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Framework for Collaboration:

The Memorandum of Understanding
between Allegheny County DHS and
Pittsburgh Public Schools

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The idea had been discussed for several years. What if Pittsburgh Public Schools and the Allegheny County Department of Human Services found a way to integrate the data they gather on students of mutual interest and use it to better inform strategies for helping those in need and improving their outcomes?

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 certain 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.

While the concept of integrating data was fairly straightforward, finding a way to do so was anything but. Several obstacles stood in the way. Chief among them were state and federal laws with acronyms such as FERPA and HIPAA whose purpose is to protect the confidentiality of personal education and health information respectively. The laws created a web of restrictions that made sharing the data they were enacted to protect a daunting legal challenge, even for those with benevolent reasons for using it.

As a consequence, the idea of sharing school and human services data in Allegheny County remained little more than a concept full of possibility – until October 21, 2009.

On that evening, the Pittsburgh Public Schools Board of Directors approved a memorandum of understanding between the city school district and county Department of Human Services to integrate student and human services data. Two months later, it was made official with the signatures of county and school officials, ending a year-long process during which they worked with staff and community leaders to overcome numerous challenges and create a data sharing agreement that was the first of its kind in the nation.

The Framework for Collaboration

The memorandum of understanding (MOU) between Pittsburgh Public Schools and the Allegheny County Department of Human Services (DHS) that was signed December 22, 2009 provides the framework for integrating student data, including confidentiality provisions, the responsibilities of each party, the type of information that can be shared and for what purposes.

Provisions within the MOU include the following:

- Under the agreement, DHS is responsible for performing the actual integration and analysis of student data. This job is performed within its data warehouse.
- The school district's responsibilities include providing DHS with all directory information and education 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, home addresses and schools; achievement data, such as grade point averages (GPA); attendance records; and information about student involvement in specialized programming, such as the district's Student Assistance Program, special education and gifted education.
- All student data provided by the school district is considered confidential under the MOU, and state and federal laws that apply to student records govern its release.

- All of the reports prepared from the data that contain personally identifiable information are also considered to be confidential.
- DHS agreed to seek parental consent for releasing student records when the data suggest certain students might benefit from additional intervention and direct collaboration between DHS and the school district.

Action Research Project

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

As part of the action research project, DHS will use the data to prepare analytical reports related to students in the city schools who receive county human services. These are prepared as aggregate reports. The general purpose of the analyses is to identify attributes and indicators related to academic successes and challenges. DHS will present the analyses to the school district and together they will examine the data in an effort to develop effective strategies for improving the way they address the needs of students and their families.

In addition, an “action” phase of the project calls on DHS and the schools to create, implement and evaluate strategies developed from the statistical analyses. The MOU also calls for DHS and Pittsburgh Public Schools to engage community stakeholders in the action phase of the research, including the Youth Futures Commission, a central clearinghouse and think-tank that convenes leaders in the public and private sectors around developing and implementing strategies for preventing youth violence and making Pittsburgh and the surrounding region a place of opportunity for its young people. The agreement, however, prohibits them from giving community stakeholders confidential student information that has not first been cleaned of indicators that could reveal the identities of students.

Finally, the MOU was given a limited shelf life, expiring in 2012 unless both DHS and the school district agree to extend it.

The Road to the MOU

Over the years, integrating DHS and Pittsburgh Public Schools data on students of mutual interest had from time-to-time been the topic of discussion, although never formally among high-level officials. That changed with the emergence of the Youth Futures Commission in Allegheny County.

The Commission was created in 2007. It evolved from a similar initiative, the Youth Crime Prevention Council, established 13 years earlier at the urging of Frederick Thieman, the U.S. Attorney for the Western District of Pennsylvania at the time, as a means of organizing prevention efforts and law enforcement to more effectively address the escalating rates of juvenile crime and violence that were sweeping the nation. The Commission quickly recognized the importance of accessing information across systems in preventing crime and improving the outcomes of at-risk youth. One of its first subcommittees was assigned to investigate the issue of cross-systems data sharing. But school officials, in particular, expressed doubt that a data-sharing arrangement with DHS was feasible.

“At the next steering committee meeting, the report back was basically that we couldn’t go anywhere because not all of the key players were ready to share information,” said Thieman, Youth Futures Commission co-chair and President of the Buhl Foundation. “But having the endorsement of the Youth Futures Commission provided a platform in which a smaller group of interested and dedicated people could work through the problems.”

Discussions with the school district and DHS provided a glimpse of the knowledge gaps that data sharing could help to fill. “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’” Thieman said.

