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Program theory and logic model to address the co-occurrence of domestic violence and child maltreatment*

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ABSTRACT

Social work and child welfare practitioners have long confronted the reality that child maltreatment and domestic violence often coexist within families. However, services for the victims of these types of family violence have been fragmented, forcing victims to go to multiple agencies for assistance. The purpose of this paper is to describe the program theory and logic model developed to guide evaluation of the St. Louis County Greenbook Collaboration to Address Domestic Violence & Child Maltreatment, together with an assessment of the use of this approach as applied to a comprehensive community initiative. Both the program theory guiding the collaboration and the logic model developed from the program theory are described. Data are drawn from qualitative documents produced in conjunction with collaboration participants. The findings suggest that a program theory and logic model approach to program planning is difficult to develop with large collaborations. Such methods may not be useful to program stakeholders. Further, attempting to use a graphic to portray a program may do a disservice to the complex ways in which many of the strategies and outcomes overlap in a community-wide collaboration.

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Leaders of the community and its institutions should join together to establish responses to domestic violence and child maltreatment that offer meaningful help to families, including protections for all victims from physical harm; adequate social and economic supports for families; and access to services that are respectful, culturally relevant, and responsive to the unique strengths and concerns of families. Simultaneously, the community should hold violent perpetrators responsible for their abusive behavior and provide a variety of legal interventions and social services to stop this violence (Schechter & Edleson, 1999, p. 16).

1. Introduction

Social work and child welfare practitioners have long confronted the reality that child maltreatment (CM) and domestic violence (DV) often coexist within families. However, services for the victims of these types of family violence have been fragmented, forcing victims to go to multiple agencies for assistance. In 1998, the National Council of Juvenile & Family Court Judges (NCJFCJ) began to discuss more effective means for communities to respond to families in which domestic violence and child maltreatment overlap, and published *Effective Intervention in Domestic Violence & Child Maltreatment Cases: Guidelines for Policy and Practice* (Schechter & Edleson, 1999). Commonly known as the Greenbook, due to its green cover, the recommendations provide a framework for communities to develop interventions and measure progress as they seek to improve their responses to families experiencing domestic violence and child maltreatment.

Shortly after the publication of the Greenbook, the U.S. Departments of Justice and Health and Human Services joined together to fund a national demonstration project to implement the recommendations. Proposals were solicited nationwide from communities hoping to bring about system changes outlined in the Greenbook. In 2001, the Family Court of St. Louis County, MO,

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received grant funding as one of six demonstration sites to implement the St. Louis County Greenbook Initiative to Address Domestic Violence & Child Maltreatment (referred to herein as "the Initiative"). The three primary partners in the Initiative were the Family Court of St. Louis County; Missouri Department of Social Services-Children's Division (DSS-CD); and the over 25 St. Louis area domestic violence service providers, including batterer intervention programs (BIPs).¹

The purpose of this paper is to describe the program theory and logic model developed to guide evaluation of the St. Louis County Initiative, together with an assessment of the use of this approach as applied to a community collaboration. As a community-based initiative with multiple partners, the Initiative can be considered part of the comprehensive community initiative (CCI) movement (Kubisch, Weiss, Schorr, & Connell, 1995). This paper adds to the literature on evaluation of CCIs by describing a program theory and logic model specifically applied to the co-occurrence of domestic violence² and child maltreatment. It is hoped this paper will facilitate program development and evaluation in other communities attempting to offer coordinated services for victims of child maltreatment and DV, and also be of interest to evaluators of CCIs addressing other social services issues.

2. Program theory and logic models

2.1. Program theory in comprehensive community initiatives

Program theory has been described as a program's theory of change (Connell & Kubisch, 1998; Hernandez, 2000) or theory of action, in which causal linkages among the various components of a program are articulated (Funnell, 1997; also see Weiss, 1995). The logic model can be viewed as a visual depiction of the underlying program theory. The element that differentiates a logic model from models which begin with stated goals is that the program's long-term goals are located at the end of the model, in agreement with the temporal reality of a program; i.e., one begins with a definition of the problem, then adds resources and activities, concluding with the desired outcome(s).

