

I. What is the AS3 Clinical Case Management System?

The Clinical Case Management System (CCMS) represents a new tool designed to aid school staff in identifying issues that impede teaching and learning and their efforts to provide academic and social support for students. The CCMS is particularly instrumental in easing the issues that encumber data collection and interpretation. The CCMS assembles multiple forms of data to provide comprehensive and developmental profiles of students, supporting evidence-based decision-making both in the classroom and for student support teams. CCMS technology is designed to provide access to comprehensive information affording more than efficiency for school staff struggling to locate and coordinate massive amounts of student data over time. The dynamic student data offered by the tool will support evidence based practice for school staff as well as evaluative data for administrators responsible for oversight and accountability.

The Academic and Social Support System (AS3) developed at the Center for Urban School Improvement is a process whereby school staff collaborate to identify, strategize, and implement interventions that address a multitude of issues that act as barriers to teaching and learning. These barriers may include academic, social/behavioral, medical, attendance, and family issues. Before AS3 student consultation meetings, teachers must assess each of their students by analyzing academic and behavioral data to determine the students to be discussed by the AS3 team. During the AS3 student consultation meeting, the team reviews a large amount of information in order to identify and properly intervene on various issues. Similarly, at follow-up meetings, the team revisits this information to determine progress and next steps. The activities that comprise the AS3 process can be organized in the following four steps 1)Pre-Consultation Meeting (student identification/referral through the universal progress review, data gathering, scheduling); 2) AS3 Student Consultation Meeting (data analysis and intervention planning); 3) Post Consultation Meeting Implementation (documentation of services and progress, administrative oversight); and 4) Follow-Up Consultation Meeting (data presentation and analysis).

II. What Core Problems of Practice is the AS3 Clinical Case Management System designed to address?

The CCMS is designed to support the practice of school professionals including classroom teachers, social support team members, and school administrators. School professionals are faced with the daily responsibility of organizing their efforts to best support student learning. Their actions are based on a series of complex decisions that are often made without the benefit of sufficient information. This occurs for many reasons. The organization and accessibility of massive amounts of student data over time presents a challenge for most schools. Even with the most recent set of student data at hand, teachers often do not have the time to deeply analyze the information to determine the course of action needed on any given

day to benefit a student. Under these conditions, important decisions that can impact student success are based on limited understanding. The resulting problems of practice include identification of students for referral, making evidence-based decisions when designing interventions, and public accountability as it relates to tracking interventions. These problems of practice are related to inefficiency, lack of evidence based decision-making, and lack of accountability. Inefficiency refers to the incapacity of individuals and/or the team to produce desired results with a minimum expenditure of energy, time, or resources. Lack of evidence based decision-making refers to the capacity of individuals and/or the team to make determinations grounded in various types of data/information (e.g., observable, measurable, anecdotal, longitudinal, descriptive, inferential, etc.). The lack of accountability refers to the inability to observe and track the activities of team members to ensure the quality of service implementation. The CCMS is designed to intervene in these problems as they affect the work of school professionals.

Supporting the Identification of Students for Referral

Early in the AS3 process, teachers identify students in need of additional supports. This task is accomplished by conducting a universal progress review of the status of each of the students in the classroom. One major issue that impedes this process is the reliance on one or two academic indicators and typically the anecdotal judgment of the teacher to identify students. Once the teacher has identified students to be referred, the next task is to assemble supporting data to be reviewed by AS3 team members during the consultation meeting. Teachers often fail to complete this task sufficiently because the process of collecting data from various locations and individuals is cumbersome and time consuming. One reason that teachers have relied on one or two data points to determine referrals is because upwards of twenty plus students have to be compared/ranked during this process. It would be quite difficult to accomplish such a task using multiple points of data. Additionally, teachers may rely on the data most easily assessable to them. Because this aspect tends to be problematic, referral files tend to be lacking in a sufficient amount of information needed to make evidence based decisions during the meeting.

The CCMS will ease this process by providing a dynamic data display of students across integral data types such as grades, standardized test scores, social/behavioral logs, attendance, and health. Each data type is color coded to communicate areas where students are above, meeting, or below standards. From this display the teacher can easily view the status of students in her classroom and make referral decisions about students who may need additional supports. The CCMS provides a step by step guide to aid the teacher in completing the referral and attaching student data to support her concerns. The main student data display is also helpful for teachers and administrators beyond the AS3 process as it provides an up-to-date analysis of student achievement and well-being at the classroom, grade, and building-wide levels.

Supporting Evidence-Based Decision-Making by AS3 Team Members

AS3 teams are multi-disciplinary groups assembled to review student/class/school data to make complex decisions about interventions for students and teachers. The team consists of the Assistant Principal, school social worker and/or case manager, the referring teacher, the AS3 consultant from USI, and the parent/guardian of the student. AS3 teams

meet weekly to review a large amount of information in order to identify and properly intervene on various issues. Interventions are performed by team members after the meeting but often go undocumented. At follow-up meetings, the team revisits this information to determine progress and next steps. Team decisions at both meetings are fully dependent on the availability of comprehensive and dynamic student data. Additionally, in the absence of intervention documentation and tracking, team members cannot make decisions about the efficacy of their practice. Through out this process team decision-making is compromised by the lack of sufficient evidence on which to base their practice decisions.

The CCMS provides a comprehensive array of data on student achievement and well-being from a longitudinal perspective allowing teams to make informed decisions about student, classroom, and possibly teacher needs. With a better understanding of the issues at hand, teams are able to fully utilize their expertise in designing appropriate interventions. The CCMS also provides a documentation structure allowing service providers to record their activities with students and any possible student impact of those intervention activities.

