

# OCD | Special Report

## Framework For Collaboration: Integrating School and Human Services Data In Pittsburgh

The Allegheny County Department of Human Services and Pittsburgh Public Schools took a major step last year toward closing a knowledge gap that prevents schools and human service agencies around the country from developing a deeper understanding of the children in their systems and collaborating on more effective, better targeted strategies for improving children's academic performance and overall well being.

After more than a year of research and negotiation, county human services and city public school officials reached a memorandum of understanding that enables them to integrate previously segregated data on students enrolled in the city's public schools.

Integrating data on issues ranging from student achievement and attendance to housing, child welfare, and mental health services offers several potential advantages. It could, for example, help school officials better understand circumstances outside of school that influence the performance and behavior of students in school. Child welfare caseworkers could more reliably monitor how their young clients are doing academically and whether they are attending school regularly. A research partnership could lead to a better understanding of the impact interventions have on children's education. And it could provide the basis for richer analyses, which, in turn, could help identify areas of need and suggest new approaches to addressing them.

The concept of integrating data was fairly straightforward. However, finding a way to do so was a challenge that had deterred previous attempts to negotiate an agreement. Among the major obstacles were state and federal laws that protect the confidentiality of personal education and health information whose web of restrictions made sharing data a daunting legal challenge.

### The Data Sharing Framework

The memorandum of understanding (MOU) provides the framework for integrating school district and Department of Human Services (DHS) data, including confidentiality provisions, responsibilities of the parties, and the type of information that can be shared and for what purposes.

#### Provisions within the MOU include the following:

- DHS is responsible for performing the actual integration and analysis of student data.
- The school district's responsibilities include providing DHS with directory information and educational records of those students for whom DHS has legal custody.
- The school district also provides certain information for other students enrolled, including personal identifiers, such as names and home addresses; achievement data, such as grade point averages; attendance; and data on students in special programming, including the district's Student Assistance Program, special education, and gifted education.
- All student data provided by the school district is considered confidential, and state and federal laws that apply to student records govern its release.
- All reports prepared from the data that contain personally identifiable information are considered to be confidential.
- DHS agreed to seek parental consent for releasing student records when the data suggest students might benefit from additional intervention and direct collaboration between DHS and the school district.

## Research Project

A key provision of the agreement authorizes the use of the data for conducting an “action research” project, a problem-solving process in which DHS and the school district work toward improving the way they address certain issues involving students of mutual interest.

DHS uses the data to prepare analytical reports related to students in the city schools who receive human services for the purpose of identifying attributes and indicators related to academic successes and challenges. The analyses serve as the basis for collaborative efforts to develop strategies for improving the way DHS and the public schools address the needs of students and their families. DHS and the schools are charged with creating, implementing, and evaluating the strategies.

The agreement also calls for DHS and Pittsburgh Public Schools to engage community stakeholders, including the Youth Futures Commission, which convenes leaders in the public and private sectors around developing and implementing strategies for preventing youth violence and improving opportunity for children and youth.

## Reaching The Agreement

The emergence of the Youth Futures Commission in Allegheny County was a key factor in moving the concept of integrating DHS and school district data from a topic of periodic discussion to reality. The commission, created in 2007, evolved from a similar initiative, the Youth Crime Prevention Council, which was established 13 years earlier at the urging of former U.S. Attorney for the Western District of Pennsylvania Frederick Thieman to better organize prevention efforts and law enforcement to address juvenile crime and violence.

One of the commission’s first subcommittees was assigned the task of investigating the issue of cross-systems data sharing, but the idea initially met with skepticism. School officials, in particular, expressed doubt that a data-sharing arrangement with DHS was feasible.

Early discussions, however, underscored the need for such an agreement, said Thieman, Youth Futures Commission co-chair and president of the Buhl Foundation. “You would hear someone say, ‘We don’t know who the homeless students are.’ Or, ‘We don’t know if our kids have been arrested.’ Or, on the county side, ‘We don’t know if someone we are providing services to is going to school or not.’ This was the reason why something like the Youth Futures Commission should exist. Its whole purpose is to try and address issues that can’t be addressed by less than a coordinated and concerted effort. It seemed a logical place to go.”

