



## The contribution of children's advocacy centers to felony prosecutions of child sexual abuse

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### ABSTRACT

**Objective:** To describe trends of felony sexual abuse prosecutions between 1992 and 2002 for two districts of a large urban city that differed primarily in their use of children's advocacy centers (CACs) for sexual abuse evaluations in children.

**Methods:** Aggregate data for two districts of a large urban city were provided from 1992 to 2002 from the district attorney's office, child protective services (CPS) agency, and all CACs serving both districts. Summary statistics were calculated over time and compared between both districts for ecologic trends using negative binomial regression.

**Results:** Over the time period of the study, substantiated reports of child sexual abuse declined: District 1 experienced a 59% decrease in the incidence of reports, while District 2 experienced a 49% decrease in the incidence of reports. Despite this decrease, felony prosecutions of child sexual abuse increased in District 1 (from 56.6 to 93.0 prosecutions/100,000 children, rate ratio 1.64, 95% CI 1.38–1.95), but did not significantly increase in District 2 (from 58.0 to 54.9 prosecutions/100,000 children, rate ratio 0.94, 95% CI 0.73–1.23); by 2002, the rate of felony prosecutions in District 1 was 69% greater (95% CI 37–109%) than the rate in District 2. In 1992, CACs in District 1 evaluated approximately 400 children, increasing to 1,187 children by 2002. The number of children evaluated by CACs in District 2 increased modestly from nearly 800 in 1992 to 1,000 in 2002.

**Conclusion:** Felony prosecutions of child sexual abuse doubled in a district where the use of CACs nearly tripled, while no increase in felony prosecutions of child sexual abuse was found in a neighboring district, where the use of CACs remained fairly constant over time.

**Practice implications:** Though many limitations exist when bringing together ecological data from different agencies, the strength of the association we observed between increased CAC use and increased felony prosecutions, and the stepwise fashion in which it occurred should support future research to confirm our findings and to delineate which attributes of CAC performance might impact the likelihood of prosecution of child sexual abuse.

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### Introduction

In 2003, nearly 80,000 cases of sexual abuse (or 120 cases/100,000 children) were reported in the United States (United States Administration for Children & Families Child Maltreatment Report, 2004). Though this number represents a significant decline from the previous decade (Finkelhor & Jones, 2004), it remains unclear whether criminal prosecution of offenders

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played a substantial role in that decline. While sexual abuse cases are more likely than physical abuse cases to reach criminal court (Brewer, Rowe, & Brewer, 1997; Sedlak et al., 2005), there is little consistency between jurisdictions in the percentage of sexual abuse cases accepted by the district attorney for prosecution, ranging from 28% to 94% across 13 studies (Cross, Walsh, Simone, & Jones, 2003). Cases with lower rates of prosecution involve children who have no medical findings, who are younger, whose perpetrator lives in the home, and whose non-offending parent does not support them (Brewer et al., 1997; Cross, De Vos, & Whitcomb, 1994; Stroud, Martens, & Barker, 2000).

Over the last 25 years, the difficulty in evaluating and coordinating child sexual abuse cases and in meeting the needs of children has led to the growth of children's advocacy centers (CACs). CACs have attempted to streamline case management, minimize interviews, and protect the well-being of children by bringing together medical, legal, and child protective services workers to one site and providing specialized, coordinated evaluations in a child-friendly setting. Measuring the criminal court outcomes of children evaluated at CACs, however, has been limited, because studies have not had adequate control groups and only examined short time periods (Jones, Cross, Walsh, & Simone, 2007).

Therefore, the purpose of this study was to describe trends in felony child sexual abuse prosecutions across two adjoining districts in a large urban city from 1992 to 2002 when one of the districts experienced a significant increase in CAC participation in child sexual abuse cases compared to a neighboring district whose use of CACs did not change substantially. Our hypothesis was that the growth in the use of CACs in one district compared to the other would correlate with a relative increase in the prosecution of child sexual abuse.

## Methods

Data were obtained from the CACs, district attorneys' (DAs') offices, and the child welfare agency in two adjoining districts of a large urban city. Permission was granted from each agency to examine aggregate data from the time period 1992–2002 on the number of children evaluated at child advocacy centers, the numbers of felony prosecutions for child sexual abuse, and the number of sexual abuse allegations substantiated by child protective services (CPS). The CAC data were in aggregate and deidentified, and therefore IRB-exempt. The years 1992–2002 were chosen for the study because it was the period in which one district (heretofore labeled District 1) increased significantly its personnel providing sexual abuse evaluations in CAC settings. Although there were additions in personnel in the other district over time (District 2), the overall number of personnel providing such evaluations did not change as significantly during the study period.

