

MIS Advancements in Reducing Clinical and Financial Risk

By Community Counseling Centers of Chicago (C4)

Winner: President's Award, 2004 Negley Awards for Excellence in Risk Management

C4 has successfully confronted many of the most challenging demands to behavioral healthcare organizations. In its efforts to increase revenue by capturing all available Medicaid billing, the agency faces increased risk of recoupment of funds through payback audits. As the cost of service delivery expands, C4 constantly attempts to reduce administrative costs to balance its budget. From a staff often overwhelmed and discouraged with the need to attend to growing administrative tasks, the organization strives to advance its service delivery volume, quality, and choices to better meet the evolving needs of its consumers. In composing its strategies to overcome these types of challenges, C4 envisioned a management information system (MIS) that would not only confront its known business risks, but would prepare itself to approach unanticipated future threats and thus allow the organization to freely develop better practices of care and administration. Over the course of approximately four years, C4 designed, built, implemented, and continuously improved a comprehensive, integrated MIS that supports and enhances clinical and financial operations throughout the agency. In short, the MIS provides at least the following functions to the organization:

...a comprehensive computerized client assessment, treatment planning, service monitoring, outcome measuring, and case management system that collects and analyzes crucial demographic, diagnostic, and socioeconomic data that is used to assess the most appropriate level of care for each client's unique set of needs;

...a thorough and secure on line clinical record that eliminates the need to print and store hard copy documentation and prevents third party bills from being submitted without first meeting all necessary requirements;

...a liability alerting/quality improvement system that provides clinicians and their managers with real time prompts and warnings of treatment deficits, contradictions in care, and charting irregularities that fall outside the boundaries of the agency's defined best practices;

...a complete billing system that meets Medicaid and all other third party regulations; and that creates electronic claims directly from the data entry of the clinician independent of clerical involvement;

...a knowledge management method that provides immediate, daily, weekly, monthly and yearly data measurements necessary to most efficiently monitor and improve programming;

...an accounts receivable application that electronically posts charges and resubmits all rejected claims that can be brought into compliance.

Since its implementation, outcomes related to C4's ambitious efforts have been positive. Billing revenue substantially grew, rejections rates diminished to insignificant degrees, clinical practices improved through automated advancements, and internal user satisfaction exceeded expectations. Administrative and support resources previously required for data entry, reviews of charting compliance, and accounts receivable maintenance dropped by 75%. The electronic liability alerting/quality improvement system has brought a significant increase in the number of cases that are identified as requiring clinical planning modifications and attention, which leads to enhanced service delivery to our clients and overall reduced business risk. During this past year, the largest test of the system occurred as the agency faced a Medicaid recoupment audit with a potential payback of up to \$4 million of collected Medicaid revenue. Common to this type of audit, a sample of 1500 bills from the total population of Medicaid bills submitted and paid during a two year period were reviewed. C4 faced the threat of having to pay back the percent of \$4 million that equaled

the percent of reviewed services from the sample found out of compliance with Medicaid regulations. Largely contributed to its automated efforts in reducing agency business risk, C4 successfully endured the audit with an outstanding 0.00% error rate.

Background and Vision: With the approaching new millennium, C4 thoroughly evaluated its MIS plan. At the center of this analysis was the question of whether to continue its investment in one of the most highly regarded third party software systems available to behavioral healthcare providers. From its assessment, C4 concluded that its third party approach was problematic. The billing software required a significant amount of on-going administrative support for the clerical data entry of clinical services. Similarly, the accounts receivable software was labor intensive as it required the manual posting of charge information and required careful examination by fiscal personnel in making determinations to resubmit rejected claims. The automated clinical record system prevented the agency from promoting many of its activities it considered its best practices in clinical service delivery. Staff simply felt stifled as they commonly faced constraints in the software's design when they attempted to implement many of the agency's well respected documentation processes and clinical methods. The system required the continued practice of needing to print clinical record documentation which prevented the agency from moving to a paperless chart and avoid concerns with missing and/or improperly filed records. The third party approach did not insure that submitted claims thoroughly met all funding regulations prior to submission. Finally, managers, if not all staff, were frustrated at the limited amount of data and reports the system provided.