The knowledge gap was also apparent to others. John Wallace realized the implications when he sought informa-

tion about the children in the city neighborhood of Homewood, where he was organizing the Homewood Children’s Village. The initiative, modeled after the Harlem Children’s Zone in New York, concentrates community support and comprehensive services to improve children’s educational outcomes, health, and social and physical well being.

Without integrated school and DHS data, constructing a holistic portrait of Homewood’s children was not possible. No one, for example, was able to explain why one Homewood girl went from earning straight “A”s through 8th grade to having a 1.7 grade point average in her senior year, which left her ineligible for the district’s Pittsburgh Promise scholarship program.

“Obviously, something happened in this young woman’s life to cause her to go from a straight-A student down to a 1.7,” said Wallace, president of the Homewood Children’s Village board, and associate professor of social work at the University of Pittsburgh. “Part of the Homewood Children’s Village task is to remove to the extent possible nonacademic barriers to kids’ academic success. As it stands now, we don’t know what those things are. And unless you have a relationship with a kid you may never know.”

## Key Challenges

Reaching a data sharing agreement between the school district and DHS meant overcoming challenges that had frustrated previous efforts. Four stood as major obstacles.

- **Attitudes toward data disclosure.** After years of being inundated with requests for student data from outside researchers, school officials had grown cautious about doing so. Key concerns were the confidentiality of personally identifiable information and whether the release of data would benefit the district and its students.
- **Legal.** Laws restricting the release of student data include the federal Family Educational Rights and Privacy Act of 1974 (FERPA), which controls disclosure of education records. In most cases, student or parent consent is needed to disclose records such as grades, test scores, and behavior information. About 30 laws protect DHS-held data, including the 1996 Health Insurance Portability and Accountability Act (HIPAA). Consent is almost always necessary to disclose child or family health data, including information about mental health and drug and alcohol issues and treatment.
- **Technical.** Integrating the data included merging school information on 26,000 students with information in the DHS data warehouse related to human services, such as child welfare and mental health, as well data from juvenile probation and other outside sources. Key issues included system compatibility and the capacity to mine data to gain insight into students of mutual interest.

- **Cost.** Financial issues included start-up costs of integrating, processing, and analyzing the data, operational costs and who would pay for them.

Thieman assumed the role of a neutral third-party facilitator and was able to gain the support of top school district and DHS leadership for sharing data, which was critical to overcoming the obstacles to reaching a legal agreement.

### Pathways to the Promise

The launch of the Pittsburgh Promise in 2007 gave the Pittsburgh Public Schools additional motivation for gaining a more complete profile of its students and their families. The scholarship program offers all city public school graduates who meet residency, academic and attendance requirements up to \$10,000 a year toward the cost of attending a college, university, or technical school in Pennsylvania.

It led to a district-wide initiative to help students become “Promise ready” and a goal of having at least 80 percent of graduates finish college or a workforce certification program. Under Pathways to the Promise, the district put in place programs to strengthen teaching, counseling, curriculum, administration, and other areas critical to improving the educational environment and preparing students to earn scholarships and continue their education.

The potential benefits of integrating data with DHS include developing a more effective accounting of students receiving human services, the types of services they receive, how they are performing in school, whether there are other students in need of support who have not been identified, and other information that would help marshal resources to improve student outcomes.

### Gap in DHS Data

Some 230,000 Allegheny County residents are involved with the DHS network, which includes mental health, drug and alcohol, child protection, at-risk child development and education, housing for the homeless, and other services. The majority of those involved in such services live in the city of Pittsburgh.

Many are of school age and attend Pittsburgh Public Schools. More than 13,600 students—about 49 percent of the students in the district—have been involved in a DHS service at some point in their lives. Some 39 percent of the 11,990 children in the child welfare system in 2008 lived in the school district, as did 36 percent of the children who received mental health services. Children living in the city also account for 44 percent of the youths involved in drug and alcohol services as well as 41 percent of the youths involved in the Juvenile Court system.

More than a decade ago, DHS began a series of reforms built on openness to new ideas, integration, and multi-system collaboration, which has led to innovative initiatives

and earned Allegheny County standing as a national model for human services. The reform efforts were supported by significant contributions from the region’s foundation community. For example, contributions made by 16 foundations led to the creation of the Human Services Integration Fund to support the coordinated, comprehensive delivery of services.

