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A Preliminary Typology of Caregivers and Effects on Service Utilization of Caregiver Counseling

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Abstract

Objectives—Caregivers (CGs) of older adults have unique and diverse needs for intervention. The present studies describe the characteristics of CGs and caregiving situations and how these relate to CG therapy utilization patterns in a community mental health setting.

Method—Study 1: Through chart review, the researchers explored service utilization patterns and identified preliminary typologies of Caregiver Family Therapy (CFT) clients, $N = 23$. Study 2: By conducting a second chart review, the researchers sought to determine whether the categories that emerged in Study 1 applied to a second group of CFT clients, $N = 36$.

Results—Study 1: Four distinct categories of caregivers emerged: High-Distress (high disorganization, high complexity), Resourceful but At-Risk (low disorganization, high complexity), Non-Committal (high disorganization, low complexity), and Model CGs (low disorganization, low complexity). Study 2: While the ability to classify CGs into category proved to have some inconsistencies, preliminary evidence suggests the ability to predict utilization once CGs were placed into category was good. In Study 2 a fifth category emerged: High Functioning but Static, which suggests CGs were on a continuum ranging from high to low on family organizational style and CG situation complexity.

Conclusion—While caregiving situations vary widely among families and across time, this paper provides a preliminary typology of CGs that may assist clinicians in tailoring CG interventions to meet the needs of their clients based on information garnered early in therapy, perhaps as early as the intake process.

Keywords

Caregiver Family Therapy; typology; service utilization

Introduction

Multiple studies have examined the impact therapeutic interventions can have on the well-being of caregivers (CGs) of older adults (for a detailed review, see Zarit, 2009). Gallagher-Thompson et al. (2000) showed that psychoeducational interventions were successful in increasing life satisfaction and coping skills, as well as decreasing CG burden and depression. Interventions have also been found to increase the frequency of CGs' contacts with their social support networks and the satisfaction derived from these encounters (Drentea, Clay, Roth, & Mittelman, 2006).

Concerned clinicians and researchers have begun to create and evaluate treatments specifically designed for the unique problems CGs face. In an effort to review and evaluate the evidence for psychological treatments for family CGs of older adults, Gallagher-Thompson and Coon (2007) identified three treatments that met evidence based treatment requirements: psychoeducational programs, psychotherapy, and multicomponent interventions. Psychoeducational programs focused on skill building were found to reduce distress and increase coping and self-efficacy. Cognitive behavioral therapy appeared to be an effective intervention to reduce symptoms in CGs with a diagnosable depression. Since effect sizes for multicomponent interventions were not strong (.33 for depressive symptoms), the authors suggested further investigation. In a meta-analytic review of 34 intervention studies, Brodaty, Green, and Koschera (2003) found that interventions that 1) included more family members and 2) were more flexible to meet the needs of the family reduced CG distress. The Brodaty et al. review also showed that some interventions delayed nursing home placement. However, overall, the interventions were relatively ineffective in reducing CG burden. Brodaty and colleagues suggest that small effect sizes when measuring the impact of interventions may have been attributable to variability in CG and CR characteristics as well as multiple differences among the CG interventions. Kraemer, Wilson, Fairburn, and Argus (2002) describe the importance of identifying moderators of treatment effectiveness, including client characteristics and circumstances related to treatment delivery. Along this line, some have begun identifying typologies of caregiving situations that affect CGs' use of support services (Di Rosa et al., 2011). These studies point to the relevance of the diverse characteristics that CGs and CRs bring to caregiver therapy. CGs, CRs, families, and the contextual factors associated with each client's caregiving situation may all have an impact on therapy effectiveness.

Although diversity in presentation is the norm in CG therapy, looking for groupings or typologies may prove to be fruitful for clinicians working with this. Typologies can serve many purposes, including "forming and refining concepts, drawing out underlying dimensions, creating categories for classification and measurement, and sorting cases" (Colier, LaPorte, & Seawright, 2012, p. 217). In the current studies, the authors extended the use of typologies from sorting cases based on CG types to providing preliminary ideas for tailoring CG family therapy interventions. Typologies have been developed for domestic violence offenders (Cavanaugh & Gelles, 2005), intimate partner violence (Carlson & Dayle Jones, 2010; Friend, Cleary Bradley, Thatcher, & Gottman, 2011), survivors of sexual violence (Stidham, Draucker, Martsof, & Mullen, 2012), homelessness (McAllister, Lennon, & Kuang, 2011), as well as learning patterns within organizations (Govaerts &

Baert, 2011) and organizations themselves (Kilmann, 1983). Some work has also already been completed regarding typologies of caregiving families (Pruchno, Burant, & Peters, 1997), decisions styles in Alzheimer's family CGs (Wackerbarth, 2002), caregiving styles (Corcoran, 2011), and patterns of service utilization among informal CGs (Hong, 2010).

Carpentier, Bernard, Grenier, & Guberman (2010) explored social factors associated with caregiving families from a life course perspective, including family histories, linked lives, human agency, and organizational factors. Using a life course perspective, Carpentier et al. identified five typologies of how families enter into caregiving for a family member with dementia, including “families' past experiences” (p. 1504); “watershed events” (p. 1505); “organizational effects” (p. 1505); “complex trajectories with gentle negotiations” (p. 1505); and, “complex trajectories with difficult negotiations” (p. 1506). These authors demonstrate that factors associated with each family and the contexts in which families live affect their entry into dementia caregiving. For example, families' past histories as well as the number of health concerns CGs are facing impact the time it takes to reach a dementia diagnosis. For families in which watershed events propel them into caregiving, the older adult is typically relatively isolated from family members, who become involved when someone in the person's social network (usually a professional) identifies a safety concern and notifies a family member. Organizational effects take place when an efficient health care system identifies Alzheimer's disease early during its course and propels the family into awareness that they are caregiving before they notice and become concerned about symptoms on their own. Complex trajectories involving gentle and difficult negotiations reflect the fact that many CGs are embedded within rich networks of both family members and health care professionals. In some situations, CGs are able to rely on their support networks and their family's historical context and launch into caregiving effectively and with efficacy. In other caregiving families, the trajectory is fraught with difficulty and unpredictability. Carpentier et al. describe these CGs and their systems of support as lacking confidence and productive involvement with sources of informal and formal support. Carpentier et al. suggest ways in which those who assist caregiving families can tailor their interventions to meet the needs of CGs who enter the caregiving trajectory in diverse ways, and their study shows the utility of applying a typology to CGs for this purpose.

