

Using a Two-Sided Matching Model to Facilitate Placement of Children for Adoption

Project Summary

The project builds the mathematical foundation for automating part of the process of adoptive placement for children in foster care. The project also assesses the practical feasibility of constructing a computerized program to facilitate adoptive matching.

The process of matching families and foster children in adoption is currently quite inefficient. Across the U.S. there are thousands of families who desire to adopt, while approximately 125,000 children in foster care need adoptive families. Child welfare authorities devote substantial resources to local recruitment of new families, even though the possibility exists that an appropriate family for the child already waits for a placement. The difficulty in matching children with families persists despite federal efforts to promote adoptions. It persists despite state efforts to facilitate interstate placement to increase the flow of information.

Currently there is no systematic way to sift through the information made available by the states. This creates a bottleneck in adoptive placement. Automating the process of comparing the characteristics of waiting children and waiting families could increase the number of adoptions from foster care, speed adoptive placement, reduce costs of placement, and cut costs of child welfare overall. The principal investigators propose to automate the matching process using an extension of the two-sided matching model currently used to match medical residents with residency openings.

The principal investigators examine decision-making in adoptive placement using an example data set constructed from known characteristics of waiting and adopted children and waiting and adoptive families. The principal investigators ask adoption specialists to identify likely matches in an example data set and will follow up with a survey of the adoption specialists, asking them to articulate the "algorithm" implicitly or explicitly used in matching. The sets of likely matches made by the adoption specialists will be used to construct the model and to test the ability of the matching model to replicate the matches made by the adoption specialists.