

Critical Decision Method Interviews to Understand the Initial Treatment Planning Process in Foster Care

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ABSTRACT

In foster care settings, the treatment plan captures goals and interventions for youth in care. The first version of this plan is typically due 30 days after the youth is enrolled in the foster care program, leading to a challenging month of assessing the case and developing the treatment plan. This study utilized Critical Decision Method interviews with care coordinators and clinicians to understand the decision-making involved in balancing assessment tasks, and the barriers to using assessment to inform treatment. The interviews were coded to identify major themes including information sources and constraints. These identified themes and general understanding of the problem space will drive future work developing interventions to improve the workflow process and drive better outcomes for youth in foster care.

INTRODUCTION

The foster care system is a complex sociotechnical system (STS) involving a diverse set of actors and interests regarding an incredibly vulnerable population. Children in foster care are almost always survivors of trauma, and those who exit the program into adulthood are at high risk of negative outcomes such as homelessness (Fowler, Marcal, Zhang, Day, & Landsverk, 2017). In hopes of improving these outcomes, legislative pressure calls for providers to utilize technological interventions and data-informed and evidence based treatments.

This call for system improvement is noticeable in legislation like the Family First Prevention Services Act which allocates funds for evidence-based treatment of youth in the system and those at risk of entering it ("116th Congress Bill Profile H.R. 2702, Family First Transition and Support Act of 2019, Bill Profile," 2019). Additionally, neoliberal policy shifts have increased demand for a wide variety of human services while forcing providers to work with fewer resources and staff. This push towards "efficiency" has resulted in poorer quality services and contributes to an ongoing problem of high workforce turnover (Abramovitz & Zelnick, 2015). All of these factors result in a complex problem space.

Many of the challenges of this space are particularly important in the initial treatment planning period. This period stretches over the first 30 days after a youth enters foster care and involves extensive data gathering and goal setting regarding youth wellbeing. Further details of the process are discussed in the results section.

While Cognitive Engineering (CE) methodologies are increasingly applied to STSs (Roscoe, Chiou, & Wooldridge, 2019), these approaches have not yet been utilized to improve the processes of foster care agencies. This study offers a beginning of that utilization by summarizing the findings of a series of interviews focused on the treatment planning process

in foster care programs at a northeastern non-profit human service agency. These interviews identified constraints and important system dynamics that impact the best uses of data-informed treatment planning which will continue to be investigated through a number of other CE methods, with the long-term goal of providing solutions and interventions to address the challenges of the domain.

METHOD

Setting

The study took place at a large human service agency that provides community-based services, education and residential treatment to youth, adults, and families in New York state. These services, often contracted by the county who is assigned responsibility for the children's cases, may be voluntary or court-mandated. Following conversations with agency administration about how to best impact outcomes for vulnerable youth aging out of foster care, we selected the initial treatment planning period as the focus of this study. This was chosen on the basis of the urgency, data requirements, and decision-making latitude during this period.

While the interviews were focused on this 30-day period, youth can enter the agency's care at any age and with a variety of previous placements. Once the child has been enrolled, a care coordinator and a clinician work with youth, families, and other staff to develop a treatment plan. This team completes a variety of assessments with the youth and family which are meant to inform the treatment plan. The treatment plan includes goals for the youth and interventions to support those goals; this plan is meant to be a collaborative document involving both the youth and their family. The team reviews the final plan, but it is not a static document. After the initial treatment planning meeting, this same team meets every 90 days to review and update the course of treatment.

Participants

Interview participants were recruited via agency email announcements from a pool of care coordinators and clinicians. Job role was the only inclusion criteria. Participants were three care coordinators and two clinicians, ranging from six months to six years of experience in their current roles. Clinicians require a Master’s degree and clinical license (or eligible for license) while care coordinators require a Bachelor’s degree. The higher standard for clinicians allows them to author treatment plans and bill insurance, while care coordinators complete assessments and arrange logistical details amongst the larger internal team. This is a relatively new change in responsibility that resulted from Article 29-I ("Public Health Law Chapter 45 Article 29-I," 2017) which changed the billing process for foster care agencies.