The authors were interested in exploring how CG characteristics as well as CR and social context may influence CG's utilization of CFT, given that existing literature supports considering these factors as well as individual factors to help understand CG trajectories (Carpentier et al., 2010). The authors began an exploratory study to examine variable trajectories of CFT utilization that included both individual and family/contextual factors. Study 1 resulted in a description of different “types” of CGs seeking counseling in a community mental health setting. Study 2 tested whether it was possible to predict these typologies based solely on information garnered at intake. Individual characteristics, mental health functioning, and other factors related to CG effectiveness, as well as contextual factors related to the caregiving situation, were explored as important factors related to CG therapy utilization patterns. These variations in CG presentation may be useful to clinicians if identified early in the progression of therapy. When therapists have a sense of the “type” of CG with which they are working, they may be able to tailor their interventions in ways that best engage the CG, support symptom reduction, and increase efficacy in caregiving.

Study 1

Method

The purpose of the first study was to explore service utilization patterns, which led to the exploration of possible typologies of Caregiver Family Therapy (CFT) clients. This was accomplished through record review.

Data Collection Site—The CU Aging Center (CUAC) located in Colorado Springs, Colorado is a nonprofit community mental health and family services clinic and research training facility operated by the Psychology Department at the University of Colorado Colorado Springs (UCCS). Therapy services are provided by trainees ranging from first year practicum students to postdoctoral licensure candidates supervised by licensed psychologists who specialize in providing services to older adults and their families. Funded in part by the Pikes Peak Area Agency on Aging, the CFT program serves families with CGs or CRs 60 years of age and older. At the time of these studies, individual CGs, couples, and/or families received up to six free therapy sessions each year (a CG treatment episode could be from one to six sessions long and was defined by the use of these free therapy sessions). CGs were able to access additional services (beyond the free sessions) on a private pay, sliding-scale basis. Active community involvement is a cornerstone of the CUAC, providing several major sources of referral (e.g., local senior service agencies, community health centers, and long-term care facilities). Given the excellent community partnerships held by the CUAC, the CFT program is frequently sought out by families across the Pikes Peak Region for assistance in navigating the challenges of caregiving.

Caregiver Family Therapy: Caregiver Family Therapy (CFT) is a psychotherapy model developed by Dr. Sara Qualls based primarily on family systems interventions and refined over the past two decades (Qualls & Williams, 2013). The Aging Family and Caregiver Program at the CUAC assists CGs in “naming the situation” (i.e., evaluation of CR functioning), family restructuring, problem-solving for immediate risks, and psychoeducation (See Qualls, 2008 for a full description of this therapy). CFT is a flexibly implemented program and at the time of data collection did not follow a formal protocol. However, adherence to the CFT model by clinicians is assumed. All CFT therapists participated in a weekly CG consultation group led by Dr. Qualls or a psychologist highly experienced in CFT.

Participants—All CG charts ($N = 44$) for those who initiated CG therapy between January and December 2004 were reviewed for inclusion in our sample. CGs who participated in only one session were excluded from the sample. Because the CUAC is a training facility, clinicians cycle in and out of clinical programs at the start of each academic year (beginning in June). Due to possible inconsistencies across clinicians and disruptions that may occur with transfers, CGs who saw more than one clinician were also excluded from our sample. After applying the exclusion criteria, twenty-three CG records remained. The length of time in treatment ranged from eight weeks to over one year to complete six sessions.

Materials—Data were obtained from clinician-maintained client files at the CUAC. These files contained the following information: intake reports (clinician and CG), intake questionnaires, logs of contacts, treatment plans, progress notes, and clinician termination reports and ratings.

Demographic information: Gender, age, ethnicity, education level, relationship to CR, and any crisis circumstances were noted (client demographic information is presented in Table 1).

Family CG intake: The family caregiver intake (client form) is completed by the CG and details information about both the CG and the CR (e.g., date of birth, race/ethnicity, relationship between the CG and CR). The form also prompts CGs to describe the living situation of the CR (e.g., with family, alone, supported living residence), an average day with the CR, and his/her main concerns.

Log of contacts: The log of contacts is a list of the dates and types of services provided, including telephone contacts, therapy sessions, psychoeducational class sessions, cognitive screening assessments, and/or missed or cancelled appointments. This was used to establish the pattern of service utilization over time.

CR behavior: Forms depicting CR behavior were examined in order to determine CGs' responsibilities in their day-to-day lives and their overall reactions to caregiving.

Activities of daily living and instrumental activities of daily living: The Instrumental/Activities of Daily Living Form asks CGs to rate the degree of problems their CR experiences in 18 areas related to daily living, such as bathing (ADL) and financial management (IADL). CGs use a rating scale from 1 to 7 to indicate the level of assistance the CR needs in each of these areas, with higher numbers indicating greater care needs. The CG is also asked to highlight recent changes in functioning.

Behavior problem checklist: [modified from Zarit, & Zarit (1990)]. The behavior problem checklist assesses specific problems CRs may be experiencing and CGs' attributions for these problems. Thirty-four items (i.e., concentration, nutrition, energy level) are rated on a 1 (*No Problem*) to 7 (*Frequent Problem*) Likert-type scale. The CG is also asked to place checkmarks next to the areas of functioning that have changed in the last few months. CGs are further asked to make attributions (e.g., Normal Aging Problems, Dementia/Alzheimer's, Depression or Anxiety, Medical Illness, Medication, Personality Problems) for what they believe is causing their CR's problems on a 1 (*Unlikely*) to 7 (*Almost Certain*) Likert-type scale.

Additional contextual information: Further contextual information about caregiving situations was gleaned from information provided by clinicians, including intake reports, treatment plans, progress notes, termination reports and ratings by clinicians.

Clinician intake report: The clinician conducts a comprehensive assessment of the CG, CR, and the caregiving situation during the initial intake session and summarizes the findings

into an intake report. This report is typically 3 to 5 pages and includes the date of examination, referral source, CG and CR identifying information, identified problems, including onset date and progression, how often problems are encountered, whether or not other family members share the CG's view of the problem, what has been done to address the problem, and what results have occurred in response to the CG's initial efforts. This intake follows a biopsychosocial approach and includes biological and medical factors (family history of mental illness, current medical situation of the CG and CR), psychological factors (CG and CR mental illness, burden, and stress), and social factors (family history, structure, and dynamics). The clinician also outlines concerns for the CG and CR, a clinical formulation, diagnostic impressions, recommendations, and treatment goals and strategies in the report.

