

New York State Office of Children and Family Services

Comprehensive Child Welfare Information System (CCWIS)

Data Quality Plan 2021-22

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1 Introduction

This document serves as the New York State Office of Children and Family Services (OCFS) Comprehensive Child Welfare Information System (CCWIS) Data Quality Plan for 2021-2022. This Data Quality Plan is a living document and OCFS regularly updates this document to reflect changes in data governance, ongoing CCWIS enhancements, updates to federal, state or tribal laws, regulations, policies, and procedures, and evolving data exchange capabilities.

This Data Quality Plan does not replace existing data quality requirements as defined in 45 CFR 1357.15(u) or any other established requirements (e.g., Adoption Foster Care Analysis Reporting System [AFCARS] and National Youth in Transition Database [NYTD]). In fact, these data quality requirements are a primary source of information for the development of our core data quality measures.

The contents of this document are derived from OCFS' understanding of the CCWIS final rule.

Per section 45 CFR 1355.52(d)(5) of the CCWIS final rule:

“(5) The title IV–E agency must develop, implement, and maintain a CCWIS Data Quality Plan in a manner prescribed by ACF and include it as part of Annual or Operational APDs submitted to ACF as required in 45 CFR 95.610. The CCWIS Data Quality Plan must:

- (i) Describe the comprehensive strategy to promote data quality including the steps to meet the requirements at paragraphs (d)(1) through (3) of this section; and
- (ii) Report the status of compliance with paragraph (d)(1) of this section.”

Following the introduction, this report is divided into several sections reflective of the main bodies of OCFS' data quality work. Within each section, an overview of the current status of the scope of work being undertaken to create a strong data quality system is provided, along with an outline of goals and tasks to be addressed in the upcoming program year. The primary sections of this document include:

- **Data Governance (Section 2)**
- **Regulatory Requirements (Section 3)**
- **Data Services Architecture (Section 4)**
- **Data Exchanges (Section 5)**
- **Data Quality Initiatives (Section 6)**
- **Risk (Section 7)**

1.1 Key Systems

The primary data repositories for child welfare data included within the scope of OCFS' data quality work include:

1. CONNECTIONS – The agency's statewide child welfare case management system used by OCFS, child welfare contributing agencies (CWCAs, or voluntary agencies), and local departments of social services (LDSS offices, or counties). CONNECTIONS is transitioning to a CCWIS application.
2. OCFS Data Warehouse – A warehouse of child welfare data collected from numerous internal and external data sources (CONNECTIONS being a primary source)
3. Other child welfare-related systems, some stand-alone and others with an existing data feed from CONNECTIONS. These systems cover specific business functions related to adoption, child protective services (CPS), incidents in congregate settings, fatalities, foster home operating certificates, child and family services plan (CFSP) submission, interstate compact for children (ICPC)/National Electronic Interstate Compact Enterprise (NEICE), and longitudinal reporting. OCFS is evaluating the potential benefits of bidirectional data exchanges between these systems and CONNECTIONS.

1.2 OCFS Planning Partners

Establishing a strong data quality system requires the input and efforts of multiple OCFS divisions and bureaus. Each of the groups described below play a key role in promoting the agency's data quality agenda. Staff from these areas participate in a wide range of data quality monitoring, system development, education, training and policy development activities, and staff key data governance workgroups.

- Bureau of Program Quality Improvement (PQI)
The previous Bureaus of Monitoring and Oversight (BMO) and Continuous Quality Improvement (CQI) have been merged into the Bureau of Program Quality Improvement, which sits within the Division of Child Welfare and Community Services (CWCS) Office of Implementation and Accountability. This bureau partners with CWCS regional offices and LDSSs to assess outcomes related to safety, permanency and well-being through case record reviews of CPS, Foster Care and Preventive Services. Case reviews are conducted for all 58 LDSSs (which includes the St. Regis Mohawk Tribe), and five (5) New York City (NYC) Administration for Children's Services (ACS) borough offices and the ACS Office of Special Investigations on a rotating schedule.

The PQI team uses continuous quality improvement concepts and utilizes quantitative and qualitative data to 1) evaluate practice and understand factors that contribute to performance, 2) establish improvement strategies, and 3) track the effectiveness of those strategies in improving outcomes. This unit performs detailed reviews of child welfare activities with a goal of improving outcomes and relies on quality data to accomplish its mission. This team participates in the data governance framework as well as in the biennial data quality reviews.

- Bureau of Child Welfare Information Systems (CWIS)
The Bureau of Child Welfare Information Systems is also within the CWCS Office of Implementation and Accountability. This group is responsible for CCWIS project direction and oversight, is the liaison group for all child welfare system needs and facilitates program representation where appropriate, and includes a team of 28 implementation specialists who work directly with CONNECTIONS users in CWCAs and counties around the state.

The CWIS team leads the CONNECTIONS Change Management Committee and works directly with the NYS Office of Information Technology Services (ITS) CONNECTIONS development team to identify, scope, and prioritize system enhancements, including those focusing on where automation can improve data quality. The implementation team assists CWCS regional offices by working with counties and agencies on identified data issues and provide targeted trainings as needed. CWIS leads the CCWIS Steering Committee, a monthly Data Exchange/Data Quality meeting with local district and voluntary agency stakeholders, AAPDU and Data Quality Plan updates, and participates in the Data Governance Council and biennial data quality reviews.

- Bureau of Research, Evaluation and Performance Analytics (BREPA)
Located within OCFS' Office of Strategic Planning and Policy Development (SPPD), BREPA promotes the integration of child welfare and juvenile justice research into agency policies and practices; designs and conducts research and evaluation studies to monitor the incidence, causes, and effects of problems faced by the children and families served by OCFS; provides analytical and data management support for policy planning and performance monitoring efforts; and fulfills federal and state reporting requirements. BREPA also maintains the OCFS Data Warehouse and Operational Data Store.

BREPA supports program improvement and data quality efforts through three main types of activities: 1) the production and maintenance of data warehouse reports designed to facilitate supervision and monitoring of good casework practice, 2) preparation and dissemination of performance outcome metrics and child level outcome files, and 3) oversight and management of federal reporting requirements. BREPA staff play a key role in the agency's data governance activities, serving as the lead for the Data Warehouse Prioritization Board, and are members of the CCWIS Steering Committee, Data Governance Council, and CONNECTIONS Change Management Committee.

1.3 Local and Agency Planning Partners

Improving data quality only works if the most important stakeholders are involved, namely, the system users. In addition to the implementation team described under the CWIS Bureau above providing direct support to over 28,000 county and agency users, there are several more formal avenues where user representatives are engaged in data quality and data exchange discussions and planning.



- **NYC Administration for Children's Services (ACS) Collaboration**
As New York's largest social services district with more than 50% of the state's child welfare population, ACS always has representation in system and data planning and implementation. In addition to ACS staff participation in the regular CONNECTIONS Change Management Committee to help guide system governance, there are separate monthly ACS-focused change management planning meetings, and with every significant system enhancement, extra planning occurs to make certain that our largest user base has proper training, instructions, and support. ACS participates in OCFS' CCWIS Data Exchange/Data Quality monthly meetings to help provide governance in terms of scope and requirements.
- **Council of Family and Child Caring Agencies (COFCCA) Collaboration**
COFCCA is a representative for most of New York's private agencies that provide foster care, adoption, family preservation, and juvenile justice services (also referred to as voluntary agencies, or CWCAs), and has a keen interest in helping to drive implementation of bidirectional data exchanges between CONNECTIONS and its member agencies' external systems. COFCCA provided OCFS with detailed information on where data duplication/overlaps occur, and prepared diagrams that depict the most beneficial data exchanges from their perspective. COFCCA participates in OCFS' CCWIS Data Exchange/Data Quality monthly meeting to help provide governance in terms of scope and requirements.
- **Local Districts and Voluntary Agencies (CWCAs)**
As mentioned above, there are 58 local districts and nearly 200 voluntary agency programs, comprising approximately 28,000 users who use the CONNECTIONS system, approximately 5% of whom also use the OCFS Data Warehouse. All users have direct access to an implementation team member for support as well as to make system requests, and the implementation team works with districts and agencies on a regional basis to provide guidance and training as needed. The implementation team also provides first-level assistance with use of the data warehouse, with the BREPA team providing more in-depth technical assistance as needed. Each district and voluntary agency was asked to assign one or more CCWIS liaison(s), and that person(s) is invited to participate in a monthly CCWIS webinar where information on system changes, data quality initiatives, data exchanges, and more is shared, and feedback is solicited. All districts and voluntary agencies were also invited to have staff participate in the monthly Data Exchange/Data Quality meeting, where governance occurs related to bidirectional data exchange needs. Both of these regular meetings often result in requests to participate in subcommittees to dive into more detailed scope and requirements discussions.

1.4 CCWIS Vision and Timeline

This plan documents the data quality efforts being undertaken by OCFS as the agency transitions to a CCWIS compliant system. Detailed information on CCWIS transition activities can be found in the agency's APDU and are briefly summarized here for context.

CONNECTIONS seeks to improve and support the following:

- Quality casework practice
- Enhanced compliance through oversight
- Improved planning through trend analysis of newly accessed data
- Local flexibility consistent with a statewide system implemented uniformly
- Quality case records consistently and correctly maintained
- Information exchange/integration to support decision-making and case flow
- Reduce the amount of time spent working on the system, thereby, freeing up the worker to spend more time meeting the needs of the families and children assigned to their caseload

To meet CCWIS compliance requirements, OCFS is doing the following:

- Enhancing CONNECTIONS to not only meet continued functional requirements, but with a focus on usability and supporting local workflows
- Building bidirectional data exchanges to reduce duplicate data entry with external systems
- Identifying data quality priorities, then building automation, reports, and workflow structures to support users in meeting data quality standards
- Formalizing data governance structures to facilitate consistency and support data sharing with other state systems

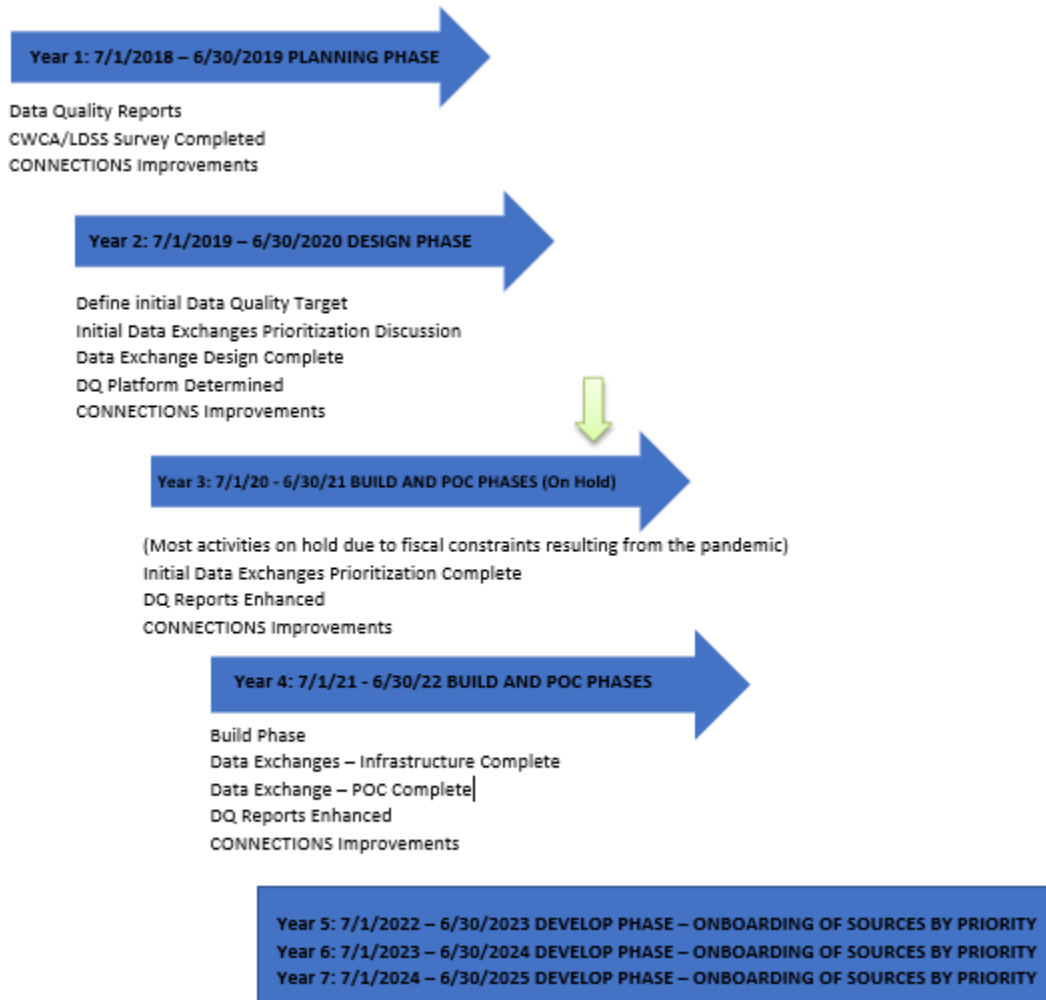
OCFS plans to employ extensive coordination between our data exchange and data quality efforts. In fact, the inclusion of bidirectional exchanges introduces data quality risks (and opportunities) that will be taken into account.