Data Collection

The research protocol was approved by the University at Buffalo’s Institutional Review Board. Interviews were conducted via Zoom and lasted on average approximately 60 minutes. One researcher led the interviews based on a semi-structured Critical Decision Method, or CDM, (Klein, Calderwood, & MacGregor, 1989) format while a second researcher took notes and constructed case timelines. The interview focused on decision-points regarding assessment and treatment planning. CDM involves asking practitioners to recall challenging cases in order to understand their workplace cognition. In this study, the participants were asked to remember a case in which the initial treatment planning period was exceptionally difficult. After the interviewee relayed an initial case narrative, the researchers worked with them to create a timeline, identify decision points, and solidify a shared understanding of the case. Finally, a series of probing questions were asked relating to themes emergent in the interview. These questions included prompts such as, “What

features of the case were most important in your treatment planning?”, “What were your major goals while designing the treatment plan?”, and “Were there any resource limitations that constrained your options for this case?”. This interview process and the semi-structured guide document were tested in a series of pilot studies conducted with other child welfare professionals.

The auto-transcribed interviews were qualitatively analyzed using Dedoose software (Version 9.0.46. 2022). The primary interviewer completed a first round of thematic coding to identify emergent codes. This coding focused on identifying the treatment planning process, constraints on that process, and the assessment strategies utilized by practitioners. Next, the primary interviewer finalized a code book, and reviewed each interview to ensure consistent use of codes. Foster care subject matter experts (mentioned in the acknowledgements) reviewed the emergent themes and findings for face validity.

RESULTS

General Findings

Figure 1 presents the treatment planning process and its key sources and barriers as understood from the interview findings. Interviewees indicated that, ideally, youth come to agency care accompanied by previous assessments, a referral packet, and any case history (accessible via a state-wide database which includes documentation from any child welfare entities the youth encounters). However, this historical information can be inaccurate or is often incomplete. Additionally, while the state child welfare database may contain extensive case history it is often underutilized by clinicians because of time constraints due to heavy caseloads. Required assessments make up a substantial part of information collecting, typically dependent on a youth’s age and exposure to certain categories of trauma.

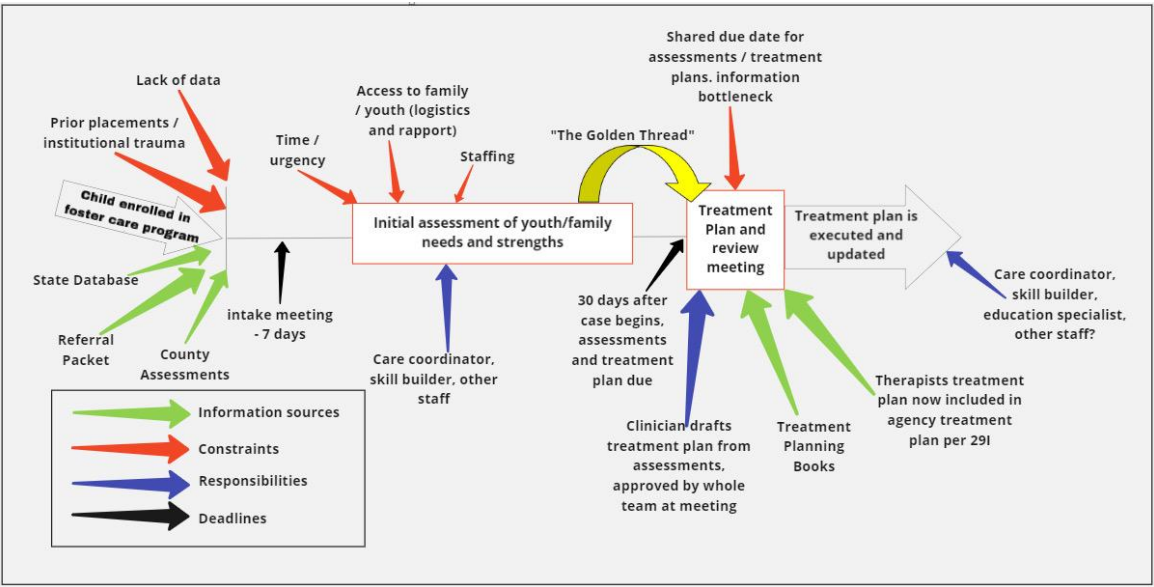


Fig. 1: Problem space for treatment planning process

The care coordinator completes most of these assessments, assisted by skill builders who help youth work towards identified goals. Findings from these assessments are shared with the clinician, who then drafts a final treatment plan by the 30-day treatment planning meeting. As this process is underway, the county child welfare office is completing concurrent planning to establish goals for the biological family, which is a different case planning document focused on the caregivers, and out of scope for the current analysis.

