



# OFFICE OF CHILD DEVELOPMENT(OCD), CCMIS (CHILD CARE MANAGEMENT INFORMATION SYSTEM)

## 2005 COMPUTERWORLD HONORS CASE STUDY

### GOVERNMENT & NON-PROFIT ORGANIZATIONS

A SCALABLE COMPREHENSIVE SOLUTION FOR CHILDREN'S SERVICES USING MODULAR FRAMEWORKS AND THE LATEST WEB TECHNOLOGIES, ALREADY HELPS MANAGE CHILD CARE SUBSIDY FOR NEARLY 70,000 CHILDREN OF LOW INCOME FAMILIES ON A DAILY BASIS, PROVIDING CHILD CARE INFORMATION TO THE GENERAL PUBLIC AS WELL AS THE CHILD CARE PROVIDER COMMUNITY. [20055401]

*A Search for New Horizons*



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## SUMMARY

Child Care Management Information Systems (CCMIS) provides a comprehensive solution for children's services across the Commonwealth of Pennsylvania. Built using modular frameworks and the latest web technologies, CCMIS manages child care subsidy for nearly 70,000 children of low income families on a daily basis. With the addition of child care management for Temporary Assistance for Needy Families (TANF) children there will be another 33,000 children whose child care will be managed by CCMIS. CCMIS, in 2006-07 will manage child care for nearly 103,000 children daily. CCMIS provides child care information to the general public as well as the child care provider community within the Commonwealth of PA.

## APPLICATION

In October 2000, the vision to transform Pennsylvania's administration of the subsidized child care programs was put into action when the Commonwealth's Office of Child Development (OCD) joined forces with the Office of Income Maintenance (OIM) and invested resources to develop an integrated child care system.

The Commonwealth needed a centralized system that would administer child care resource and referrals, as well as subsidized child care for both the TANF and Low Income programs. The expectations for the new system included the following key elements:

- Aligning child care policy across the Commonwealth through the use of an integrated system.
- Integrating various program administration and operational entities into a single system to provide better controls and management reporting.
- Establishing a technical foundation for the utilization of other advanced technologies to simplify program administration by providing more robust automation tools.

Early in the requirements gathering stages it became clear that in order to satisfy the requirements of an integrated child care system, CCMIS would need the following components to make this system a reality:

- A statewide child care provider repository to manage, store, and distribute provider information to improve the effectiveness of the resource and referral program.
- A standardized Low Income program eligibility engine and TANF eligibility interface with legacy system.
- A robust enrollment management subsystem designed to manage statewide waitlists, provider rate structures, child-specific scheduling, co-pay management, and retroactive changes.
- A comprehensive funds management and payments system to accommodate centralized payments for TANF child care, state payments to Low Income Child Care Information Services (CCIS) agencies, and CCIS payments to providers and clients.
- Access for external provider invoicing and demographic information maintenance.
- Effective reporting and correspondence tools used to support business processes of various offices across the state.

To accomplish these requirements, reduce labor-intensive, error-prone processing, and create a superior user experience, the following tightly integrated functions were incorporated in the CCMIS design:

### Case Management

Application Processing - Supports the collection of detailed individual and case demographic, income, employment, and training information, maintains subsidized Child Care cases, determines eligibility and calculates co-pay.

Enrollment Processing and Waitlist Management – After determining that there are enough funds, Allows automated enrollment for each child, establishes care levels and allocates funds. Flexible waitlist functionality allows for central or local enrollment authorizations.

#### Provider Management

Establishes and maintains child care provider profiles. Collects provider demographics and information such as rates, discounts, and schedules. Interfaces with external systems for provider background checks.

#### Resource & Referral

Collects and maintains detailed demographics for subsidy and non-subsidy providers. Collects general client demographics, and matches providers to client needs based on client-specified criteria such as location and services.

#### Payment Management

Attendance Tracking - Records child attendance from providers by service period.

Payment Issuance - Calculates payments based on provider rates, child schedules, parent co-pay amounts, and additional fees or deductions. Generates payments to local agencies, providers, and clients and enables processing of payment adjustments.