Treatment plan: After CGs complete their intake interview, clinicians develop a treatment plan based on the intake information. Every three months, clinicians update the treatment plans with CGs, mutually establishing goals appropriate to the context of the caregiving situation. The clinician further outlines the presenting problem, current symptoms, clinical impression, therapeutic goals, and current treatment strategies. Multiaxial diagnoses, based on the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition—Text Revision (American Psychiatric Association, 2000) are also included in the treatment plan.

Progress notes: Every time the clinician meets with the CG, a progress note is drafted. Progress notes include a description of the session, assessment of the CG, the CG's response to therapy, and treatment goals for the next session.

Clinician termination report: At the time of termination of therapy, the clinician develops a treatment summary report that follows the same format as the intake report. The termination report also includes details about progress made on treatment goals, the reason for termination, and recommendations for the CG at the end of therapy.

Procedure—Two coders (authors AAW and RP) made three passes through the data and conducted all analyses for Study 1. These coders were students in a clinical psychology graduate program with an emphasis on geropsychology. Both had been trained in CFT and had at least one year of experience providing CFT.

First pass: The purpose of the first pass through the data was to document a timeline of services for each CG to better understand service utilization patterns of CG clients. In the first pass through the data, a timeline of services was recorded for each CG. This included the dates of each session, the number of days between sessions, the number of sessions attended, the total number of days from intake until termination, cancellations, no-shows, and phone contacts. The coders reviewed the charts to cull the following data: CG and CR demographics, recommendations and referrals made by clinicians throughout the course of therapy, and CG follow-through with recommendations during and between sessions.

The timelines were highly variable, which led to the question of whether or not there were factors that contributed to variable service utilization patterns. While the first pass provided sufficient suggestion that there were variable service utilization patterns, it did not provide

data suggesting that the sample varied in systematic ways coinciding with variable utilization patterns. This prompted a second pass through the data. Previous literature (e.g., Carpentier et al., 2010) and clinical experience of the CFT team highlighted contributions of social and contextual factors, as well as individual factors, on caregiving trajectories. Therefore, subsequent passes through the data focused on organization of service utilization, functioning of both the CG and CR, and complexity of the caregiving situation.

Second pass: The purpose of the second pass through the data was to explore CG and CR functioning, complexity, and organization. Specifically, the coders noted informal supports, contact with social service agencies and medical providers, crisis points, safety concerns, and medication concerns. Additionally, the coders rated the level of functioning (e.g., ADLs and IADLs) of each CR as well as the instrumental functioning, insight, and overall effectiveness of each CG. All ratings were made on a 7-point Likert-type scale (7 = *optimal functioning*, 7 = *highest level of insight*, and 7 = *optimal effectiveness*). Instrumental functioning ratings reflected the coders' impressions that the CG was able to meet the basic needs of his or her CR, either personally or by arranging other support, to offset the CR's decline in functioning. Insight ratings reflected the degree to which CGs were able to understand information offered by clinicians and to make use of that information in caring for the CR.

CGs with high insight were open to a number of possible explanations for their loved one's behavior and were invested or motivated to learn about the diagnosis and the CG role. High insight CGs also demonstrated an ability to integrate and implement recommendations in order to accommodate their CR's declining cognitive abilities. Overall effectiveness was a rating comprised of both the CG's level of instrumental functioning and insight, as these two domains contribute to a CG's efficacy. For example, if a CG had high ratings of instrumental functioning and insight, that individual was considered a more effective CG overall and would be given a rating of 6 or 7 on effectiveness. Finally, factors associated with family organizational style and caregiving situational complexity were noted.

Both of the coders rated five of the charts together at the outset of the second pass through the data to improve consensus of ratings. For the purpose of the present studies, consensus was defined as agreement in ratings and assignment of category. The coders divided the remaining cases and worked separately to formulate ratings. After all of the charts were coded, the coders met and discussed each of the cases, the ratings, and the final categorization of clients. Coders came to consensus on all of the cases through discussion and agreed on category placement of all 23 cases.

The second pass demonstrated that CGs and CRs in the sample had substantial variability of functioning, family organizational style, and caregiving situation complexity. At this point, results demonstrated that the sample varied in their utilization patterns and individual, social, and contextual factors. This prompted a third pass through the data.

Third pass: The purpose of third pass through the data was to identify each client's therapy trajectory pattern and to sort clients based on family organizational style and caregiving situation complexity to begin to explore whether or not certain CG or CR characteristics or

categories of characteristics were associated with the distinct therapy trajectories. Using information from the charts, the coders made ratings on therapy trajectory, CG organizational level, and CG situation complexity for each of the cases reviewed. The coders also noted family structure and presenting problems.

On a 1 (Irregular) to 7 (Regular) Likert-type scale, coders evaluated the organization of clients' therapy trajectory pattern based on several factors, including whether or not the CG cancelled multiple sessions, what the reasons for cancellation were, how long the treatment episode lasted, and whether there were long lapses between sessions within a treatment episode. Treatment episode is defined as the number of free sessions; from one to six, that were completed. In addition to therapy trajectory rating, the coders recorded the presenting problems from the intake reports, progress towards goals, implementation of recommendations by therapist, and noted whether the CG continued in individual therapy after a CG treatment episode. CGs who chose to shift to individual therapy after the CG treatment episode typically had more severe or long-standing mental health concerns (e.g., patterns of interpersonal conflict, long-standing low self-esteem, history of family conflict, Axis I and/or II diagnosis). It was also observed that, because they were limited to six free sessions, some CGs "saved" sessions. That is, although their situation was stable, they anticipated future transitions (e.g., placement of CR into supported living environments) and planned to use their remaining sessions during that period. Saving sessions is generally interpreted by clinicians as a proactive and adaptive strategy of managing CG therapy and, therefore, associated with higher organization ratings.

Family Organizational Style rating: Therapy trajectory rating, as well as functional ratings (instrumental functioning, insight, and overall effectiveness) comprised the family organization style rating (high, medium, or low). In higher organization cases, for example, CGs rarely or never missed appointments (no more than two); they had relatively consistent pacing of sessions (e.g., attended sessions weekly or biweekly); and, they rescheduled when appointments were cancelled. Additionally, highly organized CGs followed through with the majority of treatment recommendations and received a total functioning score (by summing the instrumental functioning, insight, and overall effectiveness ratings) of 15 or higher. In low-organization therapy trajectories, CGs missed appointments without calling, had erratic intervals between sessions (e.g., scheduled biweekly sessions, but attended sporadically), and did not contact clinicians or follow up after missed appointments to reschedule. Additionally, low-organized CGs did not follow through with the majority of treatment recommendations and received a total functioning score that was below 15.