OCFS' transition to CCWIS was initially anticipated to span approximately six (6) years (July 2018 through June 2024). One year is being added to the original six-year estimate due to significantly reduced progress as a result of the pandemic in 2020-21. The state's fiscal climate has been such that the additional resources needed to work on data quality and data exchange work were not able to be onboarded; it remains to be seen whether funding will be made available for 2021-22. The current timeframe is now expected to be seven (7) years (July 2018 through June 2025).

The following timeline diagram highlights OCFS' current plans.



Data Exchange Timeline



2 Data Governance

Data governance represents a core functional component of completing data quality initiatives. OCFS has begun to improve and build upon current governance processes to establish an enterprise view of data quality and cohesive processes and procedures for changes to the data. To assist in establishing a data governance framework that will complement and drive data quality work, OCFS has determined the following goals for data governance:

- Treat data as an asset
- Remove unnecessary data duplication
- Develop a data governance approach that promotes business ownership, buy-in, and accountability
- Mature the existing approach with a more structured enterprise approach that allows data to be managed across an increased number of stakeholders and systems
- Data is centrally located in system of truth for consistent and standardized reporting
- Develop the mapping from external systems to make certain that it is properly ingested into the system of truth
- Reduce the need to enter and correct data in multiple systems
- All data entered into the systems are compliant with standards around completeness, timeliness, and accuracy.

2.1 Current Framework

OCFS understands that undertaking the implementation of a data governance framework and program is a multi-year endeavor. Child welfare-related data initiatives are dealt with by three separate committees, which are now seen as part of the agency's umbrella data governance framework. There is executive support to improve current practices and set reasonable and achievable objectives. OCFS is following an incremental approach to the data governance program. An enterprise Data Governance Council has been established. The Council has a set vision and approved Charter and Implementation Plan that has been disseminated to executive leadership. The Council had been meeting on a monthly basis until mid-2020 when the designated lead left OCFS and the pandemic necessitated focus on other priorities. The Council will begin to convene regularly again by mid-2021.

As noted above, there are targeted governance teams in existence. These teams and processes will be integrated through a non-invasive approach into the statewide framework as it matures and additional governance initiatives are undertaken. The following teams and/or processes will comprise the enterprise governance program.

2.1.1 Reporting/Data Warehouse Governance

Led by staff from BREPA and ITS, the Reporting/Data Warehouse Prioritization Board is an inter-agency, cross-divisional group created in December 2018. The Board oversees a data governance process that applies consistent rules for prioritizing requests and allocating resources; seeks to alleviate backlogs; increases transparency and improves communication; and aligns data warehouse activities with program priorities, CCWIS efforts, and federal reporting requirements.

This work of the governance board applies to both extract/transformation/load (ETL) development and the reporting functions of the BREPA data warehouse team. Routine meetings with governance committee sub-groups provide updates and new requests are prioritized. Finally, an executive committee is consulted as needed when there are prioritization conflicts or resource needs.

To coordinate and document this work, the Board utilizes the OCFS Data Request System (DRS). DRS tracks all agency data requests, both internal and external, and includes ETL requests, research analysis, performance metrics, and public information requests. It serves as a tool to track and monitor progress from intake to completion. DRS allows review and approval of data requests for external sharing and dissemination by applicable leadership (program, legal, public information office and administration) in various agency divisions.

2.1.2 CCWIS Governance

The CCWIS project director reports to an Executive Steering Committee comprised of OCFS and ITS commissioner/executive director-level and senior management, representing OCFS child welfare and community services; policy, research, and reporting; budget and finance; legal; and ITS Human Services Portfolio's Business Solutions director and CONNECTIONS director and managers. The committee meets monthly, where the CCWIS project director provides a report out of project-related activities completed and planned, the status of planning documents, resource needs, and discusses risks and challenges. The committee participates in planning, approval of resource and procurement needs, and provides feedback and direction as needed.

2.1.3 CONNECTIONS Implementation Specialists

The CONNECTIONS implementation specialists are a team of former child welfare and CPS case workers who specialize in supporting LDSS and CWCA users. The team is involved in nearly all aspects of the software development lifecycle by supporting everything from submitting new functionality requests, to providing clarity to requirements, to working out new business processes and data entry in preparation for new functionality, to user acceptance testing, and end-user support and training. As of October 2020, this team now reports to the CCWIS project director, which provides direct alignment from end user needs to system priorities and functionality.

2.1.4 Data Leaders Team (DLT)

The DLT's mission is to support the field (LDSSs and CWCAs) in acquiring, analyzing, and applying data to improve safety, permanency and well-being. The team was formed in support of OCFS ongoing continuous quality improvement (CQI) initiatives. The DLT is comprised of approximately 30 members from OCFS' home and regional offices. Four staff from each regional office are DLT members, two regional office staff specialize in supporting the field with data entry and two staff provide child welfare practice support, coaching and TA.

2.1.5 Supervisors

Throughout the various stages in CONNECTIONS (CPS, Foster Care Services, Foster Home Development, Family Assessment and Service Plan, etc.) individual components that are completed by LDSS and CWCA caseworkers are required to be submitted to their supervisors to undergo a final review and approval process.

For example, in a CPS stage, a completed Risk Assessment, Safety Assessment, and Investigation Conclusion are all required before a worker can close the investigation stage, and each piece is individually reviewed by that worker's supervisor. The supervisor then can reject or approve all work, with comments; rejected work is cycled back to the worker to resubmit for approval.

2.1.6 CONNECTIONS System Governance

The CONNECTIONS project governance structure promotes effective and open communication and the active participation of stakeholders. The Change Management Committee is run jointly by OCFS CWCS and ITS CONNECTIONS managers. The Committee is comprised of program, legal, research, and fiscal staff from OCFS, technical staff from ITS, upper managerial level staff from New York City's Administration for Children's Services (ACS), and CONNECTIONS implementation specialists who represent districts and voluntary agencies. The change request process includes

- biweekly or monthly meetings (based on workload and build schedule);
- a change request form that includes an area to note agency priorities (to include CCWIS related improvements);
- a scoring matrix that considers level of effort, end-user impact, legislative/mandated changes, and agency priority;
- a tracking procedure that takes into account OCFS policy, legal, and training considerations in addition to ITS technical/application development;
- a tentative quarterly build schedule to aid in prioritization, deployment estimation, and setting end user expectations;
- availability of forms and tracking reports online; and
- an overall transparent approval process and improved communications to requestors.

2.1.7 ACS Collaboration

As described above in section 1.3.

2.1.8 COFCCA Collaboration

As described above in section 1.3.

2.1.9 Operational Data Store (ODS) Review Work Group

The Operational Data Store (ODS) provides a daily raw data file of selected CONNECTIONS data to LDSSs and VAs that have applied and have been approved for use of this data. Once approved, they receive an initial one-time push of historical data and then a daily refresh. The ODS provides a one-way data transfer and requires technical expertise on the part of the recipient organization to process the files. While this offering is not aligned with CCWIS bidirectional data exchange requirements and our planned message-based exchanges, it has been in place for over a decade and is embedded in processes and systems at many counties and voluntary agencies. This governance group works to continuously improve the application and approval process (data usage, confidentiality, and storage), data transfer method, addition of data tables, and general end-user agency support. The work group is led by BREPA and includes an agency team consisting of child welfare, legal, and information security office. The application and approval process developed for the ODS will serve as a starting point for the future bidirectional data exchange partner application/approval process.

2.2 Data Governance Program Activities

2.2.1 Current Status

As discussed earlier in this document, a Data Governance lead/manager was going to be hired in 2020 within the agency's Office of Strategic Planning and Policy Development. Given the delays in hiring, the Data Governance Council developed the agency's Charter, including vision statement. OCFS is waiting for resources to staff the proposed Data Governance Team and is facing constraints due to COVID-19. In order to move forward with existing staff, OCFS is following a non-invasive approach to establishing a more formal data governance program. As data governance projects unfold, terminology will be defined so that all stakeholders have a common understanding of terms used (i.e., defining what a data steward is at OCFS). OCFS will set achievable objectives that fit within the scope and timeline needed for each project. All items below are subject to change based on the development and rollout of data governance processes but are topics that have been discussed as possible initial increments to explore for the Data Governance Program.

2.2.2 Current State Assessment

The Data Governance Council has approved a high-level implementation plan that follows an incremental approach. The initial task is to conduct a Current State Assessment. This assessment will show an analysis of the current environment and will help the Data Governance Council make decisions and prioritize work for the Data Governance Program. It is anticipated that the initial projects chosen by the Data Governance Council will be included in the Current State Assessment, and that the

assessment will drive the foundational work to be accomplished by the data governance program. Below are some topics that the Current State Assessment may include:

2.2.2.1 Stakeholders - Roles and Responsibilities

Through a review of each chosen project's organizational charts, observations of different meetings, committees, job responsibilities, and other artifacts as needed and defined, the results of this portion of the Current State Assessment will help to detail the future of the stewardship program at OCFS.

This team of stakeholders should consist of individuals from a cross-section of the key organizations such as OCFS, ITS, LDSSs, and CWCAs and should include both business and technical disciplines. These individuals should have an intimate knowledge of the current systems, their strengths and weaknesses, as well as a clear vision of what the systems should be.

2.2.2.2 Current Tooling

A comprehensive review of current tools that are being used in different capacities within the defined scope will help the Data Governance group have a documented understanding of how they are currently supporting data quality and where there are potential gaps or under-utilization of tools. The gap identified will be an important input into the requirements identified for selecting a data quality toolset.

2.2.2.3 Policies and Procedures

This assessment would involve review and analysis of any policies and procedures that are written regarding data management and data governance. The team would review documents internal to OCFS as well as any policies and procedures that exist with other stakeholder groups – including but not limited to: ITS, LDSSs, CWCAs, ACF, etc. This review will help the team to determine which policies and procedures they must adhere to and which may potentially need to be created for OCFS as part of the data governance initiative.

2.2.3 Stewardship

It is anticipated that the results of the Current State Assessment will lead to the establishment of a stewardship structure – a key deliverable and milestone for implementing the data governance program. An agreed upon method for documenting and informing stewardship will be defined by the governance team.

As noted above, OCFS will pursue a non-invasive approach to data stewardship where staff are identified for work that they are already responsible for and formalizing them as stewards of the data that they work with on a day-to-day basis.

The Data Governance Team will initially work with the staff to help them understand their role as a steward. The goal is to not create additional work for an outside steward and help current employees understand that they are already acting as such. This concept will be fleshed out further after review of the results from the Current State Assessment.

2.2.4 Tool Evaluation

Using the results from the Current State Assessment, a comprehensive tool evaluation may be useful to determine which tools should be expanded, which ones are repetitive, and evaluate what is currently available on the market to possibly procure. Tools are important to support governance and manage data as an asset on an enterprise level.