A data warehouse was created with nearly \$3 million from the Human Services Integration Fund in 2000 as a central repository of human services data. The data warehouse staff and computer architecture enable DHS to process and analyze millions of client records to improve services and delivery and to better inform decision making. The data warehouse grew to include more than 25 different data systems. However, data from school districts remained elusive.

“School districts have always been a high priority because so many of the kids we deal with are in the schools and it would be helpful to know more about them in school,” said Marc Cherna, DHS director. “But for many years it was very difficult to even have any conversations about that. They were not inclined to share their information. They would quickly talk about FERPA and why they couldn’t do it.”

### Overcoming the Obstacles

Following an assessment of the issues that had frustrated past efforts to draft a data-sharing agreement, Thieman met with Pittsburgh Public Schools Solicitor Ira Weiss and a strategy emerged. “In our discussions, we agreed that the legal issues were significant, but where there was the will there was a way to deal with the legal issues,” Thieman said. “We also felt that the place to start was with the cost and technical issues.”

### Technical Issues

Getting the most comprehensive picture of Pittsburgh Public School students involved with DHS requires integrating huge amounts of data. Key DHS data includes information from Children, Youth and Families—the county’s child welfare system—as well as from mental health, homeless services, and drug and alcohol services. School-related data includes names, addresses, the schools students attend, grade-point averages, standardized test scores, behavior-related issues, and student involvement in special programs and services.

Technical issues included the capacity to manage a large volume of data and to integrate data from dozens of different information systems. Another was the analytical capacity to mine the data in ways that would enable DHS and the school district to gain insight into students of mutual interest, identify gaps in services, evaluate the effectiveness of interventions, and to inform decisions, such as where to target limited resources, how to coordinate service delivery, and whether new interventions are needed to address unmet needs.

The DHS data warehouse offered the capacity to perform such tasks and was a key factor in resolving the issue of technical feasibility. The data warehouse contains more than 15 million records from DHS programs and outside systems, including the state Department of Public Welfare, housing authorities, juvenile justice, Head Start, and the Allegheny County Jail.

“The strength of the technical capacity was on the DHS side,” said Erin Dalton, DHS deputy director in charge of the Office of Data Analysis, Research and Evaluation. “We’ve continued to invest in improving the system. We have the technical infrastructure and analytic expertise. We have a matching algorithm that seeks to uniquely identify and align records and we’ve had 13 years of experience using it.”

### **Financial Issues**

The issue of who would pay the start-up and operating costs of the proposed data-sharing system was also resolved relatively quickly. Given the existing resources at the DHS data warehouse it was determined that the cost of the new initiative would not be significant, and Thieman and DHS Director Cherna assured the school district they would find the funds to support the initiative. The foundations involved in Human Services Integration Fund agreed to release funds to cover costs such as data integration and a dedicated analyst.

“The school district didn’t have the money and we didn’t want resources and finances to be a barrier,” said Cherna. “Having those private sector partners makes all of the difference in the world. Without that resource, this wouldn’t have happened.”

### **School District Concerns**

Reaching a data sharing agreement also required gaining the confidence of school district officials, particularly the school board. “The biggest concern—the one everyone asked about over and over and over—was making sure that no one would be allowed to get into that information without proper authority,” said Theresa Colaizzi, president of the Pittsburgh Public Schools Board of Directors.

In addition to confidentiality, other concerns included the integrity of research and making sure that the district would not simply be providing subjects for study, but would be gaining knowledge useful to improving student outcomes, which had not always been the case in the past. A series of meeting with school officials, DHS officials, and Thieman helped ease those concerns.

Interest among school officials in learning the specifics of

how student data would be used and the types of interventions that would result from integration presented another challenge. Among the ways the issue was resolved was discussing ideas with school officials about the types of analyses that might be possible and providing data that showed that nearly 40 percent of the children DHS serves live within the boundaries of Pittsburgh Public Schools.

Finally, the confidentiality concerns of school officials were worked out by school district and DHS attorneys who worked for nearly a year to strike a balance between adequately protecting student information and providing a level of access that would make sharing data a useful and effective tool for improving the outcomes of students.