Table 1 offers further details of the domain complexity by outlining the codes and their frequency by category. Planning factors, that is case-specific descriptors such as child behaviors or demographics, was the most prevalent category. Most other codes relate to information sources and agency processes. Two major themes of interest for our analysis emerged from the coding: constraints and information sources.

Constraints

Constraints, or the issues that limit data-informed planning, made up 15% of applied codes. *Diverse goals*, or the multiplicity of perspectives and anticipated outcomes for any given case, arose constantly in the interviews, and is one type of constraint that interferes with timely data-informed plans. For instance, in developing a treatment plan, clinicians need to include the perspectives of the youth themselves, biological family, foster family, county child welfare system, and all of the internal team. One participant described this challenge, “You have to have kids talking to you, you have to have family sovereignty, you have to have counties talking to you,

so you can hear all this information and gather all together and then sort it all out.” In any of these cases where perspectives do not fully align, practitioners need to exercise complex interpersonal skills in treatment planning to arrive at satisfactory compromises.

Even before these perspectives can be fully understood, practitioners must develop an understanding of planning factors, which can be quite challenging. Two major constraints to understanding a case are represented by the *Lack of information* and *Access to family / youth* codes. One participant described a typical starting point for a case, “We had initially some limited information on the exact behaviors of that child and really the historical information of why that child entered care, so it was a little bit of playing detective to figure out what was really going on.” The constraints of lack of information and access are closely related, as one of the largest facilitators to accessing information is good rapport with the family and youth. Individuals in the foster care system often have significant institutional trauma, and may view practitioners as further agents embedded in a system that has hurt them. Building the sort of rapport required to properly assess can be incredibly challenging and time consuming, and lack of relationship and rapport limits the information that feeds the treatment plan.

In addition to this emotional access, even logistical access can be a challenge. Contacting families and visiting homes is particularly challenging in rural communities, and a family’s internet access, especially during the covid-19 pandemic, further challenges opportunities for rapport building.

All of these constraints are exacerbated by the 30-day deadline and an overwhelming constraint of *Urgency*. This

Planning Factors	n	Information Sources	n	Process	n	Treatments	n
Disciplinary issues	16	Interviews	31	Treatment plan	26	Youth therapy	11
Multiple placements	14	Family situation	22	Safety plan	17	Education support	9
Education	12	case history	21	Goal setting	15	One on one time with youth	8
Trauma	10	Clinical expertise	19	Establishing contact	13	Visitation	7
Combative parent	8	Assessments	17	Skill building	12	Adult education	6
sexualized behavior	8	County assessments	15	Diagnostic assessment	10	Reducing negative behaviors	4
residential	6	State database	14	Permanency	6	Supervision	4
AWOL	5	CANS	12	Wellbeing	6	Family therapy	3
Adoption	5	Bio Psycho Social	9	Updating treatment plan	3	Medical oversight	3
Emotional	5	ACES	7	Evidence based practices	2	Transportation	2
Visitation	5	CSS RS (suicide eval.)	5	Intake Meeting	1	Psychiatry	1
Aggression	4	Referral packet	5	Building confidence	1		
Siblings (not placed together)	4	DAP	4			Constraints	
Substance abuse	4	Youth connection scale	3	Decision Making		Urgency	23
Mental health issues	3	Clinical risk screen	2	Family input	31	Diverse goals	22
Self-harm	3	UCLA	2	Team dynamic	24	Lack of information	19
Termination of parental rights	3	Life skill assessment	2	Prioritization	15	Access to family / youth	11
Discharge	2	trauma scales	2	Foster family input	13	Lack of staffing	11
Domestic violence	2	GAINS assessment	1	29i	12	Outside providers	8
Grandparents	2	Sex trafficking screen	1	Youth input	12	County plan	6
Health issues	2	Treatment plan books	1	DSS input	7	Information access	6
Parental substance abuse	2			Legislative requirements	3	Lack of resources	5
Parent education	1			Attainable goals	3	Lack of supervision	2
Pregnancy	1			Youth agency	1		
Young parent	1			funder input	1		
independent living skills	1						