As part of its critique, C4 reviewed the product offerings and outcomes of the other largest software vendors in the field in an attempt to not only benchmark its own success with its current system, but to also consider an alternative selection. Frustratingly, the end result of this assessment was that no vendor seemed to offer a product line the agency desired. This step caused C4 to consider that either its expectations were unrealistic or that it would need to create its own solution if it were to improve its operations to the degree outlined in its vision. Conscious of the commitment, leadership, collaboration, and labor necessary to take such a bold step; C4 conceived an internally developed software solution that would not only meet the agency's currently unmet expectations, but would exceed its staff expectations of what should be considered possible through automated advancements. It conceptualized an automated record that prevented services from being entered that did not have all required authorizations, staff credentials, clinical content, and required documentation. It pictured a system that eliminated any clerical entry between the clinician and the billing of services. It conceived a method where clinical forms would be electronically signed and stored online, thus preventing the printing and storing of documents in manual records. It planned a system where charges would be posted to a uniquely designed accounts receivable system where collections and rejections could be posted automatically by simply uploading billing outcome data. Furthermore, C4 set its software development goals to: 1) increase its billing; 2) reduce administrative costs related to billing, accounts receivable maintenance, and clinical record upkeep; 3) minimize billing rejection; 4) eliminate risk of recoupment of previously paid charges; 5) provide a paperless environment; 6) reduce clinical liability by advancing agency best practices, 7) reduce clinician documentation and record maintenance time, and 8) provide clinical and administrative outcome reports that prompted and encouraged managers to improve their program operations.

Process Development: Early identified as key to the system was building a network of unified teams of senior staff/experts that would design the content and functions of each unique application with the understanding that each team's recommended design must complement and integrate with the other team's work. To this end, distinct teams were developed to construct the major applications: intake/assessment, treatment plan, progress notes, transfer and discharge, employee clinical credentials, billing, accounts

receivable, and management reports. Principal to each team's charter was the goal to develop a comprehensive risk management system through the automated processes that would immediately alert staff of potential risks in planned service delivery and documentation. To ensure systematic integration of design, each team included at least the agency's Director of Clinical Records or Director of Information Systems, who then met daily to review the team's progress towards meeting the agency's vision.

While the teams worked towards meeting their goals, the technical elements of the project were also selected and constructed. Paramount to the success of the project was selecting a software package that would provide for ease of development and continued growth. After a careful review of the advantages and limitations of various database packages, Lotus Notes was selected as the software for developing the system. In general, Lotus Notes was chosen for the following reasons. 1) the product could be maintained at each agency location on individual local area networks (LANs) that then could be synchronized nightly through the product's replication devices; or, it could just as easily be implemented through a wide area network (WAN). This flexibility in hardware support provided the agency the ability to implement the system on equipment it currently had and the freedom to easily plan for future changes in hardware infrastructure. 2) Lotus Notes is largely a workgroup package that promotes organizational collaboration in both product design and finished application use. Given the collaborative team approach C4 chose for system development, Lotus Notes was ideal. As the clinical record could be analyzed as a series of complex and integrated documents that require myriad levels of staff accessibility, partnerships, and security; a workgroup design fostered C4's approaches and prevented the clinical staff from needing to modify its best practices due to any technical constraints. 3) E-mail is inherent within Lotus Notes. This element was crucial to the design, as it was critical to have the ability to automatically embed e-mail alerts to prompt clinicians to meet deadlines and complete unfinished work. 4) On-line and real-time reports through the element of Lotus Notes Views would provide staff with immediate feedback regarding any query of desired data elements. 5) All educational tools and procedural manuals could easily be kept within Lotus Notes databases that could be integrated directly into the clinical applications. 6) The ability to embed electronic signatures within any Lotus Notes documents was an inherent feature of the software that was deemed as crucial since the agency wanted to maintain all records on-line and eliminate printing of documents. 7) Lotus Notes exceeds all regulatory encryption requirements that insured that highly client confidential data would be secure in the agency's online, multi-location environment.