Development of the program theory and logic model through an iterative process with program stakeholders (program staff, board members, etc.) can facilitate dialogue between evaluators and stakeholders regarding the assumed linkages between conditions, services, and outcomes (Hernandez, 2000). McLaughlin and Jordan (1999) suggest stakeholders and program evaluators should agree on the definitions of program success and measures. In addition, stakeholders can assist evaluators in determining data sources to use for evaluation purposes. For example, a common evaluation measure of batterer intervention programs is offender recidivism, as evidenced by additional arrests for domestic violence. However, this measure requires access to arrest and prosecution data for both convicted and nonconvicted offenders. In Missouri, for example, information on nonconvicted offenders is unavailable to researchers. Stakeholder input may be useful in identifying alternative performance indicators when more direct measures are unavailable.

Existing research also suggests some limits to the use of logic models. Kaplan and Garrett (2005) describe how three community-based initiatives used logic models in their health-related services programs. Each of the three initiatives used the W.K.

Kellogg Foundation (2004) approach to logic model development. Kaplan and Garrett (2005) note many logic model proponents believe the process of developing a logic model forces participants to clarify program assumptions and goals. However, they found those benefits tended to accrue to coalitions that were already fairly strong and collaborative. They also found the process of identifying underlying assumptions was valuable to the two wellestablished community initiatives, but members of the weakest coalition were difficult to engage in the process. They suggest that collaboration in developing a logic model can be challenging for coalitions with a diverse group of organizations and individuals. For example, agencies attempting to collaborate will often have different philosophies, legal mandates, and levels of authority in responding to families in distress. Further, resistance may come from those who feel the logic model exercise is a distraction from program implementation. In addition, effectively using logic models requires training, time, and resources, all of which are often in limited supply for social service projects. Thus, the existing research is unclear regarding the usefulness of this approach with large community-based projects and initiatives.

2.2. Theory-driven evaluations of domestic violence programs

The earliest effort to describe program theory related to domestic violence programs was provided by Burt, Harrell, Newmark, Aron, and Jacobs (1997) for evaluating projects funded by S.T.O.P. Formula Grants funding under the Violence Against Women Act (VAWA). This publication details how to develop a logic model with the elements of background factors, program services and activities, external services/factors, immediate goals/ outcomes, and longer-term goals/outcomes. More similar to the current paper, Adler (2002) describes a framework for modeling linkages among service systems for a coordinated community response (CCR) to domestic violence in Baltimore, MD. Adler presents two models: (1) a program theory model of a local DV program, and (2) a flow chart model of the CCR system, articulating how the five system components of the CCR interact with each other. While the program theory model specifies immediate, intermediate, and ultimate objectives for evaluation purposes, the CCR flow chart depicts a system, and thus, is not designed for evaluation purposes as such. However, Adler's program theory model is the best domestic violence program theory model available to date.

Adler's model of a local DV program includes program components such as residential services, counseling, legal services, etc.; outputs such as counseling referral and support groups; immediate objectives including intake, filing reports, and training volunteers; intermediate objectives such as helping victims navigate the judicial system; and finally, ultimate objectives of preventing system revictimization and changing society's tolerance for DV. Adler then provides a comprehensive model of the entire CCR system, integrating the DV programs that provide crisis intervention, batterer intervention programs, the social services system, the judicial system, and the health care system. This model graphically portrays the linkages that theoretically exist between these five systems. She notes the challenge for a CCR or CCI in coordinating between systems with different priorities and with very different approaches to the problem of domestic violence, based on their differing "missions, legal obligations, procedures, and philosophies" (Adler, 2002, p. 209). Again, this model is not designed to guide evaluation. However, Adler includes a narrative table outlining the objectives of a theorybased process evaluation, detailing research objectives, measures, and data collection methods. She suggests evaluation of a CCR requires a multimethod approach, including both qualitative and quantitative data.

¹ During the years of the Initiative, there were up to 28 agencies involved, all of whom were members of the Missouri Coalition Against Domestic and Sexual Violence

² We think the term *intimate partner violence* is a more accurate description. However, since the *Greenbook* and the federal funders use the terms *domestic violence* and *victims*, we have opted to use those terms.

The program theory and logic model presented in this paper extends Adler's (2002) work by explicating how the various systems involved in a CCI can coordinate strategies and activities to theoretically achieve both short-term outcomes and desired long-term impacts to improve services in cases involving domestic violence and child maltreatment co-occurrence.

