**Addressing the Needs of Infants and Toddlers Exposed to Maltreatment: Examining the Impact of an Integrated Early Head Start & Children and Youth Services Program**

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## Project Description

This study will critically examine the SafeStart model in regard to factors related to the timing of services, pre-enrollment factors, and transitions. The SafeStart program, an integrated service model, is a collaboration between the Pennsylvania Lehigh Valley Early Head Start, and the local child welfare system, Children and Youth Service providers from two neighboring counties. This program is a collaboration between the two service providers designed to serve children who have an open case with their local Children and Youth Services for parent use of drugs or alcohol. This evaluation will demonstrate the effectiveness of the SafeStart intervention program and will determine whether it can be used as a model for children and families in other service areas.

## Research Questions

*Timing of Services*
- Are there critical age periods for SafeStart enrollment that predict children's attainment of developmental competencies in the areas of cognition, language, and social emotional as measured by the Early Learning Accomplishment Profile (E-LAP)?
- How is duration of enrollment, holding constant children's age of enrollment, related to children's attainment of developmental competencies in the areas of cognition, language, and social emotional as measured by the E-LAP?

*Pre-Enrollment Factors*
- How are the parent's history of maltreatment, parent's enrollment in foster care, child's level of maltreatment, and the child's duration of maltreatment prior to entry into SafeStart related to the child's attainment of developmentally appropriate skills in the areas of cognition, language, and social emotional as measured by the E-LAP following completion of an integrated program?
- Are there specific combinations of parent and child maltreatment histories that predict a child's attainment of developmentally appropriate skills in the areas of cognition, language, and social emotional as measured by the E-LAP following completion of an integrated program?

*Transitions*
- Are there specific combinations of parent and child maltreatment histories that predict whether a child will have a planned or unplanned transition from SafeStart?
- Holding length of service constant, do children who have unplanned transitions from SafeStart vary significantly on attainment of developmentally appropriate skills in the areas of cognition, language, and social emotional as measured by the E-LAP, compared to children with a planned transition?

## Sample

Data from approximately 270 families that have been enrolled in SafeStart from 2003 to 2017 were collected and reviewed. Final analysis will include data from 129 total families. Families were eliminated from analysis when data was unavailable (i.e. missing ELAP scores or missing initial referral documentation).

## Methods

An existing database that has been formulated and maintained by the SafeStart program is being utilized. Participants in the study are be parents and children, aged birth to 3, who have been enrolled in SafeStart for greater than 2 months and tracked in the SafeStart database.

- *Timing of Services Analysis.* ROC curve analysis will be conducted to determine the critical age of enrollment for the distinct developmental domains provided by the *E-LAP*. A series of three regression analyses will be conducted to determine if duration of enrollment, holding constant the age of enrollment, leads to improved child outcomes for each of the three domains measured by the *E-LAP*.
- *Pre-Enrollment Factors Analysis.* Regression analysis will be used to determine how parent and child maltreatment history impacts the trajectory of outcomes for children as measured by the three development domains on the *E-LAP*. Latent profile analysis will be used to identify subgroups (i.e. profiles) of parent and child risk factors that discriminate amongst the families enrolled in SafeStart and whether these profiles are related to child developmental outcomes.
- *Transitions Analysis.* Latent profile analysis will be used to determine what groups of parent and child risk factors predict a family's attrition from SafeStart. A series of three regression analyses will be used to determine whether children of families who dropout of SafeStart versus children who do not drop out vary significantly on attainment of developmentally appropriate skills in the areas of cognition, language, and social emotional as measured by the *E-LAP,* as compared to children with a planned transition.

**Progress Update**
Activities central to this project have included searching for, reviewing, and organizing pre-existing data from the SafeStart program as well as participating Children and Youth Service providers. This work has revealed that although SafeStart is an integrated service model there is little to no data retained on parent or child history with Children and Youth Services prior to enrollment. Further, data that is available on initial referral documents is not stored

electronically and is often unreliable and highly variable in regard to accuracy and completion. Further, program data has not been stored in a central data base and is not well maintained or complete.

Data collection is complete and currently work is underway to examine the data that are available. Not all initially proposed parent and child variables are available to the researcher. Descriptive analysis is being conducted on the available data in order to determine whether these data have enough variability to be used in the proposed analysis and whether they can act as a proxy for the initially proposed variables that are unavailable.

**Implications for policy/practice**
The project reveals the unique logistical demands of administering an integrated services model and speaks to the need for increased data-based collaboration and storage. The project reveals the complex nature of data collection for these programs and speaks to need for increased funding specifically earmarked for program evaluation and program data based researched. Further, this evaluation will demonstrate the effectiveness of the integrated SafeStart intervention program and will determine whether it can be used as a model for children and families in other service areas. The results of this investigation can be utilized to further the promotion of integrated early intervention programs for maltreated children exposed to substance use.

**Implications for research**
The novel use of ROC curve analysis, as well as, regression and latent profile analysis will provide an extensive examination of the unique services provided by the integrated SS model. Further, this project provides an in-depth examination of an integrated service model for young children impacted by drug and alcohol abuse. Results from this examination will reveal where additional research is needed into these types of innovative integrated models.

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