Caregiving Situation Complexity rating: On a 1 (Not at All Complex) to 7 (Extremely Complex) Likert-type scale, coders evaluated the complexity of the caregiving situation based on information in the behavior problem checklist, family caregiver intake form, and clinician intake report. The coders noted severity or uniqueness of diagnosis of the care recipient, referrals (i.e., neuropsychological testing, APS, police involvement), crisis points, safety concerns, and medication complications, as well as presence or history of alcohol or drug abuse and/or the presence or history of familial abuse. Those cases in which the CG or CR seemed more seriously or imminently at risk, or those with greater numbers of

complicating factors, received higher ratings than those with lower risks and fewer complicating factors. All cases including a history of or active substance misuse by either the CG or CR and/or a history of or current familial abuse between the CG and the CR (in either direction) were considered highly complex (Likert Rating = 7). Please see Figure 2 for examples of ratings of complexity. In higher complexity cases, for example, both the CG and the CR demonstrated impairment in health and cognition. In some cases, diagnostic information on the CG was ambiguous, and in other cases the CG or both the CG and CR had longstanding Axis I or Axis II disorders. In low complexity cases, the CG was managing CG concerns and still maintaining self-care and attention to his/her other family members. To facilitate sorting into categories, caregiving situation complexity ratings were collapsed from a 7-point Likert scale into categories of high (CSC Rating = 7-5), moderate (CSC Rating = 4), and low (CSC Rating = 1-3). After the three rounds of data collection, the 23 files were sorted into groups based on family organizational style (high, medium, and low) and caregiving situation complexity (high, medium, and low).

After reviewing the cases separately, the coders met and discussed each of the clients at length, including the ratings assigned and the final categorization of clients. The placement of clients along the two spectrums of organization and complexity resulted in six groups. Upon further examination, the CGs in the middle categories overlapped to a great degree, and they could not be differentiated based on their ratings. In addition, so few CGs fell into these middle groups that the use of all six categories was not supported. Therefore, the groups were collapsed into four distinct categories: High-Distress (high disorganization, high complexity), Resourceful but At-Risk (low disorganization, high complexity), Non-Committal (high disorganization, low complexity), and Model CGs [low disorganization, low complexity; Figure 3 (Williams et al., 2006)].

Results

Families utilized CFT sessions in unique ways and at varied stages of their caregiving journeys. Through the process of reviewing charts and discussing cases, distinct therapy trajectories emerged, as did a preliminary categorization of CG clients based on individual, family, and contextual factors. Case examples will be used to illustrate these categories below.

The High-Distress CGs ($n = 5$) were the least organized and had the most complexity, marked by interpersonal strife, unique diagnoses, alcoholism, and/or abuse in the family. In most cases, the CR had complicated medical and cognitive presentations, causing confusion for CGs. CGs had a history of employing ineffective strategies for problem-solving throughout their lifetimes, which carried over into their caregiving roles. Often in need of clarification of the CR's diagnosis and struggling to implement clinician recommendations, these CGs frequently required ongoing therapy beyond six sessions to continue to focus on caregiving issues and manage their own Axis I and II symptoms. Common referrals for CGs in this group included Adult Protective Services (APS), Alcoholics Anonymous (AA), and attorneys. Multiple crisis points and medication concerns were also common. CGs in this group utilized their therapy sessions sporadically and often missed scheduled appointments without calling to reschedule. These CGs rarely met their initial treatment goals or followed

recommendations and had low ratings of overall functioning. Many of those who did not continue on in individual therapy did not complete their six free sessions of CFT.

For example, Frederick, a 79-year-old husband caring for his 79-year-old wife saw his clinician at the CUAC five times over five weeks. Over the course of treatment, the clinician made at least nine contacts to other agencies, including Adult Protective Services (APS), the Area Agency on Aging, a physician, and a neuropsychologist. His clinician had several safety and medical concerns for the couple as they faced multiple crises during treatment. Due to difficulty reaching Frederick and the high level of risk involved in his case, his therapist went to great lengths with outreach including meeting with him at the hospital and in his home. Although Frederick's treatment episode only lasted for five weeks, the CUAC's involvement in his and his wife's case was complex and continued for several months, including follow up with an elder law attorney.. Frederick's overall functioning rating was a nine (instrumental = 4, insight = 2, and overall effectiveness = 3). He was unable to complete several of the treatment recommendations, and ultimately the courts and APS managed many of the details of this couple's life. As such, Frederick's CG situation was categorized as "High Distress."

The Resourceful but At-Risk CGs ($n = 6$) were involved in complex situations but were more resourceful/organized than those in the High Distress group. Similar to those in the High-Distress group, they demonstrated familial conflict, alcoholism, and/or abuse in the family. These clients frequently had histories of being physically/emotionally abused by the CR and often demonstrated inflexibility when changing roles from being dominated to providing care. The presenting problems of clients in this group overlapped with those in the High-Distress group; however, these CGs had developed many adaptive ways of coping and reducing stress prior to entering therapy. Common referrals for CGs in this group included attorneys, residential placement, and neuropsychological evaluations. CGs in this group utilized sessions in a consistent manner, often completing all six sessions and rarely canceling or rescheduling appointments. While their situations were complex, these CGs often met their initial treatment goals, followed recommendations, and had moderate ratings of overall.

For example, Sally was a CG for her 75-year-old father, George, who had frontotemporal dementia. During Sally's childhood, George was emotionally abusive toward Sally, her mother, and her siblings. According to Sally, the family was "torn apart" by George's verbally aggressive outbursts. None of Sally's siblings was willing to assist her with caregiving for their father, so Sally provided help with several IADLs and ADLs on her own. She scheduled all of George's appointments and ensured that he had transportation. She also arranged for home-care nurses to help her father once a week with medication organization. Despite these efforts, George called Sally on a daily basis and complained bitterly about her lack of attention to his needs. Sally felt that she was doing all that she could to help her father, but her "nerves were worn and she wanted out." Sally was "Resourceful but At-Risk" for distress in her CG situation.