2.2.5 Communication

The Data Governance team will complete a Communication Plan that will lay out a method for communication with stakeholders. It is important that Data Governance be properly communicated and that the right individuals are involved and understand when changes to process and governance occurs.

2.2.6 Plans for Upcoming Program Year (7/1/21-6/30/22)

- Restart Data Governance Council meetings with a regular cadence
- Conduct Current State Assessment
- Continue to socialize concepts, formalize processes, and communicate with stakeholders
- Institute and track initial data governance projects

2.3 CQI (Continuous Quality Improvement) Initiatives

2.3.1 Current Initiatives: Round 3 CFSR

The results of the Round 3 CFSR found that OCFS was not in substantial conformity with six of the seven child and family outcomes and six of the seven systemic factors. As part of our program improvement plan, OCFS identified several overarching themes for improving our performance:

- Need for improved data accuracy and timely entry
- Need for improved caseworker and supervisor competencies related to key practice areas in both preventive and foster care cases:
 - Casework contacts that support engagement of parents – particularly fathers and youth
 - Ongoing assessments of risk and safety to all children in the home
 - Assessment of service needs and the individualizing of the services to meet the parent's/child's needs

- Need to focus on an urgency to expedite permanency and utilizing relatives as a placement resource
- Need for increased oversight of foster boarding homes to promote consistency in licensing of foster homes and enhance stability of placement.

Once baseline performance is identified, the CQI/Data Unit involves the field in identifying a clear understanding of the factors that contribute to current performance. In some instances, underlying factors are related to needed practice improvements; in other situations, poor outcomes are a reflection of inaccurate data entry.

In April 2018, OCFS' performance improvement plan (PIP) was submitted to address the CFSR, and in 2020, the Children's Bureau informed OCFS that the PIP was successfully closed. Much of the PIP relied heavily on an enhanced CQI process and a concentration on data quality. The CQI team has engaged each LDSS in a local planning project to improve New York State's safety (recurrence and maltreatment in foster care) and permanency measures (timely permanency and re-entry) outcomes. This data-driven project utilizes an analysis of child-level information to identify opportunities. In several instances, data quality has a significant impact on the outcome performance. Examples include the following:

"X" County – OCFS data for a small LDSS showed five children in foster care for more than two years (CFSR permanency indicator). The CQI team engaged with the county and by working with a county team, it identified a gap in reporting child movement. This led OCFS to determine that there were only two children in congregate care facilities for greater than two years. Correcting the data had a significant positive impact on the county's CFSR permanency indicator.

"Y" County – OCFS reporting data showed that children in the county had approximately 25 more movements per child than other counties. The CQI team engaged with the county caseworkers and determined that that county was improperly classifying movements within the system.

To track effectiveness of strategies to improve the CFSR indicators, OCFS provides counties with regular child-level data updates. Additionally, each of the CFSR indicators (where New York State is below the national average) have child-level reports within the statewide Data Warehouse system. OCFS plans to expand the availability of permanency outcome data, which will allow the field to identify and correct issues on a more real time basis.

OCFS works with counties to review the findings on a child by child basis to determine the issues related to permanency.

2.3.2 Current Initiatives: Family First

In preparation for the implementation of the federal Family First Prevention Services Act (FFPSA) and the desire to reduce the reliance on congregate care, OCFS identified the need to determine if the state has a sufficient number of quality foster homes to support the initiative. The Program Quality Improvement (PQI) team is engaging with data leaders from each OCFS region, which includes both CONNECTIONS specialists and child welfare practice leads. The combined teams will engage in a data-driven CQI process with each LDSS in a review of all foster homes.

By reviewing foster parent-level files, data inaccuracies will be identified. For example, a preliminary review of the foster parent file shows inconsistencies in the recording of the use of foster care respite.

Additionally, the teams will review foster parent demographic data (such as age, location, gender, race, religion), and outcome data, such as length of time a foster parent is certified, number of children they fostered, and the outcomes of the children they fostered (i.e., exit type). This information may create a profile of foster homes that have provided foster care services for a number of years and help determine what influences foster parent retention.

Also, once the underlying factors that make for better foster parents are identified, the team will work to develop a plan to improve recruitment and retention of quality foster parents to support the Family First initiative.

Districts are also being encouraged to evaluate their congregate utilization practices in anticipation of the transition to Family First. To assist in this process, OCFS has created county specific data packets that capture all annual movements into and out of congregate settings by entry type (e.g., new admissions, step-ups from a foster boarding homes, lateral transfers, and returns) and case type (e.g., child welfare, juvenile delinquency, person in need of supervision). Visual “bubble charts” track groups of children from entry door through length of congregate care stay and exit location. Charts are supplemented by a series of data tables showing the demographic and case history characteristics of children on each track. Districts are encouraged to use the data provided to analyze how front- and back-door case practices may be impacting who enters and who exits congregate care.

Family First monitoring reports are also being developed and will be made available within the OCFS data warehouse. These reports will enable districts to quickly identify children who have entered a qualified residential treatment program (QRTP) setting, whether their required 30-day qualified individual (QI) assessment and 60-day court review have been completed in required timeframes, and the outcome of each review.

2.3.3 Current Initiatives: Case Reviews

Beginning in February 2020, CWCS instituted a comprehensive Program Quality Improvement (PQI) process for assessing LDSS practices in CPS, preventive services, and foster care. This PQI process includes the use of administrative data and case review results to assess performance. Administrative

data is used to determine the distribution of cases to be reviewed across the three program areas (CPS, preventive, foster care). Case review sample sizes are determined by county size groupings based on the number of children served in CPS, preventive services, and foster care over a three-year period. The case record reviews are conducted from home office and practice is assessed based solely on the case record in CONNECTIONS and other documentation in the LDSS case file. Results of the performance review are reviewed with LDSSs and Program Improvement Plans (PIP) are developed in partnership with LDSSs as necessary. The PIP may include strategies to address factors that contribute to performance.

CWCS utilizes the federal CFSR case review instrument, the On-Site Review Instrument, as its primary tool for evaluating foster care and preventive services and a New York State review instrument for assessing CPS (traditional investigations and differential response) practices.

2.3.4 Plans for Upcoming Program Year (7/1/21-6/30/22)

2.3.4.1 Multi-Disciplinary Team (MDT) Data and Process Improvements

In New York State, every LDSS but one has an MDT composed of CPS, law enforcement, and other human services professionals.

These teams collaboratively investigate CPS reports alleging abuse and certain reports alleging physical maltreatment. The LDSS CPS Intake worker manually flags the report in CONNECTIONS for MDT referral. Quality Assurance reviews of these manual flags have identified instances where the report was not correctly flagged. To eliminate these errors and to speed up the report-taking process, a CONNECTIONS change is scheduled for August 2021 that will automate this flagging process. This will not only improve the data quality but will also improve program practice.

As an interim stop-gap solution, a daily report is being developed to flag possible intakes for MDT review.

2.3.4.2 Data Inconsistencies Found Through Data Analysis and Case File Reviews

Through data analysis and case file reviews, OCFS has noted inconsistencies between casework progress documentation (i.e. progress notes) and other CONNECTIONS fields that are used to report administrative data.

To identify and improve on preventive services and foster care data entry issues, CWCS will expand upon a process developed for the 2018 CFSR PIP. Currently, CWCS assesses the consistency of data entered in CONNECTIONS against the data found in the case record during PQI case reviews.

In the upcoming year, OCFS will identify additional priority data elements to be added to the review form and use the form in assessing data quality in preventive and CPS cases. OCFS will also develop a format in which to report findings to LDSSs and a process to develop strategies to improve the quality of local data entry. During calendar year 2021, CWCS expects to conduct approximately 300 CPS reviews and 250 preventive and foster care cases.

The following business process steps and decisions must be developed prior to the implementation of this strategy:

- Determine additional data fields to be assessed for quality data entry
- Decide on the inclusion of timely data entry metrics
- Determine if an algorithm can be developed to identify logical/illogical sequencing of legal codes
- Develop a format for communicating findings in the PQI LDSS performance report
- Develop a format to engage LDSS in a process to determine factors that contribute to performance and develop strategies to address them
- Determine a process to track PIP items

The overall implementation of this process will involve multiple OCFS divisions: CWCS' home and regional office staff and BREPA.

- Case reviews are a core oversight and monitoring function of CWCS. The strategies for this priority are predominately the responsibility of two CWCS Units: PQI and Oversight & Monitoring.
- BREPA will provide additional support in establishing algorithms for sequencing and for regular reports of codes and the timeliness of data entry.
- Regional offices will monitor ongoing implementation of LDSS PIP strategies

3 Regulatory Requirements

3.1 Complete, Timely, Accurate

3.1.1 Complete

CONNECTIONS has edits for completeness already built into the system. Various decision points that exist within CONNECTIONS require entry of specific information in order to proceed. Additionally, operational and Data Warehouse reports are available so that workers can check for missing key data elements in the application.

Examples of how CONNECTIONS facilitates data completeness include the following:

- Concluding an investigation of child abuse – At the conclusion of a CPS investigation, several system components require completion before the system will allow the submission of the investigation to their supervisor for approval. These components include a seven-day investigation determination and safety assessment, risk assessment profile (RAP), a substantiated/ unsubstantiated decision for each allegation, and entry of an investigation conclusion narrative.
- Beginning and concluding the Family Assessment and Service Plan (FASP) – The system will notify the worker of a FASP coming due and being overdue by way of to-do alerts. The system requires completion of the FASP by way of required case-planner summaries and a FASP completion checklist, before the FASP can be submitted for approval.
- Completing a plan amendment – When there is a change in the plan between FASP timelines, such as a child being moved from one foster home to another, a plan amendment is necessary. Doing a plan amendment will make changes to the FASP, which are required. If a mismatch is identified between foster care placements, completing the plan amendment will resolve this issue by changing the information on the placement status of the child.
- Recertifying a foster adoptive home (FAD) – FAD workers get notified starting 90 days in advance that a home is due for reauthorization and get subsequent notifications at 60 days and 30 days. The Open-Case Inquiry (OCI) report shows which requirements are outstanding for all assigned FAD stages on the worker's workload. There is also a FAD summary report, which shows the information required for every window of a specific FAD stage.
- Concluding a Family Assessment Response (FAR) – In order to conclude a FAR stage, the safety assessments need to be in pending or approved status and the sex trafficking screening and Family Relationship Matrix must be completed. Also, the most recent Family Led Assessment Guide (FLAG) must be completed.

- Completing a FASP – The FASP windows present the user with a list of sections that must be complete before the plan can be submitted for supervisory review. There is a “check FASP detail” button so users can review the list at any time.
- Safety assessments submitted for approval - Upon attempting to submit the safety assessment in the investigation stage for approval, the system will check for incomplete data. The user will then be presented with a list of safety assessment elements that are missing. Submission will not be allowed until the data is complete.
- To-Dos - The system has To-Dos (tasks, alerts, and reminders) to require and/or inform users when required tasks need to be completed. There are visual indicators on each window that identify what elements/fields are required and which are AFCARS data elements.

We are planning to create a dashboard-type display on the CONNECTIONS landing page to show persons and stages with missing AFCARS information, to allow users to quickly and easily see and access those persons and stages.

The introduction of bidirectional data exchange partners introduces new sources for data contained within CONNECTIONS. These data sources must satisfy the completeness requirements of 45 CFR 1355.52(d)(1) to be included as a valid CCWIS data source. To accomplish this, OCFS will implement the following controls:

3.1.1.1 Technical

The technical controls within CONNECTIONS will validate that all data from data exchange partners is complete per OCFS understanding of 45 CRF 1355.52(d)(1) requirements.

3.1.1.2 Policy

OCFS will develop policy documents detailing completeness requirements that will be included within our data sharing agreements for all bidirectional data sources.

3.1.2 Timely

CONNECTIONS has built-in reminders, alerts, and reports available to encourage timely data entry. The system has reports for caseworkers that indicate tasks or information coming due or overdue, as well as monthly reports for supervisors. There are windows in the application where users can check to see if work is timely, missing, or late. There are windows that inform a case worker of missing information for children in foster care.