Supporting Public Accountability in Social Support Services

The assistant principal has administrative oversight of the AS3 process. They are responsible for managing the student referral process, the scheduling of consultation meetings, facilitating the student consultation meetings, and tracking the implementation of interventions. These responsibilities are quite difficult to accomplish due to the large number of daily tasks assigned to assistant principals. For example, scheduling is a complicated process that involves coordinating teacher class schedules with parent availability as well as arranging for teacher coverage. Similarly, the tracking of interventions involves the coordination of AS3 team information across several student cases. As mentioned earlier, team members rarely document their intervention activities further impeding the ability of the assistant principal to add accountability to the process.

The CCMS provides the school administrator with a calendar tool to easily create AS3 meetings by allowing the assignment of student cases to dates. Team members are automatically notified of upcoming meeting dates. The CCMS also answers many of the above issues through its intervention planning and documentation structures. The intervention planning structure requires the team to identify personnel responsible for the intervention, as well as the targeted goals and frequency of the interventions. Team members and other school staff receive alerts from the system reminding them of their prescribed activities for each intervention. School staff can view a log of all the interventions requiring their input organized by daily, weekly and monthly tasks lists. Through this process and the intervention documentation structure described above, the system tracks the implementation and efficacy of interventions, allowing the school administrator to easily view the status of social support functions in the building. Taken together, the intervention planning and documentation structures provide a powerful case management tool.

III. What are the key features and functions of the AS3 Clinical Case Management System?

Whether it's a classroom teacher trying to identify students in need of additional supports or make daily instructional decisions, a social support team attempting to understand why a student is reading below grade level and designing appropriate interventions, or a school administrator trying to identify building trends and track appropriate service delivery, CCMS technology can support and catalyze the work of these school professionals. It is designed to accomplish this through the following features and functions:

- **Student data displays across multiple areas** (i.e., academic, social/behavioral, attendance, family, and medical) with analytical tools built into the visualizations. These functions will aid teachers in the identification of student support needs as well as informing instructional decisions.
- **Student referral tools** that allow teachers and other staff to build detailed AS3 referrals and associate supporting evidence/data to illustrate their referral concerns.
- **Intervention planning tools** that allow student support teams to build and test hypotheses regarding student issues in order to design appropriate interventions with measurable goals.
- **Service provision tools** allowing service providers to document their intervention activities and track student progress.
- **School summary tools** allowing building administrators and/or case managers to easily track service provision, student progress, and program efficacy.
- **Communication tools** increasing the ability of school staff to share important information including notifications regarding upcoming meetings and deadlines.

IV. What is the anticipated impact/value of the AS3 CCMS?

Data compilation: The CCMS will be particularly instrumental in easing the issues that encumber data collection, interpretation, and team accountability. The CCMS will pull together multiple forms of data to provide comprehensive and developmental profiles of students, supporting collaborative evidence-based decision-making throughout the AS3 process.

Data visualizations: Through tailored data visualizations, the system will assist AS3 teams and school administrators in the identification of student needs as well as the planning and coordination of services. For example, teachers will be able to view graphic representations of student performance allowing in-depth analysis of one student as well as allowing simultaneous comparisons across students. During the decision-making process, teams will have the ability to test their theories against the data through user-defined queries and data graphing.

Case management: The CCMS will also provide a documentation structure for case management including: forms, assessment, service planning, case-notes, dunning and detailed report options. Through these documentation features, school administrators will have a window into the service delivery activities of staff members.

School level decision-making: Because the system will provide access to multiple forms of data at the student, class, and school levels, building administrators will have a powerful tool aiding their ability to identify building patterns/trends as well as to develop necessary reports. While this system is currently envisioned to support the AS3 process, it can very well become a tool that is used daily to support information management, visualizations, and decision-making for all students.

V. How is the AS3 CCMS being developed?

A functional map for this system was developed including tool functionality, identification of users, system requirements and screen prototypes. We employed the expertise of an external software partner, Soliant Consulting (formerly the Moyer Group), to develop basic functional screens, and create the capacity for data migration from PowerSchool and other school applications to the CCMS. In order to manage the development of this tool, the project has been scoped out in five functional areas. Each area represents the development of system functionality and supporting screens to accomplish the following:

1. Identification and referring of students, adding evidence to referrals
2. Creating and documenting AS3 Student/Teacher intervention plans
3. Management tools for school administrators to endure accountability
4. Documentation of services/activities by teachers and service providers
5. Creating on demand data visualizations and custom reporting

The CCMS will be introduced to the University Charter School campuses (NKO and Donoghue) in phases. Initially, we plan to concentrate on the efficiency needs of school staff. With the completion of scopes one and two, the first version of the CCMS will be introduced to the NKO campus during the spring of 2005 through usability testing and limited piloting. Based on information gathered during this step, final refinements will be made during the early summer of 2005. The CCMS will be implemented at the Donoghue and NKO campuses during the summer of 2005 and early fall of 2005, respectively. Both campuses will receive intensive professional development focused on integrating the technology in social practices. While managing the initial tool introduction, we plan to continue tool development with a focus on completing scopes three and four. We will continue to collaborate with school staff around tool development and refinement.

It is important to note that the CCMS is adaptable to support most forms of school student support practice. It is currently configured to aid a process called the Academic and Social Support System (AS3) developed at the Center for Urban School Improvement.