The primary outcomes for this study were felony prosecutions and convictions for child sexual abuse. A "prosecution" is when the DA files a complaint in criminal court against a person – the alleged perpetrator or "defendant" – who has been arrested for an alleged crime. The decision to prosecute a case can be very complicated, but often prioritizes a child's disclosure and the subsequent medical examination. The chief assistant district attorney (ADA) in charge of child abuse prosecutions considers this evidence in collaboration with other involved agencies (CAC, CPS, and police) and then assesses whether the evidence would be deemed credible by a jury. In most prosecutions of child sexual abuse, there are no medical findings, and the credibility of the case may be determined by the strength of the disclosure made by the child (Cross et al., 1994).

Once an ADA makes a decision to prosecute a case, each specific charge is categorized as either a "felony" (a more serious crime with larger punishment) or a "misdemeanor" (less serious than a felony with a lesser punishment). State Penal Law provides fairly rigid criteria for determining whether a charge qualifies as a felony or a misdemeanor, though in some cases there is room for interpretation by the DA. Therefore, the term "felony prosecution" is defined here as a prosecution which had one or more felony charges, regardless of whether the case also involved misdemeanor charges. This study focused on felonies because the database from one of the districts could only provide aggregate data for felony prosecutions of child sexual abuse.

Prosecutions have four main outcomes: dismissal, pled guilty, found guilty in trial, and found not guilty in trial. The prosecution is deemed a "conviction" if the defendant pleads guilty before trial or is found guilty in trial of at least one of the charges; thus, the "conviction rate" in a given year is the number of prosecutions ending in conviction (pled guilty + found guilty in trial) divided by the total number of prosecutions.

The principal exposure was the use of CACs in each district during the study period. Initially, CACs in the two districts did not all have databases to track the total number of children evaluated; however, the approximate number of children evaluated each year at each CAC was provided by interviewing the medical director or program coordinator who had been with the CAC since its inception. The CACs in both districts evaluated sexual abuse, and each achieved its designation as a CAC by meeting standards set forth by the National Children's Alliance: a child-friendly environment conducive to helping children and families feel comfortable during the evaluation; a one-way mirror for forensic interviews, which reduces the number of interviews a child has to give because multiple agencies can observe; a medical evaluation by a pediatrician or pediatric nurse practitioner who is specialized in the examination of abused children; the availability of counseling on site or in the community where the child can be referred; and regular case review meetings, where members from all the disciplines meet to discuss specific cases and highlight important areas for improvement. All CACs were based in, or closely affiliated with, a hospital and evaluated children ages 0–17. Pediatricians and social workers ran the programs, and ADAs, detectives, and CPS workers participated jointly in active cases at the centers. Finally, in an effort to provide the most accurate estimates of CAC use, we did not penalize centers that achieved CAC designation during the time period of the study by under-reporting children they had evaluated prior to their CAC designation. Because such centers had achieved nearly all of the CAC standards

**Table 1**  
Demographics of children in CPS investigations in 2002.

	District 1	District 2
Total children	23,184	11,456
		Sex
Male	48.7%	49.6%
Female	50.2%	49.4%
Unknown	1.1%	1.0%
		Age
0–5	30.8%	28.2%
6–11	34.5%	32.9%
12–17	33.9%	38.2%
Unknown	0.7%	0.7%
		Race
Afr Am	41.2%	40.7%
Hispanic	49.8%	45.9%
White	3.2%	5.7%
Asian	0.3%	0.7%
Other	1.1%	1.5%
Unknown	4.4%	5.5%

Data provided by child protective services in a large urban city between 1992 and 2002.

– including expert evaluations and treatment, coordinated with CPS, law enforcement and the DA – we chose to include their evaluations from earlier years in order to ensure the most unbiased estimates of CAC-quality evaluations.

Because of privacy concerns and the sensitivity of the data, we were unable to obtain individual case files from the CACs, DAs, police, and CPS; only aggregate data from each agency were provided over the time period of the study, which permitted an ecologic cross-sectional analysis to examine time trends between the districts. Data were described using frequencies for categorical variables. Demographic data were provided by CPS for their caseloads. CPS data were included to provide a clearer picture of sexual abuse trends in each district to help assess whether a difference in sexual abuse prosecution rates between the two districts might simply reflect a difference in the incidence of child sexual abuse or child demographics between the two districts. CPS data could only be provided from 1994 to 2002, because prior to 1994 if a case had multiple allegations of maltreatment, the entire case was recorded only as “substantiated” or “unsubstantiated” without providing a breakdown of which allegation(s) was(were) substantiated.