Examples of how CONNECTIONS facilitates data timeliness include the following:

- Reports - Monthly reports informing supervisors of upcoming due and overdue work.

- To-Dos - The system has To-Dos (tasks, alerts, and reminders) to require and/or inform users of deadlines for certain tasks.

In 2019-2020, OCFS deployed the final phase of the Placement module, which automates the data recording process for the initial placement and transfer/movement of children in foster care. This is expected to significantly improve the timeliness of tracking movements within CONNECTIONS since it automates the generation of activities and is no longer dependent on data entry by clerical staff, which often introduces a lag in time of entry. Data on the timeliness of recent movement entries is included in the *2021 Biennial Data Quality Review* report.

The introduction of bidirectional data exchange partners introduces new sources for data contained within CONNECTIONS. These data sources must satisfy the timeliness requirements of 45 CFR 1355.52(d)(1) to be included as a valid CCWIS data source. To accomplish this, OCFS will implement the following controls:

3.1.2.1 Technical

OCFS will investigate the appropriateness of alerting (and other mechanisms) on a case-by-case basis with each data source as that data source is onboarded. This may include a message-based alerting capability that can be consumed by data exchange partner applications.

3.1.2.2 Policy

OCFS will develop policy documents detailing timeliness requirements that will be included within our data sharing agreements for all bidirectional data sources.

3.1.3 Accurate

CONNECTIONS provides automation where possible to facilitate data accuracy. All dates within the system are validated based on Oracle date or date/time data types. Dependent dates and single-entry dates are validated for accuracy; for example, a person cannot receive services prior to their date of birth, and activities cannot occur outside of placements dates. All persons are searched in the database prior to being added in the system, to reduce duplication of individuals known to the system.

Examples of how CONNECTIONS facilitates data accuracy include the following:

- Geocoding – The system requires all addresses to go through a geocoding validation to align with accurate USPS addresses (while still allowing users to save addresses that do not validate, where necessary).
- Unique Person Identifiers - When adding a new person, the system forces the user to first do a person search for the person they wish to add. This is to help prevent the duplication of person records.

- Person merges - Several warning messages exist when attempting to relate or merge persons. For example, date varies by more than five years, sex of persons does not match, etc.
- The system maintains referential integrity between different functional areas to prevent users from entering inaccurate data. For example, the resource directory is used to pre-populate resource information to the calling window instead of requiring users to manually enter each relevant data element.
- Conditional value selection controls exist throughout the system. For example, when adding a new person, the Relationship/Interest (Rel/Int) values (i.e., mother, father, psychiatric staff, child, administrator) are based on what type of person (Collateral or Principle) the user selected. This is to prevent the user from picking a Rel/Int value inappropriate for the Type.

CONNECTIONS currently interfaces with the New York State Office of Temporary and Disability Assistance (OTDA) Welfare Management System (WMS). Individual demographic data is kept in synch between WMS and CONNECTIONS through this interface. WMS is currently the system of record for the authorization of child welfare payments and services. Demographic information is continually synchronized with WMS for families that are receiving ongoing services.

At the end of 2020, OCFS enhanced CONNECTIONS to help remedy duplicate person records by reminding workers to conduct a person search at additional points in the process. Details on this are included in our *2021 Biennial Data Quality Review* report.

The introduction of bidirectional data exchange partners introduces new sources for data contained within CONNECTIONS. These data sources must satisfy the accuracy requirements of 45 CFR 1355.52(d)(1) to be included as a valid CCWIS data source. To accomplish this, OCFS will implement the following controls:

3.1.3.1 Technical

OCFS will investigate the appropriateness of providing real-time web services-based access to CONNECTIONS features such as:

- Person Search
- Geolocation

3.1.3.2 Policy

OCFS will develop policy documents detailing usage of any CCWIS real-time services that are provided to our CCWIS data exchange partners, which will be included within our data sharing agreements for all bidirectional data sources.

3.2 Consistently and Uniformly Collected

CONNECTIONS is the statewide child welfare system of record in New York State and is required to be consistently and uniformly used by all LDSSs and voluntary agencies. CONNECTIONS already underwent improvements to eliminate duplicate windows that support the same function.

In the future, local systems outside of CONNECTIONS that are in use at LDSSs and voluntary agencies will be evaluated. Where it is determined that there is functionality outside of CONNECTIONS that should be collected statewide, that function will be built into CONNECTIONS. A bidirectional data exchange will be developed to bring data into CONNECTIONS and help reduce duplicate data entry. Edits will be applied as data comes in to make certain that CONNECTIONS completeness, timeliness, and accuracy requirements are met.

3.3 Exchanged and Maintained Confidentially

Data exchanged within CCWIS must support confidentiality requirements as defined in

- 471(a)(8) of the Social Security Act,
- 42 U.S.C. 5106(b)(2)(b)(viii) of the Child Abuse and Prevention and Treatment Act,
- 45 CFR 205.50, and
- State confidentiality statutes (most falling under NY Social Services Law (SSL)): NY SSL 21(3), NY SSL 136, NY SSL 372, NY SSL 422, NY SSL 427-a, NY DRL 114 (Domestic Relations Law which controls adoption records access).

ITS is responsible for developing IT security policies for the executive branch agencies within New York State. OCFS will make certain that the proper policy and technical controls are in place to comply with all relevant policies.

Each CCWIS business partner must adhere to (or have policies consistent with) New York State Information Technology Policy NYS-P03-002 (https://its.ny.gov/sites/default/files/documents/nys-p03-002_information_security_policy_4.pdf)

All data stored within CCWIS must be classified per New York State Information Technology Standard NYS-S14-002 (https://its.ny.gov/sites/default/files/documents/nys-s14-002_information_classification_1.pdf)

The data being exchanged as part of the mandatory and additional data sources is still being defined. It can be assumed, however, that most data exchanges will include a mixture of personal identifying information (PII) and personal health information (PHI).

3.3.1 Policy Controls

OCFS will develop policy documents detailing usage of any CCWIS real-time services that are provided to our CCWIS data exchange partners.

3.3.1.1 Data Exchanges and Confidentiality

OCFS will include language in our MOUs and data sharing agreements that stipulates compliance with the above standards. This includes a rigorous review of each data element being exchanged as well as the roles and responsibilities of users of the data.

OCFS will also develop auditing procedures to facilitate compliance with our agreements. These auditing procedures will be included within our data sharing agreements.

3.3.1.2 System Users and Confidentiality

OCFS will include language in our MOUs and data sharing agreements that stipulates compliance with the above standards.

All users of CONNECTIONS – including state, local district, and CWCAs – undergo training on the confidentiality requirements governing CCWIS data.

Users of data exchange partner systems must be informed that data entered into local systems is bound by the same policies mentioned above.

3.3.1.3 Audit Capability

A common challenge related to data integration projects is validating the original author of a data operation.

For example, the identity of the user that changed a progress note narrative must be known.

OCFS requires an audit trail for any data modification that occurs within the system. We expect this requirement to continue with our data exchange partners. All data exchanges that generate write operations into the CONNECTIONS database must be mapped to a specific person who is authorized to use CONNECTIONS and to update the relevant information.

3.3.2 Technical Controls

3.3.2.1 OCFS Systems

To facilitate the confidentiality of data exchanges within CONNECTIONS, OCFS will comply with ITS standard NYS-S14-007 and ITS standard NYS-S13-004. This will mandate the following:

- Data in transit is encrypted using Transport Layer Security (TLS) 1.2 or higher
- Data at rest (within the data exchange platform) is encrypted using AES 256
- Identity of data exchange partners is verified using valid X.509v3 certificates (or similar) that are issued and managed by ITS. In all cases the certificate (or similar) must be valid at time of authentication
- All data reads as well as defined CRUD (create, read, update, delete) operations are authenticated within CONNECTIONS

- Audit trails include the specific identity of the user initiating the CRUD request
- Multi-factor authentication (MFA) to comply with ITS Digital Identity policy NYS-P20-001 and standard NYS-S20-001 to ensure identity and authentication assurance

3.3.2.2 Data Exchange Partners

As stated above, OCFS will include confidentiality language in our data sharing agreements to govern the data being exchanged. Additionally, OCFS will mandate that our data exchange partners implement several technical controls to protect confidential CCWIS data as well as the identity context used to access the data exchange:

- Data in transit is encrypted using Transport Layer Security (TLS) 1.2 or higher.
- Data at rest (within the data exchange platform) is encrypted using AES 256.
- X.509v3 certificates (or similar) are used for proof of identity and are stored securely by each data exchange partner:
 - Certificate request should be generated on the system initiating the data exchange.
 - Certificate (and private key) will be backed up locally and protected using a strong password (> 12 characters, mix of numbers, letters, etc).
 - A different certificate (or similar) will be used for each data exchange relationship.

3.4 Not Created by Default or Inappropriately Assigned

With very few exceptions, CONNECTIONS does not create data values by default, or automatically assign values. The limited examples of a defaulted value require manual intervention/confirmation prior to finalization.

The introduction of bidirectional data exchange partners introduces new sources for data contained within CONNECTIONS. These data sources must satisfy the completeness requirements of 45 CFR 1355.52(d)(1) to be included as a valid CCWIS data source. To accomplish this, OCFS will implement the following controls:

3.4.1 Technical

Because OCFS does not control the applications developed by our data exchange partners, there is a limited ability to implement technical controls on these applications. OCFS will investigate developing data profiling capabilities to detect default data creation and assignment.

3.4.2 Policy

OCFS will develop policy documents detailing data creation and assignment requirements that will be included within our data sharing agreements for all bidirectional data sources.



3.5 Implement and Maintain Automated Functions

3.5.1 Regularly Monitor CCWIS Data Quality

OCFS will develop processes and procedures to evaluate data quality in conjunction with our initiatives around governance, data exchanges, and data quality automation.

3.5.2 Alert Staff

CONNECTIONS includes several methods of alerting users to information coming due or past due. The system generates To-Dos (tasks, alerts, and reminders) in various areas that identify actions required by caseworkers.

For example:

- *Family Assessment and Service Plan coming due/overdue*
- *Safety Assessment Due*
- *Risk Assessment Due*
- *Foster/Adoptive Home License due to expire in 30, 60, 90 days*
- *Annual Reauthorization due for FAHD home*
- *New assignments received*
- *Persons reported in a new Intake*

In addition, free text reminders can be self-generated by users and associated to a stage to serve as a cue for work that still needs to be completed.

- *In the coming year, additional alerts will be developed related to Family First timeframe requirements for 30-day QI review, 60-day court review, and long-stay approval.*

3.5.3 Send Electronic Requests

With each data exchange source, OCFS will work with data exchange partners to define requirements around the frequency and quantity of data exchanges. As part of our integration architecture, OCFS will provide alerting and event processing capabilities within our CCWIS solution.

Example scenarios for these services:

- *A new data exchange file is placed on a secure storage location. This triggers an event that immediately causes the file to be ingested into CCWIS.*
- *An alert is sent from CONNECTIONS that informs a user that an action is required. This alert is formatted as a message and placed on a queue within our integration environment. A CWCA has subscribed to that message and is able to consume the alert and present it to the user from within its own application.*

3.5.4 Reduce Duplicate Entry

Data exchanges with the CONNECTIONS application will result in data being ingested using the same business logic applied through the CONNECTIONS user interface. As a result, the existing standards and processes within CONNECTIONS will limit (with the goal to eliminate) duplicate entry of data. OCFS and ITS are working with end users through a series of workgroup meetings to identify and continue ongoing efforts to reduce or eliminate duplicate data entry.

Individual data exchange partners can consume data as needed. OCFS will not require alterations or changes to their systems outside of requiring that the systems meet the compliance standards documented above. Because each partner is responsible for meeting compliance as described in OCFS policy, we expect that each data partner will work to minimize or eliminate data entry requirements where data can be sourced from CONNECTIONS.

3.5.5 Generate Reports

The generation of data quality reports that are consumable by both OCFS and our data exchange partners will be a required feature of our data integration and data quality platforms. The contents of these reports will be dictated by identified data quality measures.