“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 apparent to John Wallace when he was gathering information to help inform the development of the Homewood Children’s Village. The new initiative, modeled after the successful Harlem Children’s Zone in New York, seeks to concentrate community support and comprehensive services to improve the educational outcomes, health, and social and physical well-being of children in one of Pittsburgh’s most distressed neighborhoods.

Wallace met with DHS and school district officials looking for information that would help him understand what is going on in the lives of these children that could influence their well-being and, in particular, their academic outcomes, which as a group were grim.

“I just began asking what do we know specifically about children in Homewood,” said Wallace, president of the Homewood Children’s Village board, and associate professor of social work and the Philip Halen Chair in Community Health and Social Justice at the University of Pittsburgh. “The question became, what do we know about the impact of poverty on these kids? What is the prevalence of poverty? How do these variables relate to their academic outcomes? What is being done in the school system with regard to the provision of social services and mental health services to address these issues?”

The holistic portrait of Homewood’s children he sought required integrating data from the school district and DHS, a process that was not possible at the time. The consequences were becoming clear to all parties. Wallace, for instance, learned of a Homewood girl who earned straight “A”s through 8th grade only to have her grade point average plummet to 1.7 in her senior year, leaving her ineligible for the Pittsburgh Promise, which offers a scholarship for higher education to every city public school graduate who meets academic and attendance standards.

“But the larger issue was that no one was able to explain what happened,” said Wallace. “Obviously, something happened in this young woman’s life to cause her from going from a straight-A student down to a 1.7. 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 was a major technical undertaking that 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 meaningful 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 took on the role as a neutral third-party facilitator and was able to gain the support of top leadership in the school district and DHS for the data-sharing arrangement, which was critical to overcoming the obstacles that stood in the way of reaching a legal agreement.

“When he brought the idea to me he explained how it was going to work, I felt comfortable that he was on it,” said Theresa Colaizzi, president of the Pittsburgh Public Schools Board of Directors. “I knew he would protect any child of any risk of that information getting out. That was my concern. Before, I never felt the information was going to be protected well enough.”

Giving the data sharing idea additional traction was the fact that, for the school district, the motivation for gaining a more complete profile of its students and their families had perhaps never been greater.

Pathways to the Promise

In 2007, The Pittsburgh Promise was launched with community donations to offer all Pittsburgh Public Schools graduates who meet residency, academic and attendance requirements a \$5,000-per-year scholarship to attend any accredited college, university or technical school in Pennsylvania. As “last dollar” scholarships, they are awarded in addition to any other financial aid a student receives to help cover unmet education costs.

Moreover, the scholarships increase to \$10,000 a year for up to four years when an expected statewide graduation examination is implemented. But to qualify, city public school students must graduate with at least a 2.5 grade-point average and a 90 percent attendance record. The unparalleled scholarship program led to a district-wide initiative to help students become “Promise ready,” as well as a goal of ensuring that at least 80 percent of its graduates finish college or a workforce certification program. Such a goal is ambitious for any school district. It is a particularly challenging endeavor for urban public school districts like Pittsburgh Public Schools, which enrolls nearly 28,000 students in grades kindergarten through 12, a high percentage of who are from low-income families. Under Pathways to the Promise, the district put in place a network of programs to strengthen teaching, counseling, curriculum, administration and other areas critical to improving the educational environment and preparing students to qualify for the scholarships and continue their education.

“If you look at the research, it shows that having an effective teacher in the classroom is by far the most important thing in terms of what a school district can do,” said Amy Malen, the district’s Pathways to the Promise coordinator. “But we also know that is not enough for every child.

“We have the goal that 80 percent of our students will complete college or a workforce certification program. From our perspective, strong teachers, principals and curriculum can get us part of the way there. But many of our students need other supports at different points. And that links us to the DHS work, because large numbers of our students are involved in the DHS network.”

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

“If you can look at all of that data, do a gap analysis, see whether someone else needs to be part of that system and arrange for that it will help ensure the success of these students,” said Patricia Gennari, Assistant Superintendent of Special Education and Support Services, Pittsburgh Public Schools.

A Gap in DHS Data

DHS also had powerful reasons for integrating data with the school district and had long sought such an arrangement.

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. Today, for example, more than 13,600 students – about 49 percent of the students in the district – have been involved in a major DHS service at some point in their young lives.