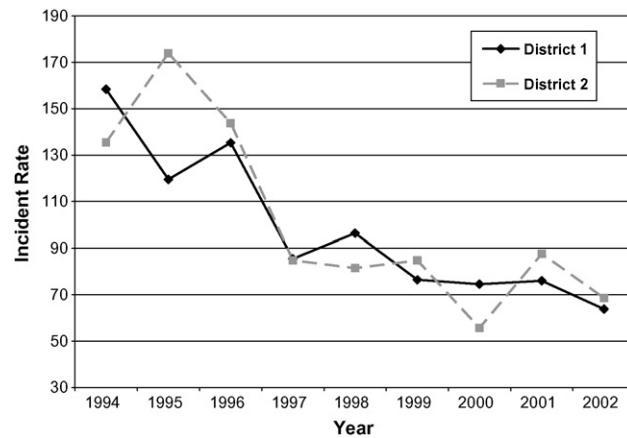
Rates of felony prosecution were calculated as incident rates per 100,000 children in each district. Population statistics were reported through city statistics yearly on all residents, but the age group distributions were only available in the 1990 and 2000 census reports. For District 2, the proportion of children aged 0–13 (for which the prosecution data covered) remained stable over the decade at 13%, so all population statistics were multiplied by 0.13 to obtain an estimate of the exposed population over time. For District 1, the proportion of children aged 0–17 years (for which prosecution data covered) changed between 1990 and 2000. In 1990, 27.6% of District 1’s population was age 0–17, increasing to 29.8% in 2000. To account for this increase, equal increments were estimated yearly to match census trends, and that fractional proportion was multiplied by the annual population in that district by year. Finally, incident rate ratios (with 95% confidence intervals) and statistical significance of time trends were examined through negative binomial regression analyses that examined the outcome of felony prosecutions as a function of both the year of study and district (District 1 vs. District 2), which were included as interaction terms in the model. Negative binomial regression was chosen over Poisson regression to account for over-dispersion of the model; it also permitted the calculation of incident rates and rate ratios calibrated to the population within each district per year. All analyses were conducted using Stata 9.0 (Stata Corporation, 2005).

## Results

### *Child protective services*

The demographics of the children evaluated by CPS for all types of child maltreatment were similar between both districts in regards to age, gender, and race as demonstrated by 2002 statistics, which had been fairly consistent over time (Table 1).

Between 1994 and 2002, 2,617 children had reports of sexual abuse substantiated by CPS in District 1, compared to 2,320 children in District 2. Similar to national data, the incidence of CPS-substantiated child sexual abuse declined in both districts during the study period (Fig. 1). The number of CPS-substantiated cases of sexual abuse in District 1 dropped steadily from 564 (158 per 100,000 children) in 1994, to 262 (64 per 100,000 children) in 2002, a 59% decrease in incidence. The number of CPS-substantiated cases of sexual abuse dropped similarly in District 2: 338 (135 per 100,000 children) in 1994, and 177 (69 per 100,000 children) in 2002, a 49% decrease in incidence.



\*data provided by child protective services in a large urban city between 1992 and 2002

**Fig. 1.** Incident rates of sexual abuse cases substantiated by child protective services (per 100,000 Children). Data provided by child protective services in a large urban city between 1992 and 2002.

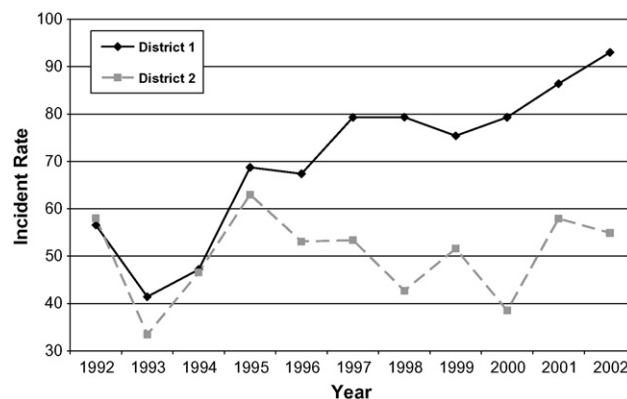
### Children's advocacy centers

In District 1, the number of children evaluated by CACs for possible sexual abuse tripled from nearly 400 in 1992 to approximately 1,178 in 2002, explained mostly by the growth of independent centers in that district. In District 2, as the medical staff of centers increased, the number of children evaluated by the three CACs for possible sexual abuse increased 25%, from approximately 800 in 1992 to nearly 1,000 in 2002.