3.6 New York State Standards

In addition to the federal standards described above, the following state and local artifacts govern child welfare in New York State:

3.6.1 OCFS Standards

OCFS standards are largely dictated by the NY Social Services Law. In support of these laws, OCFS develops guidance for LDSSs and CWCAAs in the form of the following instruments:

- **Administrative Directives (ADM)** are external policy statements designed to advise LDSSs and CWCAAs of policies and procedures that must be followed and require specific action.
- **Informational Letters (INF)** are external policy statements that clarify or amplify existing procedures. They may provide general educational information, transmit a new brochure, distribute a revised list of contacts, or announce newly enacted federal or state legislation.
- **Local Commissioners Memorandums (LCM)** are external policy releases that transmit information to the local social service districts commissioners on specific topics. An LCM generally affects all local social services districts statewide. Information transmitted by an LCM may include notification of funding, statewide audit results, or instructions pertaining to existing program or administrative procedures.

The following are examples of policies that have impacted data quality efforts at OCFS:

3.6.1.1 Administrative Directives

- 00-OCFS-ADM-03 - *Temporary Assistance to Needy Families (TANF) Eligibility, Data Reporting and Claiming Requirements for Foster Care Cases*
- 15-OCFS-ADM-25 - *Timely Data Entry and Use of Incident Date*
- 16-OCFS-ADM-01 - *New York State Education Department Historical Data for Children in Foster Care*
- 16-OCFS-ADM-16 - *Casework Contacts for Children In Foster Care*
- 18-OCFS-ADM-04 - *Requirement to Forward Reports of Suspected Child Abuse or Maltreatment to the Local Departments of Social Services and Voluntary Authorized Agencies Charged With the Care, Custody, or Guardianship of a Child in Foster Care*
- 18-OCFS-ADM-07 - *Foster/Adoptive Home Certification or Approval Process*
- 19-OCFS-ADM-11 - *Sex Trafficking Allegation*
- 19-OCFS-ADM-13 - *Uploading Documents/Photos to CONNECTIONS*
- 19-OCFS-ADM-17 - *Placement Module Phase 3 – Searching/Matching Function*
- 20-OCFS-ADM-04 - *Replacement Clothing for Children in Foster Care*
- 20-OCFS-ADM-19 - *Blind Removal Process*
- 20-OCFS-ADM-21 - *New Purchase of Service (POS) Types for Authorizing Special Payments*
- 21-OCFS-ADM-02 - *Implementing Federal and Corresponding New York State Indian Child Welfare Act (ICWA) Regulations*
- 21-OCFS-ADM-04 - *Qualified Residential Treatment Programs (QRTPs) and QRTP Exceptions in New York State*
- 21-OCFS-ADM-05 - *Regulatory Changes and Standards of Care for Youth in Congregate Care Settings*
- 21-OCFS-ADM-07 - *Supporting Foster Youth and Families through the Pandemic Act*

3.6.1.2 Informational Letters

- 07-OCFS-INF-04 (1) Attachment - *92-ADM-24 Foster Care Adoption Requirements for Siblings Placement Visitation and Communication*
- 19-OCFS-INF-01 - *The Inclusion of Local Social Services District Comments in Child Fatality Reports*
- 20-OCFS-INF-11 - *Contemporaneous Documentation of Casework Contacts With Children in Foster Care*

3.6.1.3 Local Commissioner Memorandums

- 14-OCFS-LCM-15 - *Accurate Reporting of Kinship Foster Care Placements*
- 19-OCFS-LCM-20 - *Eligibility Case File Maintenance*
- 20-OCFS-LCM-06 - *Child Protective Services Manual Updates*
- 20-OCFS-LCM-13 - *New York Statewide Central Register (SCR) Change in Intake Procedures Related to Previously Reported and Investigated Child Fatalities*

Nearly 30 years of policy directives are available here: <https://ocfs.ny.gov/main/policies/external/>.

3.6.2 New York State Statutes

The following New York State statutes dictate specific requirements related to child welfare policy and practices at OCFS:

- **N.Y. Rules and Regulations Title 18** §§ 421; 423; 426; 428; 432; 441; 443
- **Social Services Law** §§ 21; 136; 358-a; 371; 372; 372-c; 374; 383; 383-c; 384-a; 384-b; 409-e; 412; 413; 414; 415; 418; 419; 420; 422; 423(6); 424; 427-a; 459-a
- **Domestic Relations Law** §§ 111; 112-b; 113; 114; 115; 115-a; 115-b; 115-d; 116; 117
- **Surrogate's Court Procedure Act** §§ 1726; 1705; 1706
- **Penal Law** §§ 130; 135.35; 135.37; 230.33; 230.34; 240.50(4); 260.00; 260.10
- **Public Health Law** §§ 4135; 4138-c; 4138-d

4 Data Services Architecture

The data services section of this Data Quality Plan summarizes the logical and physical technology infrastructure that supports CCWIS data and transactions for OCFS. All data received from integration partners as well as all services used to encapsulate and serve data to integration partners will be persisted within this architecture.

4.1 Data Repositories

The primary data repositories for child welfare at OCFS are the following:

- CONNECTIONS – Transitioning CCWIS application used by OCFS, CWCAAs, and LDSSs
- OCFS Data Warehouse – A warehouse of child welfare data collected from numerous internal and external data sources

In addition to CONNECTIONS and the Data Warehouse, OCFS maintains other child welfare-related systems, some stand-alone and others with an existing data feed from CONNECTIONS. These systems cover specific business functions related to adoption, CPS, incidents, fatalities, foster home operating certificates, CFSP submission, ICPC/NEICE, and longitudinal reporting. OCFS is evaluating the potential benefits of bidirectional data exchanges between these systems and CONNECTIONS.

4.2 Data Model

CONNECTIONS will serve as the data model for OCFS' CCWIS solution. The CONNECTIONS data model is mature and well understood and is the physical implementation of the data elements required to support the child welfare domain in New York State.

ITS will design bidirectional data exchange data sets in accordance with the CONNECTIONS data model and will work with CCWIS data exchange partners to understand data model requirements as needed.

4.3 Data Dictionary

A data dictionary enables business stakeholder requirements to be communicated to technical staff in a consistent and repeatable manner. OCFS maintains a detailed and up-to-date data dictionary that describes the data elements found within the CONNECTIONS data model.

The data dictionary defines all fields, gives a description of each, includes the data type, and other required information.



4.4 Data Catalog

The introduction of data exchanges introduces the need to develop a data catalog for use by OCFS and our data exchange partners.

“By most definitions, a data catalog is a metadata management tool designed to help organizations find and manage large amounts of data – including tables, files and databases – stored in their ERP, human resources, finance and e-commerce systems as well as other sources like social media feeds.

Data catalogs centralize metadata in one location, provide a full view of each piece of data across databases and contain information about the data’s location, profile, statistics, summaries and comments. This systematized service helps make data sources more discoverable and manageable for users and helps organizations make more informed decisions about how to use their data.”

– Techtarget.com

OCFS and ITS will leverage the data dictionary for this purpose by adding information about each data exchange API and making certain it is accessible by all data exchange partners.

5 Data Exchanges

The CCWIS final rule outlines both mandatory and optional data exchanges for CCWIS systems. OCFS is in the process of identifying and reviewing data exchange sources. There are two distinct workstreams involved in addressing our data exchange efforts – messages and sources. Messages define the encapsulation of data elements into a standard schema. Sources are the data source or target for these messages.

As referenced earlier in this plan, there are several hundred systems used by LDSS and CWCA agencies in New York State to manage CCWIS data. Addressing each system individually is not efficient, economical, or effective. OCFS and ITS will work with our stakeholders to implement bidirectional data exchanges that will be most helpful in reducing or eliminating duplicate data entry. OCFS and ITS will work with other state agency-level data exchange partners on a source-by-source basis to implement the mandatory, large scale exchanges with such systems as WMS and BICS or the Integrated Eligibility System (IES).

To implement the most impactful data exchanges first, OCFS and ITS convene a quarterly Data Exchange/Data Quality Workgroup comprised of county and CWCA staff, who help to identify and prioritize areas where the business processes lead to

- duplicate entry,
- slowness (and cause exceptions to the timeliness requirements), and
- erroneous information being entered into the system.

At points in the business process where data needs to be exchanged, we will define what data elements are involved. These data elements are going to be encapsulated into messages. These messages can then be exchanged with *any* system that can benefit from the data.

5.1 Messages

The prioritization of messages and of the data elements contained within will greatly influence our prioritization of data sources. As part of the CCWIS transition, OCFS works with numerous business partners from CWCAs, LDSSs, and other state agencies. While these discussions are ongoing, the following are the areas that we have identified for initial review: Person, Placement Request, Placement, Activities (movements), Progress Notes, Resources, Health, and Education.

These message topics have been confirmed as the priority areas of duplicate data entry with our data exchange workgroup. It is expected that most messages -- for example RESOURCES and ACTIVITIES – will be a collection of several messages to allow for transfer of historical information. Messages such as HEALTH may be broken into separate messages along type – Diagnosis, Treatment, Medication, etc.

5.2 Source Prioritization

To prioritize data exchange sources, we are taking direction from the LDSS and CWCS stakeholders looking to alleviate duplicate data entry, and considering their input with factors such as the following:

- Identified area of data redundancy
- Identified area with poor data quality
- Number of CONNECTIONS stages impacted
- Scope of data (statewide, LDSS, CWCA)
- Technical complexity of the integration
- Real time and/or batch requirements
- Dependencies are identified (For example, to create a POS (purchase of service) authorization the system must have already confirmed Title IV-E eligibility)
- Immediate impact to health or safety of a child or family

5.3 Participants (Sources)

5.3.1 Mandatory

Per section 1355.52(e)(1) of 45 CFR, the CCWIS final rule:

“(1) The CCWIS must support efficient, economical, and effective bi-directional data exchanges to exchange relevant data with:

- (i) Systems generating the financial payments and claims for titles IV–B and IV–E per paragraph (b)(1)(ii) of this section, if applicable;*
 - (ii) Systems operated by child welfare contributing agencies that are collecting or using data described in paragraph (b) of this section, if applicable;*
 - (iii) Each system used to calculate one or more components of title IV–E eligibility determinations per paragraph (b)(1)(ii) of this section, if applicable;*
- and*
- (iv) Each system external to CCWIS used by title IV–E agency staff to collect CCWIS data, if applicable.”*

The following are the mandatory data sources identified by OCFS:

5.3.1.1 Title IV-E Eligibility

Currently, title IV-E eligibility is determined by local district child welfare staff using a manual process and the decision is recorded in WMS. New York State has no existing automated title IV-E eligibility determination system.

OCFS considered two (2) options for satisfying this requirement:

1. Build a title IV-E eligibility function within CONNECTIONS

2. Integrate with any future solution within the Integrated Eligibility System (IES) being developed by New York State.

OCFS determined that the most timely and beneficial path would be to build an automated eligibility determination function in CONNECTIONS. Requirements are underway and expected to be completed early summer 2021, with development beginning in late 2022 (following other legislative mandates related to Family First and AFCARS 2.1). A data exchange will be developed to send the determination information to WMS and ultimately, IES.

5.3.1.2 OTDA Benefits Issuance and Control System (BICS) and/or Integrated Eligibility System (IES)

The Benefit Issuance and Control System (BICS) is a mainframe system compatible with WMS. BICS is a standardized benefit issuance and management reporting system that supports each LDSS. The BICS system plays a major role in financial operations and caseload management and reporting. BICS provides for uniform post-authorization processing since it is driven from the WMS for application and eligibility processing. BICS also provides uniform financial information.

OCFS expanded the initial limited data feed from BICS into the Data Warehouse as part of our efforts to improve title IV-E reporting. Expansion included addition of historical data and county composite data. At present, we are filling residual gaps such as historical vendor information. In tandem, Data Warehouse reports to assist with title IV-E reporting are being developed.

OCFS is planning to bring the service/payment authorizations for child welfare payments, currently in WMS with an interface to BICS, into CONNECTIONS, so that LDSS workers can complete service plans and authorizations all in one system, rather than the duplicate data entry that is required today.