Table 1: Codes and frequencies (n) for interview themes

code captures two types of time constraints. In cases with pressing safety concerns or emergent realizations about abuse, an acute time constraint requires the child be placed in a safe situation before anything else. Similarly, in situations that include the case factor of self-harm, those behaviors must be addressed quickly before they might escalate. A combination of high-risk factors and constraints may make treatment planning especially difficult.

In any case there is always a general constraint of *urgency* to finish the assessments and treatment plan before the 30-day deadline. Completing these assessments requires coordination of schedules, development of rapport, and no small amount of paperwork to enter the findings into electronic medical records. These tasks all contribute to heavy workloads, which practitioners emphasized frequently in the interviews. These heavy workloads and resultant time constraint echo the systemic issues of austerity in social services discussed in the introduction. Interviewees cited the rapid pace of work as a contributor to mistakes or shortcuts such as cut-and-paste treatment plans or underutilization of the state database.

The deadline is shared by both the assessments and the treatment plan, which may lead to an information bottleneck. Clinicians cited the timeline constraint as a factor in that bottleneck. One participant explained, "It's a little tricky because the care coordinators have the first 30 days to complete the assessments and I have to have the treatment plan completed by the 30th day. So, it's a little tricky because if they don't complete the assessments until the end I can't really use them to inform my treatment planning process." While clinicians can still develop their case understanding through conversation with youth and family, this bottleneck results in many of the assessments being particularly underused.

The challenging process of assessing a youth and developing a treatment plan to help ensure their wellbeing is clearly made even more difficult by systemic constraints. However, by cataloging and understanding these constraints we can begin to understand how design interventions might improve the use of data-informed treatment planning.

Information sources

The *Information sources* theme accounted for 27% of codes. Participants reported *Interviews* with youth and family as their primary information source. These interviews serve a number of purposes; they provide case information, allow care coordinators and clinicians to gauge the youth and family mindset, and contribute to building rapport. One participant described these conversations, "So it's really helpful to have those conversations, it really is. It really gives you a much better picture as to what you're dealing with. You know how you can start developing how you're going to help with that." While conducting these interviews, the practitioners are observing body language to better understand the history and current dynamic. Further study of these interviews could illuminate cues and techniques the care coordinators and clinicians can leverage in treatment planning.

Participants reported they most often draw upon

CANS, or Child and Adolescent Needs and Strengths (Lyons, 2009), as a formal assessment source of data that influences treatment planning. CANS is a list of needs and strengths including behavioral, emotional, caregiver, cultural factors, life functioning, and risk behaviors. The assessment states that a rating of 2 or 3 in any area must be addressed in the treatment plan, a note that neatly captures the idea of the *Golden Thread* (as can be seen in figure 1). While the Golden Thread concept only arose briefly in one interview, it was confirmed by agency administrators to be crucial to their conception of treatment. The Golden Thread refers to a connection between every concern and strength noted in assessment to a related treatment goal, intervention, and outcome. This concept aligns neatly with the ongoing shift towards more evidence-based practices in social work as evidenced by the Family First Act ("116th Congress Bill Profile H.R. 2702, Family First Transition and Support Act of 2019, Bill Profile," 2019). CANS offers the clearest guidance to workers about when they should use data in treatment planning. However, participants described CANS as a checklist to ensure they were not forgetting any planning factors, so it may not be consistently used to inform treatment planning. In addition, prioritization and beginning with easy wins were frequent themes, which reflects the time constraints and seems to indicate that the Golden Thread may require longer time periods to be realized. Further study of CANS documents and treatment plans could illuminate this relationship.