### District attorneys' offices

From 1992 to 2002 the number of felony prosecutions of child sexual abuse increased in District 1, from 194 in 1992 (56.6 prosecutions/100,000 children age 0–17) to 382 in 2002 (93.0 prosecutions/100,000 children age 0–17, rate ratio 1.64, 95% CI 1.38–1.95), totaling 2,944 felony prosecutions over the time period (Fig. 2). In District 2, felony prosecutions of sexual abuse remained steady, with 112 in 1992 (58.0 prosecutions/100,000 children age 0–13, rate ratio 0.94, 95% CI 0.73–1.23), totaling 1,096 felony prosecutions. In total, the rates of felony prosecution of child sexual abuse in the two districts were similar in 1992 (rate ratio 0.98, 95% CI 0.77–1.23) but by 2002 were 69% greater in District 1 than in District 2 (rate ratio 1.69, 95% CI 1.37–2.09). In the negative binomial regression, when the year of study was modeled as an ordinal factor, the increase in felony prosecution rates District 1 was found to occur in stepwise fashion over the 11-year period ( $p=0.002$ ) (Fig. 3).

Despite these major shifts in felony prosecutions, the percentage of prosecutions ending in conviction (conviction rate) did not change appreciably between the districts over time (Fig. 4).



\*data provided by the district attorney's office of both districts between 1992 and 2002.

**Fig. 2.** Incident rates of felony prosecutions by the district attorney's office (per 100,000 Children). Data provided by child protective services in a large urban city between 1992 and 2002.

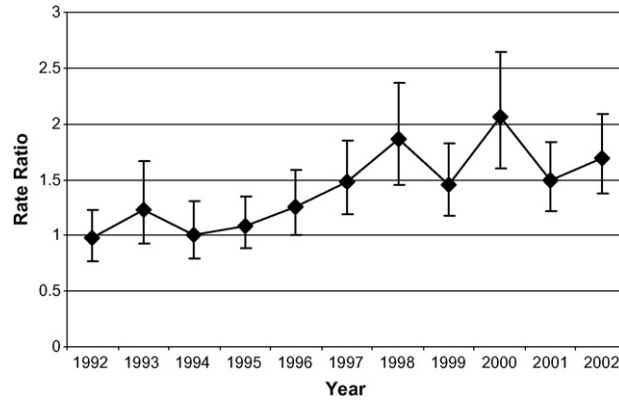


Fig. 3. Incident rate ratios of felony prosecutions by year (District 1 vs. District 2).

**Discussion**

Examining whether children’s advocacy centers increase prosecution rates of child sexual abuse has many methodological challenges; no study, to date, has been able to examine this question thoroughly (Faller & Palusci, 2007). Our study is the first to examine a large number of felony prosecutions of child sexual abuse in a city – 4,040 prosecutions – over a time period in which one district within the city greatly increased its volume of CAC-evaluated cases compared to a neighboring district. Despite city-wide decreases in sexual abuse cases substantiated by CPS, felony prosecutions of child sexual abuse doubled in the district where the use of CACs nearly tripled, while no increase in felony prosecutions of child sexual abuse was found in the neighboring district, where the use of CACs remained fairly constant over time.

The most important caution in interpreting these data is the inability to infer causality from such an ecologic study, which is limited in studying alternative explanations for the results and in understanding in greater detail how individual program variation might have influenced prosecution rates. We only had access to aggregate data of felony prosecutions from the two districts, so, despite the significant associations in time trends that we observed, the data were not detailed enough to evaluate possible confounders that might have provided alternative explanations for our findings. We also did not know which of the felony prosecutions were evaluated by CACs, the characteristics and the outcomes of specific prosecutions evaluated at CACs, whether individual CAC differences influenced the prosecutions, and we could not discern the temporal relationship of arrests and CAC involvement (i.e. CAC involvement could simply have been a marker for increased arrests).

Another important limitation for our study related to the differences in the prosecution data between the districts. While District 1 experienced a large increase in felony prosecutions, it is noteworthy that its DA’s office contributed data for child victims age 0–17; whereas, in District 2, the DA’s office could only provide data for child victims age 0–13. Because District 2 did not experience the same increase in prosecution rates, the question arises whether the increase in prosecution rates over time in District 1 could be explained by the inclusion of data on older children in that district. It is certainly possible that the DA’s office would accept more prosecutions involving older victims in whom disclosures are more reliable. To help improve comparability between districts, we partially offset this concern by presenting the prosecution data as rates (prosecutions