The child welfare system served 11,990 children in 2008 and 39 percent of those children lived within the boundaries of Pittsburgh Public Schools. Some 36 percent of the children receiving mental health services lived in the school district, as did 44 percent of the youths involved in DHS drug and alcohol services. Children living in the city accounted for 41 percent of the youths involved in the county Juvenile Court system. And 182 children living in the city used DHS shelters for the homeless. 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 led to the creation of the Human Services Integration Fund (HSIF) to support the coordinated, comprehensive delivery of human services throughout the county. One major challenge was to find a way to coordinate data on children and families collected in multiple information systems within DHS and outside systems, such as juvenile justice. A data warehouse was created with nearly \$3 million from the HSIF in 2000 as a central repository of human services data. The data warehouse staff and computer architecture today enable DHS to process and analyze millions of client records to improve services, delivery and better inform decision making.

“Part of our agreement with the foundations was that it would be a community resource,” said Marc Cherna, DHS director. “We included a lot of groups as this was being developed – consumers and providers and researchers and those kinds of folks – and got their input on how this could be useful to them. We continued to build it over the years. And we are at the point where we have between 25 and 30 different data systems in the data warehouse.”

But after nearly a decade, a significant gap in the data remained. “The schools were one of the missing pieces,” Cherna said. “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. 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 between the school district and DHS, 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. So that's where we started.”

Technical Issues

Getting the most comprehensive picture of Pittsburgh Public School students involved with DHS requires integrating huge amounts of data. Key DHS data, for example, includes information from the DHS Office of Children, Youth and Families (CYF), the county's child welfare system, as well as mental health, homeless services, and information related to drug and alcohol.

School-related data includes names, addresses, the schools students attend, grade-point averages, standardized test scores, behavior-related issues, and student involvement in certain programs and services. Data from outside agencies involved with students and families are also part of the equation.

The capacity to manage such a volume of data was one issue. Another was the ability to integrate data from dozens of different information systems. Still another was the analytical capacity to mine the data in ways that would enable DHS and the school district to gain deeper insight into students of mutual interest, identify gaps in services, evaluate the effectiveness of interventions, and to better inform decisions, such as where to best target limited resources, how to coordinate service delivery and whether new interventions are needed to address unmet needs. Pittsburgh Public Schools maintains a substantial data system and performs its own analyses through the Office of Research, Assessment and Accountability. Even so, the school district did not have the capacity to meet the demands that integrating data with DHS would impose. That capacity, however, exists within the DHS data warehouse – a fact that ultimately resolved the issue of technical feasibility. The data warehouse contains more than 15 million client records from DHS programs and outside systems, including the state Department of Public Welfare, city and county housing authorities, juvenile justice, Head Start and the Allegheny County Jail. Authorized DHS staff use a suite of analytical tools to extract and analyze the data. The tools, for example, enable DHS to generate aggregate unduplicated counts, data by geographic location, and client-specific or program-specific reports.

“The strength of the technical capacity was on the DHS side,” said Erin Dalton, DHS deputy director 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 Matters

The issue of who would pay the start-up and operating costs of the proposed data-sharing system was also resolved in relatively short order. Among the outcomes of discussions between DHS and the school district about the technical feasibility of integrating data was the conclusion that given the existing resources at the DHS data warehouse the cost of the new initiative would not be significant. Thieman and DHS Director Cherna assured the school district they would find the funds to support the start-up and operation of an integrated data system, if such a system became a reality. Cherna brought the idea to the foundations which had created the Human Services Integration Fund. They agreed to release funds to support data integration, a dedicated analyst, documentation of the partnership and other costs. “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 concerned about the confidentiality of student information and cautious about how it would be used. These issues were of particular concern to members of the district’s Board of Directors, whose approval was necessary for any agreement on data sharing.

“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 Board President Colaizzi. Other concerns included the integrity of research and making sure that sharing data with DHS would be a two-way street – 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.

“I cannot tell you how many board tabs we get,” Colaizzi said. “A board tab is something that comes in front of the board on a piece of paper asking for permission to do something in the district. And we have had some ridiculous requests. When I first came on the board, there was a group that was going to give kids books and computers, but, in return, they wanted the child to have a CT scan every three months to see how reading those books affected their brain. They wanted to look at their brain. That’s why you become fearful of these requests. We’ve had some crazy stuff.”

DHS, for its part, made sure its motives were clear. “We certainly weren’t going to do all of this research and analysis on something that would exploit these children,” said Dana Kunzman, former DHS policy specialist. “The goal was to figure out ways to help these kids.” Thieman met with Colaizzi to explain the data sharing concept, then with a small group of board members. Colaizzi later arranged for DHS to make a presentation on the plan to the board at a community meeting.