3. Methods

This section describes the methods used for developing the program theory and logic model for the St. Louis County Initiative. It includes a discussion of efforts by the evaluators to involve the stakeholders in an iterative process aimed at producing a stronger evaluation using the program theory approach. This section also presents a lengthy description of the program theory linked to the logic model in order to show how the program theory and logic model approach can be used to facilitate evaluation of a domestic violence/child abuse CCI. The program theory presented here is in narrative form, whereas the logic model is visual. The terms logic model and program theory are sometimes used interchangeably. However, we view the logic model as a visual depiction of the underlying program theory, but not the complete program theory itself, because in the case of a complicated project such as a CCI, it is difficult to depict the many attributes of contextual elements, descriptions of strategies, and outcome measures in a single logic model schematic. Therefore, we have used a program theory narrative to supplement the visual logic model. As there are many different formats for logic models (for example, see Cooksy, Gill, & Kelly, 2000; Kellogg Foundation, 2004; Wholey, 1987), we present this as a model for other CCIs that are attempting to utilize a program theory approach to evaluation, particularly those addressing issues related to family violence.

3.1. Review of program documentation

The program theory and logic model were developed by the authors, using document review together with participatory observation of Initiative meetings and discussion with stakeholders. A variety of documents were analyzed using a systematic process of looking for common themes, as well as analyzing linkages between the recommendations described in the Greenbook and the goals and activities of the Initiative. Documents reviewed included the Greenbook, the St. Louis County grant application, reports produced by the national evaluation contractor, reports submitted by the director to the federal funders, administrative policies and procedures of partner agencies, committee meeting minutes and documents, and the director's reports to committees.

The grant proposal articulated the overarching goals of the project and the shorter-term objectives essential to meeting these goals (see Appendix A). Meeting minutes reflected early deviations from plans laid out in the grant as an expanded number of stakeholders helped refine plans. Administrative policies and procedures aided identification of inputs and background conditions, as did meeting minutes. Finally, plans regarding the "products" the Initiative intended to create (such as training manuals, screening protocols, and new policies) shed light on key activities.

As mentioned previously, the development of the program theory and logic model through an iterative process between stakeholders and evaluators may facilitate dialogue with the aim of a producing a stronger evaluation. In this project, stakeholders included a variety of participants, including administrative staff from all three systems; department directors; lawyers; domestic violence advocates and batterer intervention program staff; court deputy juvenile officers; and domestic violence survivors.

Each of these individuals represented an audience the St. Louis County Greenbook Initiative wanted to impact and as such, served on a major or ad hoc committee. In order to obtain stakeholder input, the program theory and logic model were presented by the evaluators to stakeholders at an Initiative retreat. Except for minor language corrections, the stakeholders accepted the work of the evaluators and approved the program theory. One problem limiting engagement of stakeholders was a lack of knowledge regarding the role of evaluation, the language of evaluation, and the processes of evaluation—which should not be surprising given most of the stakeholders worked in administration or direct service and did not have any reason to have in-depth knowledge of evaluation. Two somewhat opposite perspectives on the use of the program theory emerged. On the one hand, there was an understanding by stakeholders that this was a requirement to support the national evaluation. On the other hand, the evaluation team wanted to use the program theory and logic model to help frame and guide the local Initiative's activities. However, by the time the program theory and logic model were completed, the collaboration partners had been working together for over a year, and were essentially coalesced around their strategies and activities. The purpose of the program theory and logic model was somewhat unclear to stakeholders, and while they respected the work of the evaluators, the activity did not seem relevant to them. Thus, the iterative dialogue between stakeholders and evaluators was not as effective as it might have been had these methods been presented earlier in the planning process.

3.2. Description of the program theory and logic model

The logic model format presented here is similar to the one offered by McLauglin and Jordan (1999). Fig. 1 presents the logic model format developed for the Initiative. The model includes the element of conditions, which describes the existing needs or problems the program is attempting to alleviate. It is sometimes referred to as the problem statement. Resources and inputs refers to reports, data, statistics, grant proposals, research, and other materials that inform policy making or practice around the existing condition, as well as agencies, personnel, dollars, and other resources devoted to the project. We use the term *strategies* to suggest that the Initiative's ventures were intended to be flexible, taking into account the interplay among three large and complex service systems. *Activities* or *tactics* are the specific types of programs and services the Initiative wanted to implement, and are identified on a project-by-project basis. Short-term outcomes describes the results the Initiative activities intend to achieve with the target population at the system level; i.e., staff within the three partner systems. Finally, long-term impacts are the broad, longerterm results of Initiative activities. These are the hoped-for impacts on victims of domestic violence, children, and batterers, which often can only be measured years after the program is completed (Den Heyer, 2002). Finally, contextual factors refer to those existing factors or variables that define and influence the macrolevel context in which the Initiative takes place.