The Non-Committal CGs ($n = 9$), appeared to be average people with common caregiving concerns. These CGs often struggled with role transitions and placement decisions,

experienced CR burden, and felt guilt related to placement. Their commitment to therapy and motivation to change was variable. They were characterized by their ambivalence, especially regarding change. They were most commonly referred to the Area Agency on Aging (AAA) and to neuropsychologists for cognitive testing for the CR. These CGs utilized their therapy sessions sporadically, frequently did not complete six sessions, and often missed scheduled appointments. They infrequently met their initial treatment goals, did not typically follow recommendations, and had moderate ratings of overall functioning.

For example, Terrence was a CG for his mother, Laverne, who was blind due to diabetic retinopathy. The CFT therapist suspected that Laverne also suffered from dementia, but Terrence had not taken her for neuropsychological testing as recommended. Terrence attended two CFT sessions, during which he complained that his mother would not participate in family activities and that she was usually very unhappy with him, his wife, and their children. Terrence also indicated that one of his adult children lived at home after a recent divorce, so Laverne's grandchild and three great-grandchildren were all living in the home. Terrence missed a session because he needed to watch his grandchildren and another because his wife was feeling "under the weather". After 2 months of missed appointments and several contacts initiated by his therapist, Terrence came in for a session and stated that his mother was never going to change, that his life was out of control, and that he wanted to discontinue therapy. Terrence appeared to be a "Non-Committal" CG.

The Model CGs ($n = 3$) presented with typical CG concerns (e.g., guilt, burden, burnout, need for residential placement) but were characterized by their exceptional ability to implement treatment goals and recommendations. They were already engaged in useful strategies to adapt to their caregiving role (e.g., self-care, distraction techniques and scheduling pleasant events with their CR) prior to entering therapy but often wanted reassurance that they were "doing what's best" for their CR. They were most commonly referred to the Area Agency on Aging (AAA) and to neuropsychologists. The CGs in this group utilized their therapy sessions in an even, sequential manner, were more likely to have completed all six sessions, and rarely canceled or rescheduled appointments. This group (along with the Resourceful but At-Risk CGs) was the most likely to "save" sessions. They frequently met their treatment goals, followed recommendations, and had high ratings of overall functioning.

For example, Betty was a 56-year-old daughter caring for her 89-year-old mother who had Alzheimer's disease and her 86-year-old father who had diabetes. Betty's overall functioning rating was 18 (instrumental = 6, insight = 6, and overall = 6). Initial recommendations and treatment goals consisted of creating a plan for care as Betty's parents' needs increased, encouraging effective communication with her parents, involving her siblings in caregiving, providing education about Alzheimer's disease, and increasing her self-care. After six sessions spaced over two months, Betty had accomplished all goals. Upon termination, the clinician recommended continued sharing of CG responsibilities and open communication with her family members, exploration of optimal living options for Betty's parents, and the creation of a living will and durable medical power of attorney. Given this information, Betty was categorized as a "Model" CG.

Study 2

Method

The purpose of the second study was to determine whether the initial categories that emerged in Study 1 applied to a second group of CFT clients. The authors theorized that they could place clients into the categories of High Distress, Resourceful but At-Risk, Non-Committal, and Model based on the complexity of the caregiving situation and CG and CR characteristics (organization and overall functioning) at the time of the intake. They further posited that categorical placement would predict therapy trajectories, including the length of time to complete sessions as well as the regularity of scheduled therapy sessions.

Participants—A random selection of CG therapy service users ($n = 36$ of 155 total cases), whose intakes occurred during 2005, 2006, and 2007, were included in this study. Clients were excluded from the study if they did not attend at least two sessions and if they saw more than one clinician during their therapy utilization. Participants ranged in age from 40 to 84 years old. Ninety-two percent were female; 86% were Caucasian; 31% were CGs for spouses or partners; 67% were CGs of parents, and one participant was a CG for her aunt (see Table 1 for full demographic information).

Materials—Copies of clinician intake reports, ADL and IADL checklists, behavior problem checklists, and family caregiver intake forms were extracted from clinician-maintained client files by a research assistant, who was not involved in the data analysis process. Care was taken so that the coders reviewing files did not have access to information about clients that would not be available to a clinician upon intake, ensuring they would not be able to observe service utilization patterns during the first pass through the data. For the second pass through the data, the coders reviewed the full chart including the log of contacts, progress notes, and termination reports.

Procedure—Three coders (authors AAW, RP, and LNA) did all coding for Study 2.

First pass: The purpose of the first pass through the data was to place clients into the categories of High Distress, Resourceful but At-Risk, Non-Committal, and Model with the information available at the time of intake. During the first pass through the data, two coders per case recorded CG and CR demographics, informal supports, contact with social service agencies and medical providers, crisis points, safety concerns, medication concerns, family structure, and the presenting problem. Ratings were made on CG functioning, insight, and overall effectiveness (see Study 1). Based on this information, cases were sorted into one of four groups according to caregiving situation complexity and family organizational style. Sorting into caregiving situation complexity mirrored the procedure in Study 1, however, sorting into family organizational style was modified for Study 2. Because no information beyond intake was available on therapy trajectory, CG organizational style ratings were made solely on CG functioning ratings. The coders divided the cases and worked separately to formulate ratings. After all of the charts were coded, the coders met and reviewed the ratings and categorization of clients. As noted above, two coders reviewed each case. After reliability was computed, coders discussed in detail their rationale for placing CGs into a

particular category. When coders disagreed on typology of the CG, the three coders reviewed the case. Through discussion about the relevant information available at intake, the coders resolved any differences in their placement of CGs into categories. Consensus was reached among the coders on one typology for each CG prior to the next stage of data analysis.

Second pass: The purpose of the second pass through the data was to record actual service use to compare this to predictions made in the first pass through the data. During the second pass the full chart was utilized for a more thorough review of the case. As in Study 1, a timeline of services was recorded for each CG (see Study 1) and a therapy trajectory rating was made.

Results

During the first pass through the data in Study 2, cases were sorted into one of four groups according to caregiving situation complexity and family organizational style with an inter-rater reliability of 63.9%. In 20 of the 36 cases, coders were consistent in their placement of clients into one of four categories (Model = 3; Non-Committal = 4; Resourceful-At-Risk = 10; High Distress = 3). Additionally, coders were consistent in their decision that three clients did not appear to fit into any of the four categories, creating a fifth category. The coders' categorization of clients into one of the five category was inconsistent in 13 cases (Table 2). In seven of the 13 cases in which the coders' placement into categories did not match, the coders' ratings matched on at least one dimension (i.e., complexity, organization). In six of these 13 cases, however, the coders' categorization differed on at least two dimensions. Regarding the clients who did not appear to fit into the four categories, this decision persisted even after discussion among the three coders. These were individuals who were highly organized with low caregiving situation complexity, which should have been categorized as Model CGs. However, these CGs were unable to implement decisions, plans or behavior change and reported previous failures at intake (e.g., "I try and I try to get my mother to go to the Senior Center, but she won't go"). These individuals appeared to be very organized, high functioning, willing to take time to support their CRs, and they intended to integrate their CRs into services, but they were "stuck" and had been unable to implement changes. At this point, a fifth category emerged: High Functioning but Static (Figure 4). These CGs appeared organized but did not carry through with recommendations effectively despite being motivated to implement strategies and wanting to continue in therapy.