### **Legal Issues**

A data sharing agreement similar in scope to the one proposed for DHS and the Pittsburgh Public Schools had never been drafted elsewhere in the United States. Likely reasons include confidentiality laws that apply to schools and the fact that urban districts, in particular, attract numerous requests to conduct research on their student populations. “They’re a Petri dish for all sorts of things,” said Weiss. “So you often have a cautious reaction.”

The general legal challenge was to find enough flexibility in confidentiality laws to make data sharing feasible. For example, consent is generally required to release education and health data under FERPA and HIPAA, but obtaining consent for thousands of students would be difficult, time-consuming and uncertain.

“At first it seemed like we were at a log jam and it would be impossible,” said Paul Molter, assistant county solicitor with DHS. “But we both said rather than saying what can’t we do let’s focus on what can we do. And we were eventually able to get most of the functionality we wanted and comply with the laws.”

Restrictions contained in HIPAA and more than two dozen other laws and regulations made it difficult for DHS to integrate data with the school district without explicit consent. The course chosen was to find a way to entrust DHS with school district data and build into the agreement protections against unauthorized disclosure.

Attorneys also identified data that could be shared without consent, such as the release of school directory information, including name, age, address, and school the student attends. Certain DHS data could also be shared. For example, the release of school information about a child could be autho-



rized, if DHS was his/her appointed legal custodian. And, in general, explicit consent is not necessary to share student data when the data are presented in aggregate without information that can identify individual students.

But creating a more robust data-sharing arrangement required access to an even broader pool of student information. Attorneys found the solution in a recent amendment to FERPA, which provided a more detailed description of the law's research exception. Under the law, consent is not required to release student data to organizations conducting certain studies for the district.

The exception allowed the school district to integrate data without consent as part of an "action research" project undertaken with DHS to identify indicators of academic and behavior successes and deficits, prepare statistical analyses, and develop and implement strategies and interventions for improving service delivery and student academic outcomes. Positioning the data-sharing arrangement as such a research project enabled attorneys to draft an agreement that was the first of its kind in the nation.

### Moving Forward

School data was flowing into the DHS data warehouse by the summer of 2010 and select data sets were analyzed to test the system's capabilities.

A few months later, the first research project was defined from an analysis of shared data, which identified 99 students in grades 6 through 9 with some level of involvement in

DHS who scored well on standardized proficiency tests, but are performing poorly at school as measured by GPA and attendance. The data revealed, for example, that 80 percent of the students had been involved in mental health services, 60 percent in the child welfare system, and 27 percent had been involved in the juvenile justice system at some point in their lives.

Researchers hope to determine the problems that beset these children and the effectiveness of existing interventions, and create strategies for improving attendance, academic performance, and the students' chances of graduating with a level of achievement that would earn them Pittsburgh Promise scholarships.

Without the ability to share data the opportunity to direct those students toward the success they have shown the potential to achieve would likely have been missed, said DHS Director Cherna. "We wouldn't have picked up on any of these kids—we would have never known."

### References

Fraser, J. (2011). Framework for Collaboration: The Memorandum of Understanding between Allegheny County DHS and Pittsburgh Public Schools. Pittsburgh, PA: Allegheny County Department of Human Resources. [www.alleghenycounty.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=32826](http://www.alleghenycounty.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=32826) ■

## Announcement

### OCD's Family Foundations Serves Infants, Toddlers, And Families

The University of Pittsburgh Office of Child Development's Family Foundations Early Head Start promotes healthy prenatal outcomes for income-eligible pregnant women, the development of very young children, and healthy family functioning in communities across Allegheny County.

Family Foundations was one of the first federal Early Head Start programs established in the nation to provide a vehicle through which every young child with the support of their family and community can achieve optimal development. Family Foundations serves and partners with infants and toddlers, their parents, extended family members, and their community to self-assess, identify goals, develop, and implement action plans to enhance children's development.

The program, recently expanded with additional funding, serves more than 300 income-eligible pregnant women and children from birth to age 3 at six Allegheny County community sites. Family Foundations' caring and qualified staff supports positive parent-child relationships, and works to make sure young children and their families receive innovative services that enhance social and emotional development, cognitive functioning, physical performance, social skills, and communication development.

*FOR MORE INFORMATION*, Contact Angela Tookes at 412-233-9430. ■