3.3. Contextual factors

One of the strengths of the McLauglin–Jordan model is the explicit inclusion of contextual factors. *Contextual factors* are external to the program and not under its control, but can influence implementation and outcomes. Den Heyer (2002) suggests program context includes general societal and physical trends that affect the target population, and notes this component is frequently missing from logic models. This dimension reflects history threats to internal validity (events occurring concurrently

Conditions (needs or problems)	\rightarrow	Resources/ Inputs (collaboration and planning)	→	Strategies	→	A C	→	Short-Term Outcomes (system-level change)	→	Long-Term Impacts (client-level change)
Lack of a coordinated system to address the needs of families in		Federal technical assistance Needs assessment/ self-study by		(1) Coordinate systems including service coordination, monitoring service effectiveness, safety plans, model service plans, policies, and procedures (2) Promote skill building and	→ →	T I V	→ →	See Table 2	→	Higher rates of victim satisfaction with system experience
which child maltreatment (CM) and domestic	\rightarrow	system partnersResults of national	→	cross-training (3) Strengthen collaboration between courts and batterer intervention programs	→	I T	→	See Table 2	→ →	Increased family stability
violence (DV) intersect (co- occur).		evaluation data collection Federal Expectations of funding agencies Review of best practices in cross-system protocols including screening and assessment, confidentiality, client		(4) Create information linkages to permit greater access to court and criminal justice information and to victim resources and services	→	I E S		See Table 2		Improved access to DV and related community services for victims and batterersIncreased compliance on the part of batterers with court-ordered treatment and other court orders
		satisfaction, and reasonable efforts								Decreased batterer recidivism
				(5) Community outreach regarding DV/CM co-occurrence Context	→ · · · · · · · · · · · · · · · · · · ·	Factors	→	See Table 2		

Fig. 1. St. Louis County Greenbook Initiative Logic Model.

with treatment that could cause the observed effect; Shadish, Cook, & Campbell, 2002).

Contextual factors in our program theory were derived from three data sources. First, the national evaluation team conducted a stakeholder network survey in the early stages of the Initiative, which provided information on how well involved the three systems were with each other at the individual level (Caliber Associates, 2002). Second, the evaluation team conducted a three-system self-study that included a survey and focus groups from all three systems, asking stakeholders to identify strengths and weaknesses in their response to DV and child maltreatment. Finally, the evaluation team had access to stakeholder interview data collected by the national site liaison early in the Initiative

(Steketee, 2001). Favorable and unfavorable contextual factors were identified by stakeholders as affecting the success of the Initiative (see Table 1). Some of these factors may be unique to St. Louis County, particularly relating to the physical and organizational separation between the Family Court and the Circuit Court. However, many of these factors would be found in any community-based program, such as high turnover among human services staff and the need to constantly monitor funding streams.

3.4. Conditions

The *conditions* statement in the logic model is designed to capture the many issues identified by the three partner systems

Table 1Contextual factors of St. Louis County Greenbook Initiative.

Favorable Factors	Unfavorable Factors
 Fairly high levels of existing collaboration; people are accustomed to working together across organizations Collaboration among organizations is balanced People are willing to work beyond their regular day People are flexible and committed to the cause People are able to put personal issues aside 	 Constant need for training new staff, particularly in DSS-CD; staff turnover as a result of burnout as well as incentives for early retirement in the DSS-CD system Resource needs (staff, funding, services) Interagency communication Some people are willing to ride on the work of others The county/city divide in St. Louis (the city and county are separate jurisdictions) Conflicting organizational policies and procedures Weaknesses in intra-agency communication, particularly within the court system, in part due to physical separation of the Family Court building from the rest of the Circuit Court offices Inability of the system to hold batterers accountable and instead place the burden on the victim