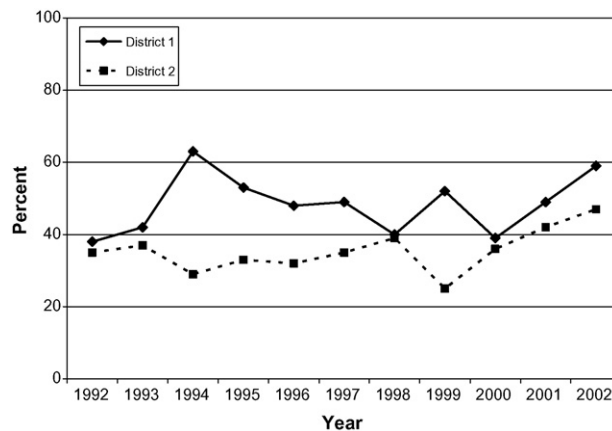


Fig. 4. Felony conviction rates over time in District 1 and District 2.

per 100,000 children age 0–17 living in District 1 and per 100,000 children age 0–13 in District 2). Such offsets, however, do not completely eliminate the concern; if overall prosecution rates are much higher in cases involving adolescent victims, it is likely that the aggregate rate for District 2 may have been under-reported across all years in this study. And yet, even if the aggregate rates across all years were higher, that would not impact the slope or change in prosecutions that were observed over time. The stepwise increase that was observed in District 1, where there was larger growth in CAC evaluations, would still emerge in a comparative analysis to District 2.

Other system-level changes might also have helped explain some of these differences. For example, differences over time in the conduct of investigations within child protective services agencies or in police departments might have led to improved efficiency and prosecutions between districts. However, significant changes in policy by police or CPS would be city-wide, and thus would have been expected to affect prosecutions similarly across districts; therefore, one would have to invoke more unofficial differences in practice between districts – those that are not routinely recorded in administrative data – that may have influenced prosecution rates. Finally, one could argue that the finding of increased prosecutions might merely reflect the DA's decision to move forward with more cases by lowering the threshold for quality of evidence. The equivalent conviction rates between the two districts might argue against such a concern; however, we were not able to discern what percentage of the felonies were pled guilty as misdemeanors and whether this may have increased the conviction rate.

Despite this study's shortcomings, the magnitude of association between CAC involvement and increased felony prosecutions is difficult to discount. Prosecution of child sexual abuse relies heavily on whether the child provides a clear disclosure of abuse and whether an appropriate medical evaluation was performed, and CACs aid critically in both of these issues. Without coordination between experts from each agency, children are subject to more interviews (Cross, Jones, Walsh, Simone, & Kolko, 2007), which can affect the consistency of their statements (Bruck, Ceci, & Hembrooke, 1998); additionally, studies have demonstrated that many pediatricians in offices and emergency departments are inexperienced in examining children's genitalia (Leder & French, 2005) and vary significantly in how they interpret exam findings compared to experts in child sexual abuse (Adams & Wells, 1993; Makoroff, Brauley, Brandner, Myers, & Shapiro, 2002; Paradise et al., 1997). Though physical exam findings are rare in child sexual abuse (Adams, Harper, Knudson, & Revilla, 1994), CAC pediatricians and nurse practitioners serve several integral roles: triaging cases from hospital Emergency Department doctors who are not always sure when to involve CPS and law enforcement; helping manage cases referred by CPS to make sure law enforcement and the DA are involved, when necessary; and providing timely, expert medical evaluations and being prepared to testify in court, if needed, to explain the child's findings or to educate the jury how a normal physical exam does not mean that nothing happened. Whether any of these roles was integral to the pursuit of felony prosecutions of sexual abuse was beyond the scope of this analysis.

In a currently on-going, multi-state, prospective study, children's advocacy centers have been shown to increase police involvement in CPS cases, increase the number of agencies present during interviews, increase the number of children receiving forensic medical exams, increase the non-offending parent satisfaction with the investigation process, and decrease the percentage of children who are very scared and uncomfortable during the interviewing (Cross et al., 2007; Jones et al., 2007; Walsh, Cross, Jones, Simone, & Kolko, 2007). Future research could examine whether any of these specific improvements are a significant contributor to increased prosecution of child sexual abuse.

## Conclusion

We present the first data that show an association between the increasing use of CACs and an increase in felony prosecutions of child sexual abuse. The limitations of the separate databases and lack of data sharing between agencies limit our ability to infer a causal relationship for the increase in felony prosecutions of sexual abuse; however, the strength of the association and the stepwise relationship we observed over time should support future research to confirm our findings and to delineate which attributes of CAC performance might impact the likelihood of prosecution of child sexual abuse.

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