In the second stage of analysis, coders reviewed client charts to explore whether clients' actual service utilization patterns, based on timing of sessions and treatment goals accomplished, matched predictions of service utilization based on CG typologies. While the ability to classify CGs into categories proved to have some inconsistencies, once clients were placed into categories, the ability to predict utilization using the typology was good. In 34 of 36 cases (94.4%), therapy trajectory matched the predicted service utilization pattern expected based on the CG typology. For example, Model, High Functioning but Static, and Resourceful but At-Risk CGs utilized their CG sessions in regular patterns of weekly or bi-weekly sessions. They called to cancel appointments with reasons, such as being sick or going on vacation, and they had clear endings to therapy that included termination sessions

with the therapists. High Distress and Non-Committal CGs tended to come in for therapy sporadically, missed sessions without calling, and accomplished treatment goals they set out to complete less frequently than the other groups.

Discussion

In Study 1, four CG types emerged based on categorization of CGs into high and low organizational approaches to CFT and into high and low complexity of CG concerns (Figure 3): High-Distress (low organization, high complexity), Resourceful but At-Risk (high organization, high complexity), Non-Committal (low organization, low complexity), and Model (high organization, low complexity). Clinicians working with CG clients may be able to use this typology to focus therapy and predict what types of interventions are most likely to be useful to their clients. For example, some CGs may need to identify support systems (e.g., respite care, increased family involvement, medical treatment) in order to enhance their own ability to accomplish the practical aspects of caregiving. Furthermore, CGs who are embroiled within complex CG situations may need the clinician to begin with practical therapeutic interventions (e.g., finding a diagnosis, identifying a primary CG within the family system, defining the primary CG's role, establishing effective communication approaches with the CR).

In Study 2 coders were able to place CGs into categories, or types, with moderate inter-rater reliability and high accuracy, based on the intake information alone. The continuum portrayed in Figure 4 depicts two characteristics of CG clients and their situations upon which the CGs in our study varied. CGs ranged from low to high in their organizational skills, and their CG situations ranged from low to high in complexity. Those with the highest organizational skills and least complexity were generally effective in their service utilization, and their situations were the most stable. Those who were less organized and whose situations were most complex tended to struggle with making use of therapeutic recommendations, either due to individual characteristics that hindered progress or due to situational variables that challenged the most effective of CGs to implement changes. While placing clients in categories, coders discovered some cases did not fit into the categories developed in Study 1. This suggests that further refinement of the categories is necessary before being able to reliably apply these typologies to CGs. Furthermore, in six of thirteen cases, the coders' categorization differed on at least two dimensions. This raised concerns about the process used to code clients as either high or low in organization and complexity. Two possible explanations for these discrepancies may be the coders' subjectivity in making ratings and/or the inconsistency and lack of pertinent information provided in intake documents in the charts. A third explanation may be that it is untenable to make a typology rating after only one intake session with a CG. Clinicians may need more exposure time (2-3 sessions) with each CG prior to having enough information to apply a typology to that CG.

While the ability to provide a typology was somewhat limited in this particular study, the authors believe that examining variables associated with CG and CR functioning has potential as a valuable endeavor. The emphasis in this study was placing CG clients into categories, which had modest success. An alternative approach that may be more straightforward and have more utility would be to place CGs along the continua of

organization and complexity rather than using categories. With additional refinement and a streamlined process for information gathering at intake, this process could prove to be a very useful approach to tailoring therapeutic interventions to meet the needs of unique CGs. Regardless of the form it takes, types or continua, considering contextual factors, specifically, CG and CR organization and caregiving situation complexity, in addition to individual characteristics may provide clinicians with important information that would aid in assessment and intervention. Understanding CGs' challenges, needs, and resources provides a useful frame that would enable clinicians to anticipate the ways that CGs may utilize therapy (e.g., consistently versus sporadically), to anticipate the needs of CGs (e.g., increased engagement in pleasant activities, referrals for formal support) as well as potential resources that can be leveraged in therapy (e.g., increased involvement of other family members). This task may seem daunting to some clinicians, as it requires assessment of the CR as well as the broader social context; however, this information may facilitate efficient use of CG interventions in the long run. Predictions about service use patterns and prominent caregiver typologies can prepare clinicians for some of the uncertainty that is inevitable when working with such diverse, complex, and dynamic populations. Prior to learning through experience each CG's therapy trajectory, clinicians could anticipate what types of CG concerns would likely need to be addressed in therapeutic interventions. Moreover, based on presenting information collected at intake, clinicians could predict with some degree of confidence how CG clients would utilize their treatment, including regularity of appointments and ability to carry through with therapeutic goals.

One limitation of this study was the small sample sizes in both Studies 1 and 2. Small sample size could have contributed to the modest ability of coder's to agree on CG placement into categories in Study 2. In exploratory and qualitative research, it is often reasonable to begin by examining a small number of cases in great detail in order to garner initial information about the group being studied. At the same time, for the purposes of these studies, formulating typologies or continua based on a small number should be viewed as preliminary. A second limitation was related to clinician variability. Clinicians did not adhere to a manualized therapy, were at different stages in training, and had various supervisors with different approaches to therapy and documentation. Based on ongoing consultation and education the authors have assumed adequate consistency across clinicians; however, it is possible that the differences in CGs found in these studies are explained by the variability in clinicians' approaches rather than CG presentation. A third limitation is related to using the same coders across studies which could have led to contamination from one set of ratings to another. A stronger research design would have employed independent coders for the confirmatory aspects of the study. A related limitation was that inter-rater reliability was not calculated for the first study; however, in this case, discussion and consensus were justified as they proved integral to the process of developing categories.