into a single, comprehensive statement. Specific concerns identified for the Family Court included lack of a mechanism to track domestic violence cases involving more than one branch of the court system; no protocol for domestic violence screening by the Family Court; and no monitoring of batterer referrals to intervention. In addition, DSS-CD did not have access to Court and other criminal justice information, a situation that goes directly to the co-occurrence of DV and child abuse. The grant proposal identified the issue of no mechanism for DSS-CD to track cases presenting with domestic violence issues, and also little interaction between DSS-CD staff and domestic violence advocates. This situation was exacerbated by high staff turnover at DSS-CD and lack of ongoing staff training on DV issues. Finally, domestic violence service providers identified a lack of understanding of the child protective system and subsequent frustration with DSS-CD responses. BIPs wanted to put a system in place to monitor batterer compliance under court supervision. These concerns were combined to create the following conditions statement: "Lack of a coordinated system that addresses the needs of families in which child maltreatment and domestic violence intersect (co-occur)."

3.5. Resources and inputs

The next component, Resources and Inputs, is a composite category that includes all the elements present at the beginning stages of a project. Resources include the human, financial, organizational, and community resources a program has available (Kellogg Foundation, 2004). Examples are money, staff and staff time, supplies, office space, etc. Inputs include activities undertaken during the planning stages of the project, such as technical assistance provided by the federal partners, the three-system selfstudy, federal expectations for the demonstration sites, and research conducted by project staff regarding existing protocols and best practices. Inputs also include information brought back to the site from training conferences and meetings sponsored by the federal funders. Some logic models use these terms interchangeably, or include resources as part of inputs (e.g., United Way, 1996). However, identifying these as unique categories allows a project to assess whether resources are in fact sufficient to achieve the identified goals, and also to question what preliminary activities such as a self-study - should be undertaken before continuing further into strategy development. This stage includes building collaboration among stakeholders and is considered part of the planning phase of most projects.

3.6. Strategies and activities

Strategies are the direct "outputs" of resources and inputs, and describe the specific programs and services the Initiative wanted to implement. Strategies are similar in form to the traditional objectives of a program-broad and general, without specific action steps. Activities or tactics are the detailed projects and action steps taken in support of the strategies. Activities are the link between the identified strategies and the short-term outcomes, and are similar to traditional objectives in terms of being measurable. In other words, the activities are specifically designed to produce the short-term outcomes identified in the logic model. Table 2 clarifies the relationship between these three program theory elements, and also describes measures used to evaluate these outcomes in the process evaluation. For example, the strategy of coordinating "systems including service coordination, monitoring service effectiveness, safety plans, model service plans, policies and procedures" is supported by several activities, specifically: (1) co-located specialized positions, (2) development of the Domestic Violence and Child Maltreatment Resource Manual, (3) the Child Order of Protection Project, (4) the DSS-CD Manual for Domestic Violence Advocates, and (5) pilot testing various screening and assessment protocols in the court, DSS-CD, and domestic violence agencies. These activities, in theory, will produce the identified short-term outcomes. Achievement of these outcomes are then evaluated using various measures, including extent to which the necessary protocols and policies are in place through document review; assessment of understanding and use of protocols by line staff through focus group qualitative data; changes in number of identified co-occurrence cases in a sample of DSS-CD child abuse case files; and participant feedback from training events.

3.7. Short-term outcomes

Short-term outcomes describe the near-term or proximal changes the Initiative activities are designed to achieve with the target population. Proximal changes are those more immediate or incremental outcomes a program anticipates will eventually lead to the desired long-term impacts (Sullivan, 2001). In this case, the target population for the activities is primarily at the system level—the Family Court, DSS-CD, and the domestic violence service providers. Strategies and activities targeted at the system level, such as establishing a protocol for approving batterer intervention programs for court referrals, are intended to have long-term impacts on children and their mothers. This is the point at which the process evaluation was conducted in order to assess the extent to which the Initiative had implemented its strategies as intended. The measures adopted for the process evaluation of the Initiative are outlined in Table 2.

One challenge in developing a logic model for a complex community-based initiative such as the Greenbook is differentiating between activities and outcomes. The distinction between these categories can become blurred in community collaborations due to multifaceted implementation strategies. For example, the co-located specialist positions are identified as an activity in support of strategy one (see Table 2), but the implementation of these positions is also a short-term outcome under strategy one. Thus, identified outcome measures may express program activities as also being short-term outcomes. In addition, the focus of the federal Greenbook funding was on system-level change rather than client-level impacts. Thus, developing a curriculum or hiring a DV advocate to work with child welfare staff was itself an accomplishment, while also being an activity in support of long-term impacts.