BICS will ultimately be replaced by the IES Financial Management Module. The current estimate is for that module to go live in 2023-24. CCWIS will need to have a bidirectional data exchange with BICS and/or the IES Financial Management Module for service/payment authorizations, payments, and reconciliation information.

OCFS is working with the IES program to define and build out the IES Financial Management Module requirements and the future data exchange for CCWIS.

5.3.1.3 OTDA Automated Claiming System (ACS)

The Automated Claiming System is used by local districts for claiming of federal, state, and local child welfare expenditures. ACS data is used by OCFS for federal Title IV-E claiming. BICS, the payment system, interfaces with ACS (IES will interface with ACS in the future).

5.3.2 Additional

Per 45 CFR 1355.52(e)(2) of the CCWIS final rule:

“(2) To the extent practicable, the title IV–E agency’s CCWIS must support one bi-directional data exchange to exchange relevant data, including data that may benefit IV–E agencies and data exchange partners in serving clients and improving outcomes, with each of the following state or tribal systems:

- (i) Child abuse and neglect system(s);*
- (ii) System(s) operated under title IV– A of the Act;*
- (iii) Systems operated under title XIX of the Act including:*
 - (A) Systems to determine Medicaid eligibility described in 42 CFR 433.111(b)(2)(ii)(A); and*
 - (B) Medicaid Management Information Systems as defined at 42 CFR 433.111(b)(2)(ii)(B);*
- (iv) Systems operated under title IV–D of the Act;*
- (v) Systems operated by the court(s) of competent jurisdiction over title IV–E foster care, adoption, and guardianship programs;*
- (vi) Systems operated by the state or tribal education agency, or school districts, or both.”*

5.3.2.1 CWCA Systems

As summarized above, the child welfare application portfolio of the CWCA (and LDSSs) is complex.

OCFS will continue to work to

1. prioritize identified CWCA processes and data sources that may require duplicate data entry such as the following:
 - a. Progress Notes
 - b. Resource Management
 - c. Placement Information (demographics) during an investigation or FSS stage
 - d. Health Services
 - e. Education Data
2. evaluate CWCA local system data sets to determine if they capture CCWIS data that must be brought into CONNECTIONS, and
3. build data exchanges between these data sources and CONNECTIONS as part of our CCWIS initiative.

5.3.2.2 Local Departments of Social Services (LDSSs) Applications

As summarized above, the child welfare application portfolio of the LDSSs (and CWCA) is complex.

OCFS will continue to work to

1. prioritize identified LDSS data sources that may require duplicate data entry,
2. evaluate LDSS local system data sets to determine if they capture CCWIS data that must be brought into CONNECTIONS, and
3. build data exchanges between these data sources and CONNECTIONS as part of our CCWIS initiative.

5.3.2.3 OCFS Child Welfare Applications

As summarized above, OCFS' child welfare application portfolio of OCFS is complex.

OCFS will continue to work to

1. prioritize OCFS child welfare-related data sources (non-CONNECTIONS), and
2. develop a plan for including these data sources in our CCWIS initiative.

The following are additional data sources identified by OCFS:

5.3.2.4 Office of Court Administration (OCA)

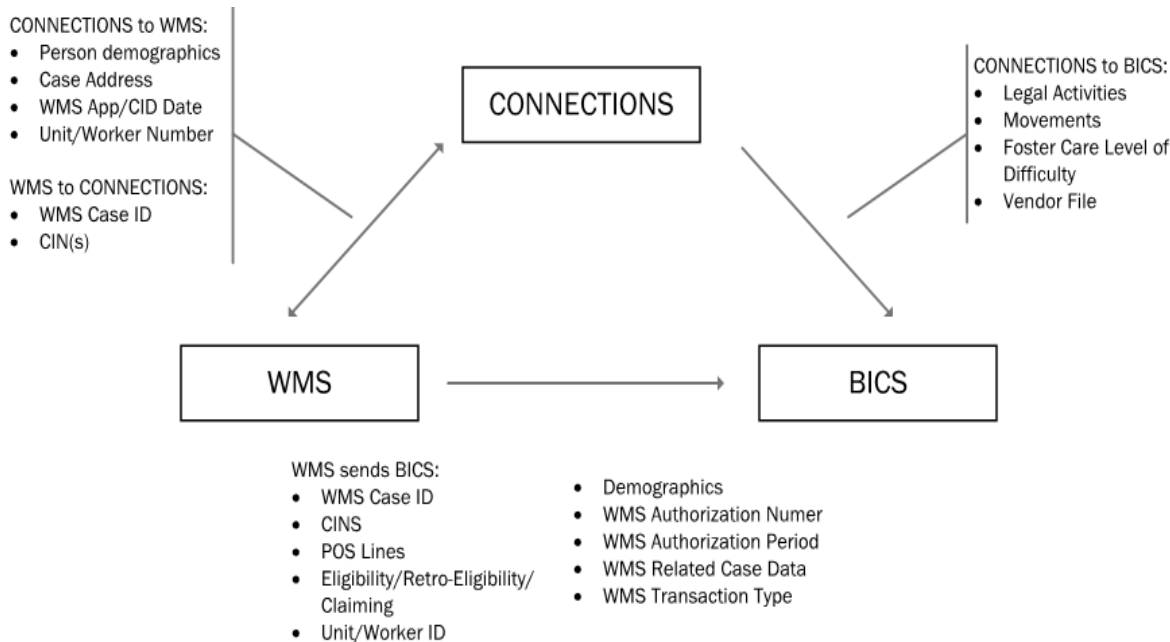
OCFS already supports a bidirectional data exchange with New York State Office of Court Administration (OCA) to support the fair hearings administrative review process.

OCFS is reviewing the feasibility of surfacing relevant court order and scheduling information in CONNECTIONS.

5.3.2.5 Office of Temporary and Disability Assistance (OTDA) WMS (Welfare Management System)

The Welfare Management System (WMS) is a management information system developed to improve the administration and control of LDSS social services programs (Temporary Assistance, Medicaid, SNAP, HEAP and Services programs) in New York State. It is designed to assist local districts in carrying out client eligibility determination and processing functions.

OCFS currently supports a bidirectional data exchange with OTDA's WMS system:



The current CONNECTIONS-WMS-BICS¹ data exchange process:

1. A CONNECTIONS case is created (User initiated)
2. CONNECTIONS case information is sent to WMS
3. Full data entry and social services case opening is completed within WMS (User initiated)
4. WMS Case ID and CINS (Medicaid number) for all persons in the case are sent back to CONNECTIONS
5. Legal or movement activities for the child are entered into CONNECTIONS (User initiated, requires WMS Case ID and CINS obtained by CONNECTIONS in step 4)
6. CONNECTIONS sends activities to BICS
7. WMS purchase of service (POS) line is created in WMS (User Initiated)
8. BICS issues payment for services

OCFS is reviewing the feasibility of extending the bidirectional data exchange between CONNECTIONS and WMS to allow users to develop purchase of services (POS) lines from within CONNECTIONS.

The OCFS Data Warehouse has very limited WMS data. An effort is underway to expand WMS authorization data in the Data Warehouse to assist with AFCARS and title IV-E financial reporting

¹ Please see section 5.3.1.2 for a description of BICS.

(until such time as we are able to develop service authorizations in CONNECTIONS and implement a data exchange with WMS/IES).

The IES system will ultimately replace WMS, and CCWIS will continue to work with the IES program to align timeframes and develop interfaces in the coming years.

5.3.2.6 Department of Health (DOH) eMedNY (New York State Medicaid Management Information System)

OCFS is actively working with the New York State Department of Health (DOH) on developing a data exchange to support the surfacing of Medicaid claims data (encounters, etc) within CONNECTIONS. Development is complete, and this will be deployed upon finalization of a signed data use agreement between OCFS and DOH.

5.3.2.7 DOH Medicaid Eligibility

OCFS has had discussions with DOH to improve and streamline the authorization of Medicaid eligibility for foster children, and the ability to do so within CONNECTIONS. CONNECTIONS would then interface with the New York State of Health (NYSOH) system and/or the Integrated Eligibility System (IES). This is an extremely complex change to current processing and is likely to be a multi-year effort.

5.3.2.8 OTDA Child Support Management System (CSMS)

OCFS will review the feasibility of surfacing the Child Support Management System payment data within CONNECTIONS.

5.3.2.9 Education Department

OCFS will review options for surfacing school attendance information from the New York State Education Department or local educational agencies with CONNECTIONS.

5.4 MOUs

OCFS is in the process of developing a memorandum of understanding (MOU) template for CCWIS data exchanges. The MOU will likely contain the following:

- Name of the project (specific to the data exchange)
- Name of the agencies involved in the MOU
- Identification of the relevant CCWIS rules
- Project (data exchange) goals and services
- Project (data exchange) outcomes

The Data Governance manager will have a role in moderating developing MOUs.

5.5 Data-Sharing Agreements

OCFS is in the process of developing a data-sharing agreement template to define the scope of data exchanged as part of the CCWIS program. The agreement will likely contain sections such as the following:

5.5.1 Applicant Information

This section will include such items as

- the name and title of the individual who can legally bind the LDSS, CWCA, or company to the terms of the agreement;
- the names of the technical staff responsible for data security and storage of the data; and
- the roles of users within the organization that can access the data to support child welfare policies as prescribed by OCFS.

5.5.2 Purpose of Project and Data Use

This section will include such items as

- a narrative describing why the data exchange is happening with references to Child Welfare policies as prescribed by OCFS, and
- a narrative of how the data will be used.

5.5.3 Deliverables

This section will include a narrative of the product or solution that is being developed as a result of obtaining the CCWIS data.

5.5.4 Data Elements

This section will list all the data elements or message types being exchanged as part of the data sharing agreement.

5.5.5 Dates of the Project

This section will list the beginning and ending dates for the data exchange.

5.5.6 Storage and Disposal of Data

This section will provide a narrative overview of the system(s) responsible for storing the data. This should include properties such as

- physical location of the data,
- overall security characteristics of the application, and
- ability of the application to expunge data per OCFS policies.

5.5.7 Modifications

This section defines the process for modifying the data sharing agreement.

5.5.8 Limitations and Liabilities

This section will define any liabilities related to data loss by either party.

5.5.9 Attestation Regarding Privacy/Security of Data

This section will bind the parties to specific language regarding the confidentiality of the data and any actions that must be taken to secure the data against unauthorized usage. Additionally, this section will inform the parties of actions to be taken in the event that unauthorized access to data is determined.

5.5.10 Executory Clause

This section will include the signatures necessary to execute the data sharing agreement.

5.5.11 Right to Audit

This section will describe the ability for OCFS to audit data exchange partners.

5.5.12 System Users

This section will describe a requirement whereby the data exchange partner must include the ID of a CONNECTIONS user with each discrete update request.

5.5.13 Attachments

This section will include attachments such as the following:

- Contractor language
- Data Disposal Attestation Form
- Executed MOU

5.6 Process for Adding a CCWIS Data Exchange Partner

OCFS and ITS are drafting a standard onboarding process for all new CCWIS data exchange partners. The process will include the following:

1. Execution of an MOU
2. Execution of a data sharing agreement
3. Classification of all information being exchanged per New York State Information Technology Standard NYS-S14-002 (https://its.ny.gov/sites/default/files/documents/nys-s14-002_information_classification_1.pdf)
4. A mapping of user identities from the data exchange partner's source system to valid CONNECTIONS user accounts
5. Usage of an existing messaging schema and process

5.7 Data Exchange Standard

Per 45 CFR 1355.52(f) of the CCWIS final rule:

“(f) Data exchange standard requirements. The title IV–E agency must use a single data exchange standard that describes data, definitions, formats, and other specifications upon implementing a CCWIS:

(1) For bi-directional data exchanges between CCWIS and each child welfare contributing agency; and

(2) For data exchanges with systems described under paragraph (e)(1)(iv) of this section.”

As stated above, OCFS has decided to use the CONNECTIONS data model as the basis for our CCWIS solution. Given this decision, our data exchange standard will closely mirror this model.