#### Funds Management

Manages multiple funding streams associated with subsidized Child Care, tracks expenditures at state, county and district/office levels, updates and monitors budgets and spending plans. Calculates encumbrance of funds associated with service for a client, tracks allocations and adjustments at the district/office levels. Interfaces with external accounting systems

#### Correspondence

Generates notices, letters and forms automatically based on system events or user-initiated actions. Utilizes mailing discounts by consolidating correspondence, sorting by zip code, and supporting multiple page printing.

#### Administration

Administers and manages users, provides role-based access, and manages security at a screen and field level. Maintains client and provider ownership and allows case transfers. Generates user-defined and system triggered alerts, allows for creation of broadcast messages.

#### Reports

Generates operational reports, management reports, and federal reports ACF 800 and ACF 801. Creates summary and detail views at state, regional, county and local levels.

#### Impact Analysis

Projects the impact of changes to key Child Care program parameters such as co-pay, income limit and work hours.

## **BENEFITS**

The CCMIS project has been a success for the Department of Public Welfare and the Commonwealth of PA.

CCMIS has also allowed the department of Public Welfare's Office of Child Development to consolidate the business processes and informational systems program of the 59 Child Care Information Services (CCIS) resulting in better service and support to Pennsylvania families. The overall impact of the system can be seen by looking at the advantages offered by CCMIS across these functional areas:

- Resource and Referral

- CCMIS contains a comprehensive statewide database consisting of nearly 9,075 regulated providers including information such as schedules, rates, curriculum and other service-oriented information.
- CCMIS automates child care referrals to regulated child care providers. During the last fiscal year over 28,000 parents utilized this service.
- CCMIS automates CareCheck Provider Clearance Processes for Relative Neighbor providers.
- CCMIS provides the ability to match a child/parent's needs to the appropriate regulated providers in their area.

- Intake and File Clearance

- CCMIS facilitates consistent client and provider data entry and data gathering.
- CCMIS creates a statewide registry of clients. Currently, CCISs assist over 70,000 low income children by paying for part of their child care costs.
- CCMIS utilizes file clearance against DPW's Master Client Index (MCI) to identify clients currently in service and prevent duplication.

- Eligibility Determination

- CCMIS standardizes the eligibility process, reducing the occurrence of human error.
- CCMIS standardizes the enforcement of policy decisions by the way data is captured and processed, resulting in consistent procedures and results when calculating eligibility.
- CCMIS allows for an automated transfer of TANF client data from OIM's Client Information System (CIS) to CCMIS affording a smooth transition for these families so that they do not lose child care benefits.

- Enrollment and Ongoing Case Management

- CCMIS supports enrollments of a child with multiple providers to meet the parent's work or training needs. This is critical because parents have many non standard work schedules.
- CCMIS tracks deadlines and due dates for local CCIS and CAO staff.
- CCMIS adjusts encumbrance and payments for each CCIS based on changes to child enrollments or parent co-payments.

- Subsidy Provider Management

- CCMIS tracks and supports the activity of providers serving children from various CCISs.
- CCMIS tracks the number of children a provider is serving to trigger whether a center, group home or family day care home may be over-populated.
- CCMIS creates a statewide registry of providers via DPW's Master Provider Index (MPI) consisting of regulated and relative neighbor providers.

- Payment Management

- CCMIS compares provider rates to the Commonwealth's Maximum Child Care Allowances and pays the lesser of the two.
- CCMIS calculates all non-traditional rates.
- CCMIS tracks payments as well as adjustments and recoupments.
- CCMIS compiles enrollment authorizations and generates invoices to providers.

- Funds Management

- CCMIS tracks Statewide and CCIS Service and Administrative Allocations, as well as Available Funds in real time.
- CCMIS provides DPW with a comprehensive statewide waiting list in real time.
- CCMIS generates payments vouchers to a CCIS based on expected utilization and tracks payments to a CCIS.
- CCMIS allows DPW to adjust allocations among CCIS based on service utilization and need.
- CCMIS allows management of fiscal data (e.g. Administrative Budgets, Available Funds, Anticipated Cost of Care for enrolled waitlisted or pending children, etc.)