3.8. Long-term impacts

Finally, *long-term impacts* are the broad, longer-term results of Initiative activities on victims of domestic violence, children, and batterers. The fact that these are long-term outcomes is the very reason why they cannot be evaluated during the course of a short-term project. Changes in organizational policies and protocols take a considerable amount of time to put in place. Written protocols need to be developed and approved by the bureaucracy; staff must be trained; then time must be allowed for staff to implement the new procedures. In addition, financial resources typically do not extend over a sufficient period of time to allow for evaluation of these long-term impacts. Nevertheless, long-term impacts on clients are the essential reason for a program's existence, and it is imperative these be articulated and reinforced.

4. Lessons learned

The federal partners funding the Greenbook demonstration sites expressed hope the program theory and logic model would play a significant role in guiding the development and implemen-

 Table 2

 Strategies, Activities, Short-Term Outcomes, and Process Evaluation Measures for the St. Louis County Greenbook Initiative.

Strategies	→ Activities	→ Short-Term Outcomes	→ Process Evaluation Measures		
(1) Coordinate systems including service coordination, monitoring service effectiveness, safety plans, model service plans, policies and procedures	 Implement co-located specialized positions at the Court and DSS-CD: 	 Implement best practices in cross-system protocols including screening and assessment, confidentiality, client satisfaction, and reasonable efforts. 	Implementation of co-located specialized positions at the Court and DSS-CD, including ability of these positions to effect change in staff practice and engage in protocol development and policy implementation Implementation of best practices assessed through (1) file and policy review and (2) understanding and use of protocols by line staff assessed through focus groups		
·	 Develop and distribute Domestic Violence/Child Maltreatment Resource Manual 	• Pilot CM protocols in DV agencies			
	 Develop and implement Child Order 	 Pilot DV screening and assessment 	 Increase in number of identified DV/CM 		
	of Protection (COP) Project	protocols at court and DSS-CD	cases in samples of DSS-CD case files over time		
	 Develop and distribute DSS-CD Manual for Domestic Violence Advocates 	 Implement co-located specialized positions at the Court and DSS-CD Raise awareness and understanding of co-occurrence Improve screening and assessment 	 Feedback from training events and follow-up surveys 		
		procedures			
(2) Promote skill building and cross-training	Develop case-centered DV/CM cross-training curriculum	 Hire a DV/CM specialist to consult with DSS-CD and Family Court staff on co-occurrence cases regarding best practices: 	 Increase in number of identified DV/CM cases in samples of DSS-CD case files over time 		
	 Hire a DV/CM specialist to consult with Family Court staff on co-occurrence cases Pilot Multidisciplinary Consultation Case (MCC) Review Process 	Improve Court staff knowledge of appropriate responses to cases involving domestic violence Improve screening and assessment procedures, so that DV is identified at the earliest possible juncture	 Perceptions of line staff and stakeholders regarding co-located positions (surveys, interviews, focus groups) Feedback from training events and follow-up surveys 		
		Implement case-centered cross-training curriculum Implement MCC Review Process: Provide information on resources/services available and on best practices Provide a forum for developing comprehensive and collaborative responses to families experiencing DV/CM	 Assess development and implementation of cross-training curriculum MCC Review Process: Staff perceptions of support and ability to implement MCC recommendations Facilitator's perception of collaborative nature of conference 		
		 Offer support to staff handling complex multi-problem cases and facing difficult decisions Increase "institutional empathy" across partner agencies 	 Staff perceptions of changed attitudes and development of institutional empathy 		
(3) Strengthen collaboration between courts and batterer intervention programs	 Implement Batterer Accountability Referral and Monitoring Program between the Court and BIPs 	 Implementation of protocol for approving batterer intervention programs for Court referrals 	• Rates of program enrollment and completion		
	 Implement Criminal Court Batterer Accountability Compliance Project 	 Implementation of standardized referral and compliance tools for reporting batterer compliance to the Court 	• Increase in Court action for noncompliance		
		•	 Feedback from program staff regarding quality and timeliness of information from BIPs 		
(4) Create information linkages to permit greater access to court and criminal justice information and to victim resources and services	 Conduct feasibility study for developing a database to improve information-sharing. 	 This objective was tabled due to a pending statewide judicial database effort. 	_		
(5) Community outreach regarding DV/CM co-occurrence	 No specific activities were developed to address this objective. 	Referred to county family violence coordinating council	-		

tation of local projects. However, in our efforts to use this approach, several challenges became apparent, and revolved around the development of program theory while considering the complexities of community collaborations.

