

JWB Clients and Foster Care

Introduction

Jim Mills, and Kate Wilson, from the Juvenile Welfare Board (JWB), initiated this analysis request to find out how many JWB clients as of July 1, 2001 were also shown to be in foster care by the child welfare system. The JWB clients were identified as between the ages 0 and 17 and having an open case as of July 1, 2001. This analysis request required the use of Probabilistic Population Estimation (PPE) & Caseload Segregation Integration Ratio (C/SIR) as there were no shared individual level information to link the two different systems together.

Method

This methods used to conduct this analysis was PPE & C/SIR, which will take two data files and estimate the number of individuals who overlap both data files. First the method used to identify the participants in the analysis will be discussed. Then a second section that will briefly talk about the statistical methods used PPE and C/SIR, and finally how the procedure was conducted.

Participants

The number of JWB clients who are between the ages of 0 through 17 and had an open case file as of July 1, 2001 were 4,618. Table 1 and Table 2 show the breakdown by age and sex of these individuals

JWB Clients by Gender		
Gender	Number of Ind.	Percentage
Males	2,530	54.79
Females	2,088	45.21
Total	4,618	

JWB Clients by Age Group		
Age Group	Number of Ind.	Percentage
0 to 5	917	19.86
6 to 12	1,725	37.35
13 to 17	1,976	42.79

The second file used, was Child Welfare Data of those individuals who shown to be in foster care as of their last activity record and were between the ages of 0 to 17.

PPE & C/SIR

These processes rely on information in existing databases. PPE is a statistical method for determining the number of people represented in a data set that does not contain a unique identifier. The estimation is based on a comparison of the information on the distribution of Date of Birth and Gender in the general population with the distribution of Date of Birth and gender observed in the data sets. The number of distinct birthday/gender combinations that occurred in each data subset are counted. The number of people necessary to produce the observed number of birthday/gender combinations are then calculated.

C/SIR is a rating between 0 and 100, which indicates the amount of overlap of clients between systems. Zero being no overlap at all and 100 being total overlap. Duplicated, unduplicated counts from the two files and combined files is used in the C/SIR formula to calculate the C/SIR.

There are multiple concerns and issues when using PPE and C/SIR. These concerns are 1) the assumption of unduplicated individuals in each file, 2) the differences in the sizes of the files being used, and 3) the confidence interval between the file unique identifier and population estimation.

Procedure

Both files were formatted using only a system unique identifier, DOB and gender, then used in the PPE & C/SIR process. There were multiple concerns about the limits of using PPE on these two data files. The size difference between the JWB client file size (4,618) and the Child Welfare file size (830) was not an issue in this analysis and the difference still falls within the 1:20 ratio.

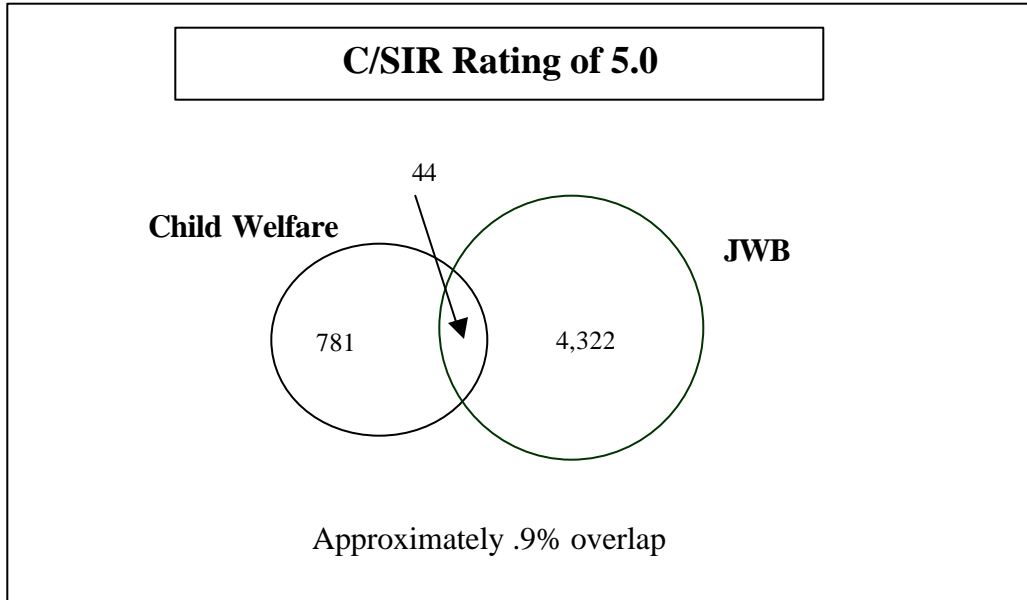
Even though each individual was identified as unique in both files, the 95% confidence interval was not met for either file, although it was very close in both files. Even though these issues were identified, the analysis was continued with caution.

Results

PPE & C/SIR

PPE and C/SIR was run on the JWB Clients and the Medicaid file and subgroups of these files by program and age breakdown. Figures 1 through 5 show the findings.

JWB Clients and Child Welfare



There was very little overlap between those JWB clients identified and those in the child welfare system showing to be in foster care.