DISCUSSION

This study was highly exploratory; as a result, the most valuable findings take the shape of further questions. The problem space (Figure 1) and the themes (Table 1) identified present a number of areas for future work. Three areas for process improvement are validation of the Golden Thread to connect assessment data to treatment, improvement of communication and data use to alleviate time pressure, and extension of the studied timeline beyond initial treatment planning.

Further interviews and analysis of actual case data would allow for validation and enhancement of the Golden Thread, which currently only exists conceptually. There is a long list of assessments utilized in treatment planning, and redundancies likely exist. Additionally, there is currently no prioritization of assessments or capacity to verify the tie between variables, specific outcomes, and case goals. In follow-up conversations after the initial interviews, agency collaborators expressed that validation of the Golden Thread has been a long-standing interest of theirs, but they have been unable to investigate it further given the narrative nature of the treatment plans and lack of resources.

This relationship between assessment data and treatment plan could be investigated in further interviews, which are necessary to explore this and other emergent features of the system. Additionally, future work might model the Golden Thread via qualitative coding of treatment plans and Work Domain Analysis (Vicente, 1999). This methodology examines how physical features and processes drive abstract

goals of mechanistic or sociotechnical systems, and would capture which assessment variables drive overall treatment goals. In this way, an ecologically based data visualization tool could be developed that would allow practitioners to dig down into a high level goal (e.g. child safety or wellbeing) to specific assessments and interventions that support that goal. This would follow the practice of Ecological Interface Design (Wong et al. 1998) which focuses on allowing operators to view complex systems through a variety of levels of abstraction.

Furthermore, in situ study of treatment planning meetings and practitioner interviews could identify team-related redundancies and potential areas for work optimization to reduce time pressure and the information bottleneck created by shared deadlines. The new division of labor between clinicians and care coordinators created by 29-I ("Public Health Law Chapter 45 Article 29-I," 2017) is still relatively new, and as such it is likely far from optimal. While an ecological framework of the Golden Thread could potentially improve outcomes, that improvement is dependent on clinicians having access to assessment data in a timely manner prior to their own deadline. The data visualization tool previously mentioned could facilitate more efficient data sharing amongst the team and present information in a manner fitting specific roles and points in the planning timeline.

Team-focused extensions to the original Cognitive Work Analysis method (Ashoori & Burns, 2013) have potential for optimizing this complex problem space, but further observation of team dynamics would be necessary to follow that methodology. While these interviews focused on care coordinators and clinicians, another facet of the problem space that emerged from the interviews was the importance of other team members, including education experts and skill-builders. Further investigation of their roles and contributions will be important to improving efficiencies and outcomes.

Finally, the current research scope only covers the initial treatment planning process. While our collaborators highlighted that 30-day time period as incredibly challenging and important to eventual outcomes, the treatment plan is not a static document after the first month. Interviewees indicated that the plan continues to get updated as the youth stays in program, and priorities may shift as initial goals are met. A longer perspective considering a youth's entire time in the program will be necessary to consider in the design of any intervention.

CONCLUSION

Ideally, treatment plans are informed by assessments that take place during youths' first 30 days in the foster care program. Child welfare systems have many data sources and are burdened to use them meaningfully in the design of a youth-centered plan. Meaningful treatment is necessary to address the negative outcomes experienced by foster youth. These children are removed from their homes out of concern for their well-being, which is further jeopardized if planning is ineffective. Therefore, it is critical that child welfare systems analyze and correct system-related factors that may further contribute to poorer outcomes for youth in foster care.

This study was limited in its scope, and reflects interviews with only 5 domain experts; this limitation arose largely from the team's heavy workloads. Nonetheless, valuable patterns emerged as a number of themes were quite consistent. The treatment plan is constrained by diverse goals, a lack of information, and a demand for urgency. Practitioners rely mostly on interviews to inform their treatment, versus other data, including formal assessments and case history. The relationship between assessments and outcomes should be evident, as if held together by a Golden Thread, but this has yet to be verified. This relationship is also located in a complex team structure, which lends itself for future study and improvement. We believe that cognitive engineering methodologies have the potential to improve outcomes of this initial treatment planning period by designing functional processes that support these linkages and team dynamics.

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