First, a CCI is far more complex than a single program, which has a narrower range of activities and typically a single target audience (as described by Adler, 2002). One significant difference is the number of people involved. A small single program may have a staffing of, say, an executive coordinator, administrative assistant. and five counselors, together with a board of directors. The logistics of getting this number of people together - and getting them to agree on a program theory or logic model - is substantially different from trying to organize multiple representatives from numerous organizations, all of whom must respond to their own organization's bureaucracy. Kaplan and Garrett (2005) found logic model development was difficult in situations where resources are stretched thin or spread wide in terms of the location of their members. In addition, program participants are often unfamiliar with theoretical approaches to program development and evaluation, so a substantial amount of time may be spent simply getting everybody 'on the same page' on just the basics of the process. Again, Kaplan and Garrett (2005) found developing logic models was a challenge for even strong collaborations when comprised of a diverse group of organizations and individuals with varying levels of education and differing roles in the collaboration. The St. Louis County Greenbook Initiative attempted to bring together into a new collaboration individuals with diversity in professional training from three systems without the same organizational goals or mandates. We believe this contributed to the failure of the program theory and logic model to be used by Initiative participants as envisioned. As Kubisch et al. (1995, p. 5) suggest, CCIs seek improvements in a range of domains for which there are "few agreed-upon definitions, much less agreed-upon measures."

Also, we did not anticipate the amount of time and resources the Initiative would invest in activities such as forming and managing committees and work groups, and formal conflict resolution. Petersen (2002) refers to this as the development of social capital (i.e., social trust, responsibility, cooperation, and action) between the collaborative partners. She suggests that social capital is built concurrent with program implementation, creating a synergistic relationship between the program's strategies and the development of social capital. Outcome achievement is the result of this synergy. We now believe that strategies and activities with the explicit outcome of building social capital as the foundation of a sustainable collaborative should have been included in the program theory and logic model. For example, as described previously, the national evaluation team conducted a network survey of stakeholders that graphically represented the links between individuals in the three systems. In order to measure in the short-term whether the Initiative had fostered a greater number of such linkages, strategies and activities should have been articulated and then evaluated with a follow-up network survey.

In addition, the Initiative's leadership did not use the program theory as envisioned by the federal planners. The logic model did not structure discussion at Initiative committee meetings and was not used as a 'road map' to the Initiative's overall strategy. This may be due to the late introduction of the program theory in the course of the project, combined with the unfamiliarity of Initiative members with this type of program conceptualization. This finding is also consistent with Kaplan and Garrett's (2005) that the benefits of developing a logic model, in terms of assigning responsibility for tasks and outcomes, tend to accrue to coalitions that are already fairly strong and collaborative. In St. Louis County, staff members at the DSS-CD and the Family Court had a strong working

relationship prior to the Initiative due to their joint responsibility for child abuse cases. However, domestic violence service providers were more weakly attached to either DSS-CD or the Family Court. Therefore, a great deal of effort was invested in simply building relationships among the three systems.

We suggest the best way to improve stakeholders' understanding of evaluation methods and process is to engage stakeholders together with evaluators early in the process and include evaluation as an essential component of program development. Also, in a multisystem collaboration, a small advisory council should be identified that would be kept apprised of evaluation activities and become a liaison between the evaluator/evaluation team and the broader stakeholder audience. This advisory council could facilitate access to evaluation data and advocate for the importance of evaluation to the project's success. We believe expanding the boundaries of evaluation activities to enlist the aid of non-evaluator stakeholders is critical. Not only are funders increasingly requiring evaluation of the programs they fund (including individual contributors), program evaluation is essential in order to improve services.