- Report and Correspondence

- CCMIS enables CCISs to better track and manage client, provider and fiscal data.
- CCMIS provides DPW with statewide data and reporting functionality.
- CCMIS standardizes the usage of correspondence for CCISs to meet policy and legal requirements.
- CCMIS centralizes the printing and mailing of eligibility notices.

- Program Management

- CCMIS enables monitoring of all program data by Regional Offices and Headquarters

## **IMPORTANCE**

Any large-scale information system faces challenges in meeting its basic functional goals. Through the CCMIS project, the Department of Public Welfare hoped to improve the delivery of subsidized child care in a variety of ways.

§ Unlike the previous child care solution, CCMIS uses web technology to deliver a flexible and scalable system. Implementing a web-based system has allowed the Commonwealth to consolidate the 59 disparate legacy systems into a single application and data repository. This centralization is a crucial component of the success of the CCMIS project. A centralized system has provided the following benefits;

§ Uniformity in Service Delivery – Prior to CCMIS, CCIS had various methods of implementing procedures and policies. CCMIS is centrally hosted and allows the Commonwealth to uniformly apply policies and procedures throughout the state. This leads to a consistent service offering to clients and providers irrespective of geographical boundaries. Additionally, CCMIS has implemented a Rules Engine to facilitate consistent application of eligibility rules to all applicants. The Rules Engine is also flexible to allow for dynamic changes to the Commonwealth’s child care policy.

§ Consolidated reporting – Data from disparate systems was manually collated and compiled into reports before the implementation of CCMIS. Now, the system produces statewide reports at the click of a button. This allows administrators to make better and more informed decisions.

§ Centralized tracking of funds – With the implementation of CCMIS, the state has been able to move to a more centralized approach to funds management. Waiting lists can now be managed centrally to allow child care benefits to be available to more families.

- Unduplicated entry of clients and providers - The system assigns a unique client number to every new applicant of subsidized child care. It also assigns a unique provider number to every regulated and unregulated provider, thereby facilitating unduplicated client and provider entry. This will significantly reduce processing costs and has helped prevent fraud and the receipt of care by the same family in more than one county.
- Web based training – CCMIS offers web based training modules for trainers. These have enabled trainers to train over 1,200 CCIS workers with a minimum disruption to ongoing office operations.
- Providing clients with information – The resource and referral module of CCMIS allows the CCISs to print a list of providers that would meet a family’s child care needs. This module caters to specific client requests (e.g. providers who provide pickup services to and from school and are located within a certain distance from the client’s residence, etc.).

Because of the project’s importance to the Governor’s agenda for early childhood , the Department of Public Welfare has focused significant effort toward the successful implementation of the final release of CCMIS. Throughout this effort, Deloitte Consulting and the Department have cooperated to ensure that CCMIS provides a more efficient, equitable and effective subsidized child care program for the families, children, and providers of Pennsylvania.

## **ORIGINALITY**

While many state governments use child care information systems to administer their child care programs, many aspects of CCMIS are original and unique. CCMIS integrates the programs of two different Program Offices within Pennsylvania's Department of Public Welfare (DPW) and thus supports the consistent treatment of the programs' beneficiaries. CCMIS is an end-to-end solution that determines program eligibility, manages client and provider information, provides funds management & allocation capabilities and supports invoicing and payment functions. CCMIS is built on the .NET framework and utilizes a highly configurable Rules Engine to apply DPW's child care policies for calculating program eligibility.

## **SUCCESS**

Success

The implementation and user adoption of CCMIS has been a . Some of the key measures of the system’s success are:

· Improvements that Benefit Families

- o Clients are no longer regularly required to complete duplicate copies of paperwork for each office as the information is stored centrally and accessed through CCMIS, allowing data sharing between offices
- o Clients are able to receive comprehensive information on available child care services more quickly as each county office can provide referrals to providers anywhere in the state
- o Clients receive continuity of child care services as CCMIS automates the majority of steps in the county-to-county and office-to-office transfer process

· Improvements that Benefit Providers

- o Providers enjoy greater consistency, reducing the amount of effort required to receive subsidy payment as the invoicing process has been standardized across the Commonwealth
- o Providers receive correspondence that is consistent and predictable, as do clients since most correspondence is issued through CCMIS in a standardized format

· Improvements that Benefit Office of Child Development Headquarters

- o Headquarters can view each county’s waitlist allowing better management of funding allocations as CCMIS maintains one statewide waitlist that is managed at a county level
- o Headquarters can monitor service information and child care data for each office as CCMIS centralizes child care usage data based on enrollments in each county

- Improvements that Benefit Local Service Administration
    - o Server and data maintenance are centralized under the Department's information systems office
    - o Manual monthly reporting requirements are virtually eliminated,
- Business processes across CCIS are standardized resulting in more uniform application of regulations and procedures.