Future studies to elaborate on the findings of this study could be very beneficial to practitioners of CG therapy, whether they confirm or disconfirm these initial typologies. Further, quantitative follow-up studies are needed to determine whether the typologies found here applied to a larger number of CG therapy clients. Specifically, studies should address 1) whether these typologies could be implemented with success, 2) the reliability of different individuals using these typologies, and 3) identify whether there are risks involved in

applying a typology system in certain settings (e.g., are there ramifications in misidentifying clients). In other words, it is critical to determine whether utilization and/or therapeutic effectiveness would increase if clinicians could tailor their treatment approaches by anticipating CG engagement and needs based on these typologies. Future work evaluating the importance of obtaining information on the CR also may be beneficial. These studies support the importance of obtaining intake information on both the CG *and* the CR, which may not be standard in routine clinical practice.

According to the findings of this study, family CGs have diverse needs when they enter treatment. The ways in which CGs use the CFT program are as varied as the strengths and difficulties they bring to therapy. Thus, clinicians must be flexible and thoughtful as they approach their work with such clients. Clustering clients into typologies may allow clinicians to anticipate types of interventions and referrals that may be most useful for particular clients. Highlighting patterns of service utilization and describing critical characteristics of the family and the treatment improves clinical understanding of CGs and prepares clinicians to serve families in unique situations. CG therapeutic interventions are extremely difficult to prescribe in structure or format because the diversity in client needs is great. The idiosyncratic cases presented here illustrate the importance of flexibility in implementation of interventions with this population. These data illustrate clearly that one size does not fit all.

References

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th—Text revision. Washington DC: Author; 2000.
- Brodsky H, Green A, Koschera A. Meta-analysis of psychosocial interventions for caregivers of people with dementia. *Journal of the American Geriatrics Society*. 2003; 51:657–664. [PubMed: 12752841]
- Carlson RG, Dayle Jones K. Continuum of conflict and control: A conceptualization of intimate partner violence typologies. *The Family Journal*. 2010; 18:248–254.
- Carpentier N, Bernard P, Grenier A, Guberman N. Using the life course perspective to study the entry into the illness trajectory: The perspective of caregivers of people with Alzheimer's disease. *Social Science & Medicine*. 2010; 70:1501–1508. [PubMed: 20207459]
- Cavanaugh MM, Gelles RJ. The utility of male domestic violence offender typologies: New directions for research, policy, and practice. *Journal of Interpersonal Violence*. 2005; 20:155–166. [PubMed: 15601787]
- Colier D, LaPorte J, Seawright J. Putting typologies to work: Concept formation, measurement, and analytic rigor. *Political Research Quarterly*. 2012; 65:217–232.
- Corcoran MA. Caregiving styles: A cognitive and behavioral typology associated with dementia family caregiving. *The Gerontologist*. 2011; 51:463–472. [PubMed: 21335422]
- Di Rosa M, Kofahl C, McKee K, Bieo B, Lamura G, Prouskas C, Döhner H, Mnich E. A typology of caregiving situations and service use in family carers of older people in six European countries: The EUROFAMCARE Study. *GeroPsych*. 2011; 24:5–18.
- Drentea P, Clay OJ, Roth DL, Mittelman MS. Predictors of improvement in social support: Five-year effects of a structured intervention for caregivers of spouses with Alzheimer's disease. *Social Science & Medicine*. 2006; 63:957–967. [PubMed: 16616406]
- Friend DJ, Cleary Bradley RP, Thatcher R, Gottman JM. Typologies of intimate partner violence: Evaluation of a screening instrument for differentiation. *Journal of Family Violence*. 2011; 26:551–563.
- Gallagher-Thompson D, Coon DW. Evidence-based psychological treatments for distress in family caregivers of older adults. *Psychology and Aging*. 2007; 22:37–51. [PubMed: 17385981]

- Gallagher-Thompson D, Lovett S, Rose J, McKibbin C, Coon D, Futterman A, Thompson LW. Impact of psychoeducational interventions on distressed family caregivers. *Journal of Clinical Geropsychology*. 2000; 6:91–110.
- Govaerts N, Baert H. Learning patterns in organizations: Towards a typology of workplace-learning configurations. *Human Resource Development International*. 2011; 14:545–559.
- Hong S. Understanding patterns of service utilization among informal caregivers of community older adults. *The Gerontologist*. 2010; 50:87–99. [PubMed: 19574540]
- Kilmann RH. A typology of organization typologies: Toward parsimony and integration in the organizational sciences. *Human Relations*. 1983; 36:523–548.
- Kraemer HC, Wilson T, Fairburn CG, Agras S. Mediators and moderators of treatment effects in randomized clinical trials. *Archives of General Psychiatry*. 2002; 9:877–83. [PubMed: 12365874]
- McAllister W, Lennon MC, Kuang L. Rethinking research on forming typologies of homelessness. *American Journal of Public Health*. 2011; 101:596–601. [PubMed: 21389289]
- Pruchno RA, Burant CJ, Peters ND. Typologies of caregiving families: Family congruence and individual well-being. *The Gerontologist*. 1997; 37:157–167. [PubMed: 9127972]
- Qualls SH. Transitions in autonomy: The essential caregiving challenge. An essay for practitioners. *Family Relations*. 1997; 46:41–45.
- Qualls, S Honn. Caregiver family therapy. In: Knight, B.; Laidlaw, K., editors. *Handbook of emotional disorders in older adults*. Oxford University Press; 2008. p. 183-209.
- Qualls, SH.; Williams, AA. *Caregiver Family Therapy: Empowering families to meet the challenges of aging*. Washington DC: American Psychological Association; 2013.
- Stidham AW, Draucker CB, Martsolf DS, Mullen LP. Altruism in survivors of sexual violence: The typology of helping others. *Journal of the American Psychiatric Nurses Association*. 2012; 18:146–155. [PubMed: 22495915]
- Wackerbarth SB. The Alzheimer's family caregiver as decision maker: A typology of decision styles. *Journal of Applied Gerontology*. 2002; 21:314–332.
- Williams, A.; Pepin, R.; Qualls, SH.; Layton, H.; Stephens, M.; Hiroto, K.; Altayli, B.; Foster, S.; Kenny, M. Variable Trajectories of Service Utilization of Caregiver Counseling in a Community Mental Health Agency. Poster presentation at the Gerontological Society of America Conference; Dallas, TX. November 2006; 2006.
- Zarit, SH. Empirically supported treatment for family caregivers. In: Qualls, SH.; Zarit, SH., editors. *Aging families and caregiving*. Hoboken, NJ: Wiley Publishing; 2009. p. 131-154.
- Zarit, SH.; Zarit, JM. *The memory and behavior problems checklist and the burden interview*. University Park, PA: Penn State University Gerontology Center; 1990.