An additional feature of Lotus Notes that was crucial to the project's success was the product's feature of Discussion Boards. This bulletin board system was most frequently used as applications were introduced to all staff throughout the organization. As the consumers of systems, all clinicians were encouraged to post comments, concerns, questions, and ideas for improvement to any application they were to use. This direct end-user feedback through the Discussion Boards was invaluable in identifying process improvements regarding product design, which only enhanced both the systems utility and user buy-in.

Outcomes: As outlined above in the "Background and Vision" section of this application, C4 set multiple enterprising goals for its desired MIS. In brief, through a collaborative effort of staff throughout the organization, the agency achieved each target. As previously mentioned, through its MIS, C4 was able to pass one of behavioral healthcare's greatest fiscal tests, the Medicaid recoupment audit, with a finding of 100% compliance. Moreover, since the system was implemented, the agency has received similar findings when its billings and service delivery systems have been reviewed by its largest funding source, the Illinois Department of Human Services. In these audits, C4 has received the highest ratings and is only required to face the most minimal amounts of future audits as a result of the findings.

C4's clinical management consistently report high degrees of satisfaction with the approach. Moreover, internal queries reflect that the system directly contributes to 1) a higher degree of both service delivery and quality of care, 2) a decrease in the amount of time spent documenting services, 3) elimination of exposure to liability relating to unsigned, incomplete, or unauthorized services, 4) quicker and more thorough review of client progress towards meeting clinical goals, 5) higher reliability that clinical needs are identified and addressed, and 6) greater integration in treating health, financial, and social issues with behavioral ones. Furthermore, the findings of the agency's 2003 MHCA Staff Satisfaction Survey show that C4 staff ranks the agency's MIS beyond those of similar organizations.

The organization feels strongly that its enhanced billing, lower rejection rates, decreased threat of potential payback of billing, and reduced risk of clinical liability easily justify the costs related to maintaining the ongoing project. While the initial capital investment in computers and other hardware peripherals required careful fiscal planning, many of the ongoing expenses are met through a reduction in administrative costs related to decreased data entry and manual audit of the agency's former manual systems. Moreover, the agency has been well supported by industry leaders in the technology field who have supported this project upon learning of its scope and outcomes. For example, Lotus Notes has provided in kind donations of software with a market value of \$36,000. In recognition of the agency's efforts to better serve its clients and community through the project outlined in this application, Microsoft charitably gave an incredible gift of PC and network operating software, as well as business office tools that have a market worth of \$273,000.00 to support the agency's vision.

About C4:

Community Counseling Centers of Chicago (C4), a behavioral health and social service provider, offers quality, comprehensive services tailored to the cultural and economic diversity of its consumers. Since 1972, C4 has dedicated itself to providing counseling experience and expertise to healing and helping men, women and children who are struggling with mental illness, substance addiction, emotional trauma and the aftermath of violence. C4 has become known throughout Chicago for its leading clinical services and its sensitivity in providing mental health services to racially, ethnically, and economically diverse communities. Since its inception, C4 has continually developed services particularly directed to persons in poverty, which address a multitude of behavioral health and prominent social problems that exist in the community, including specialized services for victims of sexual assault. With qualified staff that speaks 21 languages and dialects, C4 serves a diverse clientele. C4 services have expanded to nine locations serving 3,000 clients monthly and 7,000 unduplicated participants annually, 80% of whom are impoverished. In June of 2001, C4 was re-accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), which means that C4 has been recognized for complying with rigorous national performance standards that promote quality health care delivery. CEO is Anthony A. Kopera, PhD. Contact Paul Stieber, MA, Chief Information Officer.