## DIFFICULTY

Meeting the goals set forth for CCMIS has not been easy. As with any large project, numerous difficulties had to be overcome during the development and implementation of CCMIS. Some of the largest challenges for the CCMIS project were:

1. Organizational challenges existed to coordinate the policies for Office of Child Development (OCD) and the Office of Income Maintenance (OIM). This was further complicated by the inclusion of 59 separate business partners who contract with the Office of Child Development to manage the service dollars for subsidized child care across the Commonwealth of Pennsylvania.

The second largest challenge was the changing policy and regulatory framework. The regulations for subsidized child care, which CCMIS was being built to support, dramatically changed during the design and implementation of the third release of CCMIS. This was due, in part, to the desired integration of policy and procedures for the Department's Office of Child Development and Office of Income Maintenance.

As the Department moved toward the third release – the eligibility Rules Engine – the regulations for subsidized child care were being rewritten.

Training for the third Release of CCMIS also had a heavy policy component requiring the 59 business partners not only to master a new system, but to accept a core change in the way in which they served clients.

In spite of these challenges, CCMIS was able to meet the goals that were originally set by making use of the appropriate technologies and designing capabilities to specifically address those goals.

These challenges required similar project management structures between the Department and Deloitte Consulting and an emphasis on several fundamental risk-management processes:

- Rigorous issue identification and resolution processes
  - o A comprehensive Modified Business Process Assessment was completed identifying issues
  - o An easy-to-follow Operational Change Workbook was created to support business process changes by the 59 business partners with conference calls and meetings hosted to help them identify issues and resolution within their agencies.
- Efforts by the Office of Child Development to develop policy that would reflect the changes needed by the administration and that would support both offices and the 59 business partners.
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- Flexibility in design approach wherever possible had to be incorporated by Deloitte Consulting due regulatory changes
  - o Frequent meetings had to be held between Office of Child Development and Deloitte Consulting to manage design changes.
  - o Reference table driven data were incorporated where possible.
- Supportive, task-oriented workgroups had to be created to manage the changes to business process and policy.
  - o A Steering Team made up of members of Office of Child Development, Office of Income Maintenance, Office of Information Systems, and Deloitte Consulting was designed to provide direction to CCMIS implementation.
  - o A Change Control Board made up members of Office of Child Development, Office of Income Maintenance, and Deloitte Consulting was established to assess scope changes for CCMIS.
  - o An Advisory Team made up of staff from 16 Child Care Information Services, Office of Comptroller Office of Income Maintenance and Office of Child Development was created to validate business process changes as well as system design issues.
  - o An Implementation Team made up of the Office of Child Development staff and Deloitte Consulting's Implementation and Training team was established to prepare the end users for system changes, policy changes and business practice changes.

§ A Train-the-Trainer approach utilizing Web Based Training Modules was created to help ensure the best training possible was provided to business partners in all 67 offices.

- o A Conversion Team made up of CCIS system staff and Deloitte Consulting's Conversion team was established to identify best practices in the old Legacy system to make the conversion to CCMIS as smooth and seamless as possible

- o A Child Care Information Services Testing Team, made up of CCIS staff from varied offices, was established to test system functionality and how changes would fit into business practices. .

- o Help Desk Super Users made up of Child Care Information Services staff was equipped to provide dedicated customer service and ongoing support for end users.

Through these carefully coordinated activities, the entire CCMIS community was successful in developing and deploying a comprehensive system that promises to meet the varied needs of Pennsylvania's families, providers, Child Care Information Services offices and the Department of Public Welfare.