Second, as can be seen from the logic model presented here, attempting to use a graphic to portray a program theory may do a disservice to the complex ways in which many of the strategies and outcomes overlap in a community-wide project such as the Greenbook Initiative. Further, the process of developing a program theory and logic model is supposed to include articulation of the assumptions underlying the theorized causal linkages. In St. Louis County, this level of discussion did not really take place until the 'rubber hit the road,' so to speak; a key strategy was implemented on the assumption workers would take advantage of this resource. which did not occur as intended. Ultimately, this led to a restructuring of the strategy to be consonant with the nowidentified real needs of the target audience. Moreover, projects such as the Initiative do not operate in a vacuum, but within a larger organizational and community context. In addition to implementing Initiative-related changes, partner agencies also had to continue to adapt to new legislation, policies and other mandates, administrative changes, and funding cuts. Kaplan and Garrett (2005) suggest one of the most unreliable assumptions is that people will change their work habits because a new resource or technology becomes available. However, it may be that the target audience does not perceive a need or weakness in that area and, thus, does not utilize the new resource. Successful implementation requires program planners to move beyond the howwhat-when-where questions of program development to the important question of why they expect the program to succeed: Why will clients access this resource? Why will workers change their habits? Why will this change of practice be better than the existing practice? In this regard, one of the lessons learned is that developing policies and protocols is only half the challenge. The other half – and this cannot be underestimated – is how to move or motivate workers to adopt these new practices as part of sustainability efforts.

This leads to the suggestion that a newly forming collaboration develop a basic program theory and logic model, and then revise it as reality sets in. This is the premise of Den Heyer's (2002) temporal logic model or TLM. She suggests that traditional logic models offer a hard-system image that does not exist in the real world. A soft-system model, which changes through a "continuous process of feedback, assessment, and adjustment," (p. 31) and with stakeholder input, would reflect real-world changes. Thus, in her temporal logic model, stakeholders identify and implement an activity, monitor feedback on program context and problems, redesign the activity, and continue monitoring feedback and making changes as necessary. Den Heyer (2002, p. 45) notes the TLM expands on the "supposed to be" model by including "how it

is currently implemented." The TLM thus becomes a project management tool that can both facilitate strategic decision making and provide a program history. In terms of its usefulness for CCI evaluation, the TLM represents a model of project management. It remains to be seen whether the TLM can be used effectively in a real-world situation.

5. Conclusion

The program theory and logic model information presented in this paper is intended as a guide to help both program planners and evaluators. The logic model format is often a new way of looking at program planning for program developers. As such, this approach can force planners to answer key questions related to a succinct identification of the problem they wish to address, the assumptions behind the strategies and activities they propose to implement, how they wish the problem to look at the end of the program in terms of short-term outcomes and long-term impacts, and the resources needed to produce these outcomes. However, individuals come to community collaborations with their own philosophies and system concerns. Our findings are consistent with previous findings that, unless the method is presented at the inception or very early in the collaboration, the complexities of developing a program theory and logic model may not be appropriate for newly forming collaborations.

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Appendix A. Objectives of the St. Louis County Collaboration to Address Domestic Violence and Child Maltreatment

- A. Establish a comprehensive, inclusive planning process whereby information can be communicated and input can be solicited from all agency staff from each of the systems that will be participating in the project and from the broader professional and citizen community.
- B. Develop standards for best practices in cases involving child maltreatment and domestic violence that involve collaborative efforts utilizing the strengths and expertise of both fields to provide for the safety of children and adults who are victims of domestic violence.
- C. Confidentiality policies and procedures will be formulated by the collaborative effort in compliance with state statutes and case law. The policies will focus on safety for victims of domestic violence while still protecting victims of child maltreatment from harm.
- D. Cross-training on the dynamics of domestic violence and child maltreatment will be provided on a broad basis to agencies and individuals responsible for protecting the well-being of children and families. The ultimate objective of the training will be to develop a shared vision among the partners about the cooccurrence of domestic violence and child maltreatment and the responses that are most effective in terms of insuring adult and child safety and well-being.
- E. The collaborative project will contract for a feasibility study to explore the possibility of total county access to data systems to support the effective collaboration of DSS-CD, the Family Court, and domestic violence service providers in assessing cases, developing safety and case plans, and monitoring progress on case plans.

- F. The collaborative project will undertake community-wide outreach about domestic violence and child maltreatment and their co-occurrence.
- G. Increase collaboration among batterer intervention programs and the participating partners so that referrals made pursuant to case plans can be monitored and perpetrators can be held accountable.
- H. Develop a direct service component to assist domestic violence victims in securing services that will lead to self-sufficiency, such as housing, transportation, employment, and child care, that will give victims of domestic violence the option of leaving a perpetrator upon whom they may have been economically reliant.

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