5.7.1 Messages

Our CCWIS exchange will support messages in JSON or XML format. Submission of files (CSV format for example) will be supported for batch exchanges.

5.7.2 Services

Our data exchanges will be constructed in a way that allows for real time and batch integration. In addition to standard SOAP and/or REST services, our CCWIS data exchanges must support publish/subscribe and first-in/first-out messaging with guaranteed delivery.

5.8 Data Security and Confidentiality

Please see section 3.3 for a discussion relating to how security and confidentiality will be handled for CCWIS data exchanges.

6 Data Quality Process

6.1 Overview

Data is the foundation of nearly all CCWIS-related activities. Accurate and timely data is essential to all CCWIS automated functions. Even in SACWIS, balancing data collection and real-world child protective services and case worker needs was extremely difficult. With a transition to CCWIS, OCFS is expecting that reducing duplication of data entry will improve the quality of data within the system by reducing (or eliminating) errors caused by re-keying of information. Improving data quality will lead to both better outcomes and better policy.

Ensuring quality data is a continuous process that must adapt to constantly changing conditions. OCFS is incorporating ongoing data quality monitoring and improvement into discussions across the child welfare program as well as with our ITS partners, both working with stakeholders in LDSSs and CWCA in improving practice and understanding the importance of quality data, and in developing system functionality that supports and facilitates good quality data. As data exchanges are implemented, adhering to data quality standards will be key in defining edits and messaging.

6.2 Approach

Data is an organizational asset. Data Quality Management requires a systematic approach that can be divided into six high level activities:

- Define High Quality Data
- Define a Data Quality Strategy
- Define Scope of Initial Assessment
- Perform Initial Data Quality Assessment
- Identify and Prioritize Improvements
- Develop and Deploy Data Quality Operations

The Data Quality Improvement Lifecycle consists of four steps:

- Plan: Assess the scope, impacts, and priority of known issues, and evaluates alternatives to address.
- Do: Address the root cause of issues and plan for ongoing monitoring.
- Check: Actively monitor the quality of data as measured against requirements.
- Act: Address and resolve emerging data quality issues.

6.3 Business Activities

The following are the business activities that OCFS will undertake as part of our data quality initiatives:

6.3.1 Define High Quality Data

Defines what the data represents. There are multiple levels of data quality: the database level, the data exchange level, the application level, and the business level. Ultimately the business owners will have the final say as to what determines quality data. The Data Governance team will manage the definitions from a governance point of view. CCWIS will use the current metadata definitions in CONNECTIONS as the foundation for the future data model. This metadata will be available to all stakeholders and validated for accuracy. It will be the job of the Data Governance team to examine processes that link metadata to application and database development and make certain that data quality standards are adhered to. It will also be the job of the Data Governance team to examine the current change control process to make certain that data quality definitions are embedded.

6.3.2 Define Scope of Initial Assessment

OCFS and ITS staff on the Data Governance Council will conduct the current state assessment for data governance. The team will assess current data quality processes, tools, and artifacts. This will provide the foundation for recommendations for additional data quality reports and outreach/communication to stakeholders. Existing tools will be utilized initially, with an eye toward future needs and whether more robust data quality assessment tools will be desired.

6.3.3 Perform Initial Data Quality Assessment

The CONNECTIONS Data Warehouse has implemented reports that are targeted toward monitoring and improving data quality associated with federal reporting, program needs, and/or those identified by BREPA as impacting either. As gaps are identified, new reports are developed, testing is done by CONNECTIONS Implementation staff/field and moved to production in the data warehouse. At this point tip sheets are created by CONNECTIONS Implementation staff where applicable and data warehouse staff disseminates the reports to applicable users via webinars.

These existing and in-development reports will be utilized as key elements of the initial data quality assessment.

6.3.4 Identify and Prioritize Improvements

OCFS has dedicated significant efforts to improving data quality as demonstrated by improvements in the CONNECTIONS application that continue to support regulatory requirements, as noted earlier in this plan. Additionally, we have developed or are in the process of developing reports to assist in identifying data gaps within CONNECTIONS.

Improvements are prioritized by the child welfare program staff who perform continuous quality improvement, monitoring and oversight activities, and CONNECTIONS governance and field support.

6.4 Technical Activities and Requirements

The following are the technical activities that OCFS may undertake as part of our data quality initiatives:



- Define Preventive Actions
 - Data entry controls that prevent invalid data from entering the system will continue to be defined. Many of these edit controls exist in the current CONNECTIONS system.
 - Training to alert users to the importance of quality data and how to recognize when data quality is being put at risk is a top priority.
 - Demanding high quality data from suppliers. This will be of critical importance as data exchanges are introduced with CCWIS.
 - Institute formal change control that embeds data quality at all steps of the development process. This will confirm that data quality issues are always considered when systems are created or modified.
- Define Corrective Actions
 - Automated actions that don't require human intervention are being reviewed in the current CONNECTIONS system and defined for the future CCWIS. Care is taken to ensure that any automated controls only make low-risk changes. Anything that requires a level of analysis by a worker will never be automatically determined.
 - Manual actions that require data quality assessment by stakeholders involve processes that address the short-term goal of correcting data quality and the long-term goal of correcting the root cause.
- Define Quality Checks and Audit Code Modules
 - Shareable, linkable, and re-usable modules that enable data quality issues to be treated the same across all systems, regardless of platform, when system interfaces are implemented will be defined. This supports consistent quality regardless of where the modules are used.
 - Creating a centrally located data dictionary that all stakeholders have access to will support a common understanding of data quality. Any data quality decisions that affect code will be based on information stored here.
- Effective Data Quality Metrics
 - Data quality metrics that can be quantitatively measured will be monitored.
 - Data quality metrics with business relevance will be monitored. If a metric is no longer relevant, it will be dropped. Conversely, new data element will be considered.
 - Acceptability from stakeholders that the chosen metric identifies data quality as required.
 - Accountability/stewardship means the stakeholders will periodically review and re-validate the usefulness of the metrics chosen.
 - Trending is key. Leading indicators, those metrics that predict future issues, will be the focus of measurement.
- Statistical Process Control
 - Analyzing variation will be a key process in ensuring data quality. Statistical methods will be defined, and appropriate tools will be identified.
- Root Cause Analysis
 - Understanding factors that contribute to problems and interfere with data quality is crucial. Understanding the lifecycle of the data is equally important.

- Identify conditions that if eliminated, would also eliminate data problems.

6.5 Develop Operational Procedures

The following are the operational procedures that OCFS plans to undertake as part of our data quality initiatives:

- Data quality issues tracking system
 - To enable patterns of data quality issues to be identified and addressed, a standardized data quality issues and activities system needs to be established to manage data quality resolution workflow.
 - This system would capture incidents and capture metadata values so that issues can be categorized.
 - The tracking system must provide an assignment process so that data quality issues are addressed promptly. In addition, there must be a mechanism for managing issues and escalation.
- Diagnosing issues
 - Isolate processes that produce bad data.
 - Look for potential issues with external data entering the system through the data exchanges.
- Formulate options for remediation
 - Address non-technical root cause with training
 - Modify systems where necessary.
 - Develop controls that prevent future data quality issues.
 - New monitoring techniques may be developed if the current techniques did not detect the data quality issue.
 - Determine a governing process to decide when to directly correct flawed data or take no action.
- Resolving issues
 - Cost/benefit process for resolving issues should be well established.
 - Develop process for recommending data quality changes.
- Establish data quality service level agreements (SLAs)
 - SLAs for data elements should be established between all stakeholders. These SLAs will establish how to react when the data quality is compromised and will take into consideration the business impacts and the cost for remediation.
 - SLAs will set the expectations for quality, define the methods of measuring when the SLA is broken, the thresholds that determine when it is broken, and the method of notification and timeliness of the response.
 - SLAs will also establish an escalation strategy that includes who should be alerted and when.
- Data Quality Reporting
 - Reports will be established to show data quality at a point in time.

- Trends of data quality will be monitored to identify when data quality is varying outside defined boundaries. This will help prevent data quality issues before they escalate.
- Metrics defining allowable values will be defined. There will be different levels of metrics based on criticality, frequency, and impact.
- Issues management reports will be established to determine what types of issues are occurring. This will highlight areas that need the most attention.

6.6 Software Tooling

6.6.1 ETL Tools

OCFS currently uses several ETL tools from various software vendors. These tools include Microsoft's BizTalk, SQL Server Integration Services, Oracle Warehouse Builder (OWB), and Oracle Data Integrator (ODI).

6.6.2 Data Quality Tools

OCFS will continue to use existing software tools to develop data quality reports (Cognos, SPSS, SQL Server, SQL, SSRS, SAS, and Excel). Continuous assessment will be performed, and if and when we are at a point where more robust tools are needed, software products will be evaluated.

6.7 Biennial Reviews

Per 45 CFR 1355.52(d)(3) of the CCWIS final rule:

“(3) The title IV–E agency must conduct biennial data quality reviews to:

(i) Determine if the title IV–E agency and, if applicable, child welfare contributing agencies, meet the requirements of paragraphs (b), (d)(1), and (d)(2) of this section; and

(ii) Confirm that the bi-directional data exchanges meet the requirements of paragraphs (e) and (f) of this section, and other applicable ACF regulations and policies.”

6.7.1 CCWIS Data Quality - Review Structure

With this year's Data Quality Plan, OCFS will submit its first biennial data quality review report. Staff from the child welfare program area, including CONNECTIONS governance and support, program quality improvement, and the Data Warehouse and federal reporting team, reviewed the agency's most recent approved CFSR, APSR and associated PIP. The team also brainstormed to develop a list of the data quality challenges encountered in each group's respective work. These sources taken together enabled the group to identify the top data quality initiatives based on impact, programmatic priority, and frequency.

Each of the data quality priorities were then quantified, and baseline and comparison data evaluated, documenting steps taken and plans for the coming year. See the attached *2021 Biennial Data Quality Review*.

6.7.2 Bidirectional Data Exchanges – Review Structure

OCFS is committed to making certain that all data sources that contribute data to CCWIS are identified as directly supporting identified CCWIS automated functions and/or state or federal reporting requirements.

As stated above, OCFS, along with our stakeholders, is developing a prioritized list of data exchange needs. A key requirement of the prioritization process will include references to CCWIS automated functions and state and federal reporting requirements. OCFS' MOU and data-sharing agreements will require commitments from our partners to uphold the required confidentiality of exchanged data, and commensurate standards for maintaining and transmitting data. OCFS will develop a process for periodically reviewing open data exchange partners for compliance with our data sharing agreements.

Because OCFS does not control the conditions of data entry within our data exchange partners' solutions, OCFS cannot perform similar tasks on those systems. We will use reporting tools that allow OCFS to develop point-in-time and historical reporting on data quality to evaluate data imported from external systems using bidirectional data exchanges.

Once our first data exchanges are implemented, related data quality activities will be reported on in subsequent biennial data quality reviews.

6.7.3 Plans for Next Biennial Review (2023)

In identifying the priority data quality work over the past two years on which we are reporting in this year's biennial data quality review, areas of focus for the next two years were also discussed. The following initiatives will be carried over as our work continues:

- Multiple PID reduction
- Movement entry timeliness
- Federal reporting (AFCARS)

Specific areas of attention will include pregnant/parenting data elements, termination of parental rights (TPR), kinship placement indicator, direct placement of youth by the courts with family/relative caregivers (known as 1017 placements), and reports to law enforcement for AWOL youth. It is expected that data quality work related to implemented data exchanges will also be included.



7 Risk Management

The amount of resources dedicated to improving data quality must be measured against the cost of poor data quality. At all levels, risk management is a key component in the Data Quality Plan. Any decision made about data quality needs to assess the risk of introducing poor data quality into the CCWIS solution. OCFS will work on developing a formal risk management process as part of our data governance initiative.