Figure 1.

Family involvement with members (Qualls, 1997).

Full Mutual Autonomy- Caregiver and care recipient engage in balanced reciprocal kindness to one another with power and nurturance balanced as they have been for the past few years

Observing- Family caregiver is watching the care recipient's behavior and situation in a way that is different from past years, but is not intervening

Advising- Family caregivers is advising the care recipient fairly often about how to handle situations in a role that is different from their past relationship

Monitoring- Family caregiver is actively monitoring the care recipient's situation because of concerns that the care recipient might not be safe or well cared for without the caregiver's monitoring

Assisting- Family caregiver assists with activities of daily living (e.g., bathing, eating, etc.) or instrumental activities of daily living (e.g., transportation, shopping, etc.), and is actively engaged in decisions

Holding Primary Responsibility- Family caregiver has primary responsibility for activities of daily living or instrumental activities of daily living

Full Legal and Ethical Guardian- Is the court appointed guardian who oversees all aspects of the care recipient's well-being

Likert Rating	Referrals	Complicating Factors	CSC Condensed Ratings
1	None	None	Low
2	Area Agency on Aging	None	Low
3	Neurologist, Physician	Minor Fall risk, Minor Medication Concerns, Unclear CR diagnosis	Low
4	Psychiatrist, Alzheimer's Association, Support Group	Safety risks including history of suicide attempt and medication concerns	Moderate
5	Neuropsychologist, Area Agency on Aging, In-home care	Serious nonadherence in CR's diabetes management	High
6	Neuropsychologist, Area Agency on Aging, Adult Protective Services, Physician	History of multiple hospitalizations in CR and medication concerns	High
7	Adult Protective Services, Physician, Police	Multiple crisis points, Medication Concerns, Other imminent safety risks	High

Figure 2.
Illustrative examples of complexity ratings.

		Organization	
		Low	High
Complexity	Low	<u>Model</u> Clinical Challenges <ul style="list-style-type: none"> · Average people with common caregiving concerns, centered around placement decisions, role transitions, CG burden · Often wanted assurance that they were doing what's "best" for the CR Trajectory <ul style="list-style-type: none"> · Utilize sessions in an even, sequential manner, often complete all 6 session, rarely cancel or reschedule · Often meet initial treatment goals and follow recommendations 	<u>Non-Committal</u> Clinical Challenges <ul style="list-style-type: none"> · Average people with common caregiving concerns · Often struggle with role transition, CG burden, and placement decisions · Seem to lack commitment to therapy and to change Trajectory <ul style="list-style-type: none"> · Sporadic use of CFT sessions, do not complete 6 sessions, often miss scheduled appointments · Occasionally meet initial treatment goals and follow recommendations
	High	<u>Resourceful but At-Risk</u> Clinical Challenges <ul style="list-style-type: none"> · Clients had histories of being physically/emotionally abused by CR · Clients demonstrated inflexibility when changing roles from being dominated to providing care · Interpersonal strife and/or, alcoholism in the family Trajectory <ul style="list-style-type: none"> · Utilization of CFT sessions in an even, sequential manner, often complete all 6 sessions, rarely cancel or reschedule · Occasionally met initial treatment goals and followed recommendations 	<u>High-Distress</u> Clinical Challenges <ul style="list-style-type: none"> · In most cases, CR had complicated medical and cognitive functioning presentations, causing confusion for CGs. · CGs had employed ineffective strategies for problem-solving throughout lifetimes, which carried over into their caregiving roles. · Complex family structure, interpersonal strife, alcoholism and/or abuse existed in the family. Trajectory <ul style="list-style-type: none"> · Sporadic utilization of CFT sessions, do not complete all sessions, often miss scheduled appointments · Often did not meet initial treatment goals or follow recommendations

Figure 3.
Initial categorization of CGs (Williams, et al., 2006).

Figure 4. Preliminary CG Typology

Note: Additional category of High Functioning but Static added to initial set of 4 categories. Complexity decreases from left to right of the figure, and organization increases from left to right of the figure.

Table 1
Caregiver Demographics

	Study 1 (N = 23)		Study 2 (N = 36)	
	<i>n</i>	%	<i>n</i>	%
Age	Range = 44-79 years		Range = 40-84 years	
Education *				
High School or Less	n = 6	26%	n = 5	14%
Some College/Trade	n = 1	4%	n = 3	8%
2-Year Degree	n = 2	9%		
4-Year Degree	n = 3	13%	n = 11	31%
Licensed Practical Nurse	n = 1	4%		
Master's degree			n = 1	3%
PhD			n = 2	6%
Ethnicity **				
Euro-American	n = 16	84%	n = 31	86%
Gender				
Female	n = 18	78%	n = 32	92%
Male	n = 5	22%	n = 4	8%
Care Recipient Information				
Spouse/Partner	n = 11	48%	n = 11	31%
Parent	n = 11	48%	n = 24	67%
Aunt	n = 1	4%	n = 1	3%

Note.

* 10 missing data points for education in study 1 and 14 missing data points for education in study 2;

** 4 missing data points for ethnicity in study 1.

Table 2
Study 2 Coding Inconsistencies

Inconsistency 1 *	Coder 1	Resourceful-At-Risk	(high org.; high complex.)	n = 5
	Coder 2	Non-Committal	(low org.; low complex.)	
Inconsistency 2	Coder 1	Model	(high org.; low complex.)	n = 2
	Coder 2	Resourceful-At-Risk	(high org.; high complex.)	
Inconsistency 3	Coder 1	Model	(high org.; low complex.)	n = 2
	Coder 2	Non-Committal	(low org.; low complex.)	
Inconsistency 4	Coder 1	High-Distress	(low org.; high complex.)	n = 1
	Coder 2	Resourceful-At-Risk	(high org.; high complex.)	
Inconsistency 5	Coder 1	Non-Committal	(low org.; low complex.)	n = 1
	Coder 2	High Distress	(low org.; high complex.)	
Inconsistency 6	Coder 1	High Functioning but Static	(high org., low complex.; poor implementation)	n = 1
	Coder 2	Model	(high org., low complex.)	
Inconsistency 7 *	Coder 1	High Functioning but Static	(high org., low complex.; poor implementation)	n = 1
	Coder 2	High-Distress	(low org., high complex.)	

* Note: These discrepancies are concerning, and may be explained by the subjectivity of individual coders' emphasis on different details in the intake documents and/or limited relevant information available in the intake documentation.