“There was some back and forth with the school board, continuing reassurance that this wasn’t anything except what we were saying it is about – a joint intervention to help kids,” said Dalton. “It wasn’t just for research purposes. It wasn’t just to write papers. There is no point in doing this if we were not going to use the data.”

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. DHS could not provide with certainty the specifics that school officials were looking without first examining the data to determine what would be possible.

“I think that is one of the main challenges in sharing data,” said Dalton. “People want to know explicitly how it will be used. The challenge for those advocating for sharing data is that we can’t quite know until we have it, but we have to make convincing arguments.”

Among the ways the issue was resolved was discussing ideas with school officials about the types of analyses that might be possible and by providing data that showed that nearly 40 percent of the children DHS serves live within the boundaries of Pittsburgh Public Schools. The confidentiality concerns of school officials were worked out by school district and DHS attorneys who labored 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.

Resolving Legal Issues

When attorneys began to draft a memorandum of understanding that would enable DHS and Pittsburgh Public Schools to integrate and share student data they did so without the benefit of a template to guide them. As far as could be determined, an agreement similar in scope had never been drafted elsewhere in the United States.

Ira Weiss, Pittsburgh Public Schools solicitor, was not surprised. “School districts tend to reflexively turn to confidentiality as their position because of the way the regulations are,” he said. Another reason is the fact that urban districts, such as Pittsburgh Public Schools, are often magnets for requests to conduct research on their student populations. “They’re a Petri dish for all sorts of things. So you often have a cautious reaction.”

Laws such as FERPA and HIPAA set formidable restrictions on the disclosure of personal education and health information. The general legal challenge was to find enough flexibility in those laws to make data sharing feasible. FERPA and HIPAA, for example, require consent to release personal education and health data in most cases. But obtaining consent for thousands of students would likely be a difficult, time-consuming and uncertain proposition. One question facing attorneys was whether there were ways to share data without having to obtain wholesale consent.

“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.” Rigid restrictions contained in HIPAA and more than two dozen other laws and regulations made it difficult for DHS to share data with the school district without explicit consent. It was decided the more prudent course was to entrust DHS with school district data and build into the agreement protections against unauthorized or illegal disclosure. As a long-term goal, DHS agreed to seek the consent of those involved in DHS services allow access to individual student records.

Attorneys also identified data that could be shared without consent. Consent, for example, isn't required to release school directory information, including name, age, address and school the student attends. Certain DHS data could also be shared, but not on every child. DHS, for example, could authorize the release of school information about children it has been appointed to be their legal custodian.

"An example is when parental rights are terminated and the child is up for adoption and the county is assigned to be the parent," Molter said. "If we are assigned to be the parent, we have a right to their school information and we have the right to release information."

And, in general, explicit consent is not necessary to share student data when the data is 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.

"What the research exception provides is that you can disclose personally identifiable information without consent as long as you have confidentiality parameters, a memorandum of understanding and it is used for a research project related to enhancing the achievement of students. Otherwise, you need individual consent," said Jocelyn Kramer, an attorney with The Law Offices of Ira Weiss who specializes in special education and student services. The exception in FERPA allowed the school district to share data without consent as part of an "action research" project. The project calls for DHS, in collaboration with Pittsburgh Public Schools, to conduct research to identify indicators of academic and behavior successes and deficits, prepare statistical analyses, and work with the district to develop and implement strategies and interventions aimed at improving the delivery of services to students in need and their academic outcomes. By positioning the data-sharing arrangement as such a research project, attorneys were able to draft a legal agreement that was the first of its kind in the nation.

"We answered the feasibility aspect pretty quickly and with the help of the attorneys we set the parameters of what could be shared," said Paulette Poncelet, Pittsburgh Public Schools chief of research, assessment and accountability. "But I think the real test is going to be the extent to which we can impact children and their families. Data sharing is just a technical problem. It is much easier than the second part."

Moving Forward

Within a month after the MOU was signed, the framework for the data-sharing arrangement was being put in place. DHS and Pittsburgh Public Schools staff began meeting monthly to work out the technical details. By summer 2010, school data was flowing into the DHS data warehouse 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 revealed a cohort of students with DHS involvement who had scored well on standardized proficiency tests, but were performing poorly at school as measured by GPA and attendance.

The project will take a close look at the students to determine the problems, the effectiveness of interventions and to shape strategies for raising their attendance and performance so they have a better chance of graduating with a level of achievement that would earn them Pittsburgh Promise scholarships.

Without such a data-sharing system the opportunity to direct those students toward the success they've demonstrated the potential to achieve would likely have been missed. "We wouldn't have picked up on any of these kids – we would have never known," said DHS Director Cherna.



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