The following table is a placeholder to capture data exchange related risks that were discussed during creation of the initial Data Quality Plan:

ID	Description	Likelihood	Level of Impact	Status	Initial Thoughts
1	Data source becomes permanently unavailable	Highly Likely	High	Identified as a risk	Business processes built upon externally sourced data must be strongly considered
2	Data stored insecurely	Highly Likely	High	Identified as risk	MOUs and data-sharing agreements must be strict and include language to allow OCFS to audit
3	Bad data introduced into CONNECTIONS	Highly Likely	High	Identified as risk	Need to develop real time data quality mechanisms to prevent uploads of bad data.
4	Messages are not acted upon	Highly Likely	Medium	Identified as risk	Messages are not processed by a consuming system and are "lost"

8 Conclusion

Even before the advent of CCWIS, OCFS was a proponent of using data integration to improve operations. OCFS has already invested in building a continuous quality improvement program to assist in the mission to improve our work with the children and families of New York State.

This Data Quality Plan describes how OCFS is approaching data quality as part of our transition to CCWIS. This plan will evolve as we mature our data governance structure and

- **define** the data quality standards required by our stakeholders,
- **identify** the rules and edits that will be implemented when we import data into the CCWIS system,
- **select** the techniques we will use to measure our data quality,
- **implement** the processes and develop the reports to measure data quality, and
- continue to **refine** our processes as we work to improve data quality.

The process of developing and implementing an enterprise program to manage data quality is an expensive and complex undertaking. OCFS is committed to building an effective governance structure and working with our partners and stakeholders to improve data quality within the CCWIS solution.

9 Appendix A - Job Aids

CONNECTIONS maintains a collection of job aids and other “how to” reference documents and tip sheets to assist users with common data entry scenarios. These materials are updated as required and available on demand:

Placement Window	
	Getting Ready to Search in the Placement Dashboard Window
	Using the Placement Module to Modify Activities Data
	Using an Exact Search
	Initiating the Placement Request
	Completing a Placement Request
	Searching for Resources and Sending Referrals
	Placing a Child
	Verifying a Placement
	Closing or Withdrawing a Placement Request
	Initiating a Request with "New Using"
	Accepting or Declining a Referral
	Entering Congregate Care Resource Characteristics (Updated February 2021)
Activities Window	
	Activities Task Tips (Updated December 2020)
	Activities Window Security Tip Sheet (Updated December 2020)
	Activities Worksheet for Legal Entries (December 2020)
	Documenting Eligibility: Candidacy for Foster Care (January 2021)
	Documenting Respite (September 2020)
	Using the Placement Module to Modify Activities Data
Security Tip Sheets	
	Accessing Someone Else's Workload and To-Dos (Updated February 2021)
	Creating an On-Call Unit for Accepting After-Hours SCR Reports (Updated September 2020)
	Placement Business Functions (October 2019)
	Adding a User to CONNECTIONS (Updated August 2020)
	Agency Access and Organizational Hierarchy (Updated August 2020)



	Data Redaction (Updated December 2020)
	Encrypting Email (June 2014)
	Removing a Worker From CONNECTIONS (Updated August 2020)
	Specialty Path Access (Updated August 2020)
	Understanding Designees and Assignees (Updated February 2021)
	Understanding Business Functions (Updated August 2020)
	Working With Units (Updated February 2021)
CPS/FAR Tip Sheets	
	Creating and Maintaining the On-Call Schedule (Updated December 2020)
	The Complete Guide to Progress Notes (May 2018)
	Consolidating a CPS Investigation in CONNECTIONS (Updated February 2021)
	CPS Intake (Updated February 2021)
	Creating a FAR-Associated FSS (Updated August 2015)
	Creating an FSI From a CPS Investigation (Updated September 2020)
	The Family Relationship Matrix (FRM) (Updated December 2020)
	Intake Priority Closures: Closing a Duplicate CPS Report (DUP) and Additional Information (ADD) (Updated February 2021)
	Local Data Maintenance on Closed Investigation (INV) Stages (June 2020)
	Managing Family Assessment Response in CONNECTIONS (November 2012)
	Combined Open Case Inquiry (July 2020)
	INV/FAR Open Case Inquiry Report (July 2020)
	Reviewing Intake Stages in CONNECTIONS (Updated February 2021)
FAD	
	Accessing the FAD Closure Report (September 2020)
	Adding a Provider/Resource
	Field Description Addendum to Adding a Provider (Updated November 2011)
	Creating and Maintaining Contracts in CONNECTIONS (January 2019)
	FAD Tips for Troublesome Tasks (September 2020)
	Foster Home Transfer Procedures (November 2019)
	Recording KinGAP Data (Updated September 2015)
	Supervised Independent Living Program (SILP) Job Aid (July 2020)
Services Workers	
	Combined Open Case Inquiry (July 2020)



	The Complete Guide to Progress Notes (May 2018)
	The Modernized Bridges to Health (B2H) Windows in CONNECTIONS (May 2015)
	Children in Foster Care Who Are Parents (Updated October 2015)
	The CONNECTIONS-WMS Interface (Updated February 2021)
	Creating a Child Case Record for a Legally Freed Child (June 2016)
	Designating Health Responsibility (Updated February 2021)
	Documenting Eligibility/Candidacy for Foster Care (Updated January 28, 2021)
	FASP Tip Sheet (Updated October 2016)
	The Family Relationship Matrix (FRM) (December 2020)
	Filtering the Person View of the Workload to Locate 21-Year-Old Youth (July 2018)
	FSS Case Closure (2005)
	Health Services Component (2007)
	Completing the Missing Child Window for Family Services Stages (July 2020)
	Recording KinGAP Data (Updated August 2016)
	NYTD Reporting Requirements Tip Sheet (Updated September 2020)
	Permanency Hearing Reports -- New Using Launch Option (Updated October 2015)
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	PHR Title Page: Updating Type and Date of Placement (July 2016)
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	Plan Amendments and Removal Updates (Updated February 2021)
	Preventive Services for a Pregnant Woman and Her Unborn Child (February 2021)
	Recording Essential Information When a Child Enters Care (June 2018)
	Recording Sex Trafficking Information for the Family Services Stage (July 2020)
	System and Casework Contact Implications for Youth Moved Into and Out of OCFS Facilities (August 2016))
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	Accessing CONNECTIONS Via the Internet (October 2017)
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	Recording AFCARS Information (Updated January 2021)
	AFCARS and Activities: Documenting Removal Information in CONNECTIONS (Updated May 2017)



	The Complete Guide to Progress Notes (May 2018)
	Creating and Maintaining Contracts in CONNECTIONS (January 2019)
	Data Redaction (Updated December 2020)
	District Agency Profile (DAP) (2009)
	Family Services OCI Report Version 3 Tip Sheet (June 2020)
	Help - "Using Online Help" (2008)
	Hot Keys (November 2011)
	Implied Role/Cross District Access (December 2016)
	Linking an FSI to a Case (Updated November 2015)
	Multiple PIDs: Troubleshooting Merge Error Messages (Updated February 2021)
	Narrative Recovery (November 2011)
	Person Unrelate (Updated September 2020)
	Progress Notes Instructions (March 2011)
	Progress Notes - Successfully Documenting Casework Contacts With Children in Foster Care (Updated March 2016)
	Records Retention (Updated October 2015)
	Using Reminder To-Dos to Share Confidential Information (December 2017)
	Uploading Photos and Documents in CONNECTIONS Job Aid v 3.0 (May 2020)
	User Resource Information (2006)
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	Case Management Handbook (2019)
	Foster Care Handbook (2016)
Job-Aids	
	Activities Window Build
	Getting to Know the CONNECTIONS Activities Window (October 2014)
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	FAR Build Job Aid (March 2014)
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	Reviewing Person History (Updated March 2014)
	Personalizing CONNECTIONS
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	Helpful Tips for CONNECTIONS
	Did You Know? (Intranet Access) November 2008
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	Security Document:
	Password Protecting Files
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	Q4-09
	CONNECTIONS Job Aid SharePoint Open Caseload Inquiry (OCI) Worker Report
	Q2-09
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	Q3-08 Job Aid
	Build 18.9.7 Job Aid
	Build 18.9.7 Job Aid (Version 1)
	Build 18.9.6 Job Aids
	Updated: CONNECTIONS System Build 18.9.6 Job Aid - Functionality for All Users (dated 4/07/08)
	AFCARS Job Aid (dated 3-3-08)
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	Build 18.9.3 Job Aid
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	CONNECTIONS System Build 18.9 Job Aid: Critical Improvements (dated 4/5/07)
	Revisions: Critical Improvement Job Aid
	CONNECTIONS System Build 18.9 Job Aid: Education
	Revisions: Education Job Aid
	Build 18.7 Job Aids
	CONNECTIONS Permanency Bill System Build 18.7 Job Aid (dated 12/8/05)
	Build 18 Job Aids
	CONNECTIONS Common Functions Guide Version 1.0 (dated 9/7/06)
	CONNECTIONS Build 18 Job Aid: Interfaces Version 4.2 (dated 08/25/06)
	CONNECTIONS Build 18 Navigational Toolkit
	CONNECTIONS Build 18 Case Management Quick Reference Guide for Upstate
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	Identified Revisions to the CONNECTIONS Case Management Step-by-Step Guide (dated 5/2006)
	CONNECTIONS Supervisory Functions System Build 18 Job Aid Version 1.2 (dated 10/4/05; includes Builds 18.3 and 18.4 changes)
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	Build 17 Job Aids
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	Build 17 Job Aid - Changes to Security for FSS Stages
	Job Aids for CPS Workers
	CONNECTIONS Person Relate/Merge Procedural Update
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	Identified Revisions to the CONNECTIONS Build 18 Job Aid: Changes to CPS Functions v1.3 (dated 9/22/05)
	CONNECTIONS Build 15/15.1 Job Aid CPS: Data Maintenance (dated 7/30/02)
	Updated CONNECTIONS Step-by-Step Guide: Data Maintenance for CPS Workers (6/13/2006)
	CONNECTIONS Tip Sheet - CPS Intake (dated 7/27/04)
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	Job Aids for FAD Workers
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	CONNECTIONS System Build 15 FAD: Changes Affecting FAD and Related Common Functions (dated 4/15/02)
	CONNECTIONS Build 15 FAD: The Foster and Adoptive Home Record Summary (FRS) (dated 4/12/02)
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	Job Aids for Other Staff
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	CONNECTIONS Guide: Adding a Provider/Resource to CONNECTIONS (dated 5/7/04)
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	CONNECTIONS Case Management Step-by-Step Guide (Version 1.5) (dated 5/5/06)
	Summary: Identified Revisions to the CONNECTIONS Case Management Step-by-Step Guide (dated 5/2006)
	CONNECTIONS Common Functions Guide Version 2.0 (dated 02/28/07)
	Summary: Identified Revisions to the Common Functions Step-By-Step Guide (dated 2/07)
	For CPS Workers

	CONNECTIONS Step-by-Step Guide: Training for CPS Workers (dated 3/01/07; includes Build 18.8 through 18.8.5 changes)
	Summary: Identified Revisions to the CONNECTIONS Step-by-Step Guide: Training for CPS Workers (dated 2/2007)
	CONNECTIONS Step-by-Step Guide: Data Maintenance for CPS Workers (dated 06/13/06)
	2nd Quarter Revisions to the Data Maintenance Step-by-Step (dated 6/2006)
	CONNECTIONS Step-by-Step Guide: Search Techniques for CPS Caseworkers (dated 12/30/04)
	For FAD Workers
	Notice to NYS OCFS of Foster Home Transfer Between Authorized Agencies
	CONNECTIONS Step-by-Step Guide: Training for FAD Caseworkers (dated 4/12/06)
	CONNECTIONS Step-by-Step Guide: Data Maintenance for FAD Workers (dated 11/18/03)
	For All Workers
	CONNECTIONS Step-by-Step Guide: Data Maintenance for Family Services Stages (dated 4/28/06)
	Summary: Description of the NEW CONNECTIONS Step-by-Step Guide: Data Maintenance for Family Services Stages (dated 4/06)
	CONNECTIONS Case Management Step-by-Step Guide (Version 1.5) (dated 5/5/06)
	Summary: Identified Revisions to the CONNECTIONS Case Management Step-by-Step Guide (dated 5/2006)
	CONNECTIONS Step-by-Step Guide: Security (dated 4/12/06)
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