

THEME

Technology and Information Sharing

RECOMMENDATION 10:

Utilize technology to support providers in delivering quality care, individuals in participating in their care, and the system in collecting data for effective management.

Strategy 10.1: Support improvements in efficiency and recovery through the purchase and support of a new electronic health record/personal health record (EHR/PHR) following county funding and procurement procedures. Funding for this recommendation would be considered through the county's IT Enhancement fund.

Strategy 10.2: Purchase hardware (laptops and similar portable devices) that supports changes in business practice.

Strategy 10.3: Establish, through a collaborative effort with the county Department of Information Technology, CSB-specific security guidelines and procedures that provide CSB greater flexibility to grant authorized staff certain system administrative rights when using desktops, laptops, and related peripherals.

Strategy 10.4: Facilitate access to information for individuals receiving services by extending public access to CSB sites and purchasing computer "kiosks" for key CSB service sites.

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Utilize technology to support providers in delivering quality care, individuals in participating in their care, and the system in collecting data for effective management.

The successful implementation of changes to practices, structure, and philosophy identified in this report is critically linked with the leveraging of appropriate technology solutions. Technology can bring alive the set of values established by this Commission, affording the opportunity to improve efficiency, facilitate access to services and information, provide data for measuring effectiveness, and promote transparency and participation. More specifically, efficiency gained through the real-time entry of information via a variety of hardware into an electronic health record rather than on paper, or paper to electronic transfer, ensures that information is available across physical sites and between CSB providers of service. For the individuals receiving service, the end result is better coordination and quality of care, not to mention the efficiency gained by not having to reiterate information already provided (both clinical and administrative). Likewise, for staff it affords the opportunity of time savings and enhanced decision support. For individuals receiving service as well as for staff, support for decisions about care is enhanced through access to the most current research and information on service practices. Data that is generated on service type and amount can be utilized to compare what is being provided with demand and need, to evaluate productivity, and to realign resources as needed. Having information available on outcomes and productivity on a regular basis is itself an important management tool for system improvement.

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Across the nation, technology is playing an increasingly important role in the delivery of health care, behavioral health care and, most significantly, the integration of the two. Key to this are ePrescribing, the electronic health record (EHR) and the personal health record (PHR) that support health information exchange (HIE), and supportive technologies that improve the efficiency and quality of service. An EHR is an individual's health record in digital format that is accessed on a computer, often over a network. Typically an EHR is generated by the service provider, while a PHR is maintained by the individual receiving service. A PHR is a vehicle for the individual to organize and retrieve his or her own health information, including emergency contact information, a description of problems, history of treatments, and preferences. The integration of EHR and PHR information promotes a person-centered approach to services. On a larger scale, the EHR and PHR are facilitators of HIE, which is the electronic movement of clinical information between information systems. Ultimately, HIE will improve the safety, efficiency, and effectiveness of services.

TECHNOLOGY CAN BRING ALIVE THE SET OF VALUES ESTABLISHED BY THIS COMMISSION BY IMPROVING EFFICIENCY, FACILITATING ACCESS TO SERVICES AND INFORMATION, PROVIDING DATA FOR MEASURING EFFECTIVENESS, AND PROMOTING TRANSPARENCY AND PARTICIPATION.

The development of an electronic health record and related infrastructures is required by both state (target date for Virginia Health Information Exchange initiative is 2012) and federal initiatives (target date for Federal EHR and Interoperability initiative is 2014) to facilitate the movement of information. The Fairfax-Falls Church CSB has set a goal of full electronic connectivity by 2010. Anasazi Software, behavioral health care software, was implemented in 1999 as the CSB Electronic Health Record.

As a county agency, the Fairfax-Falls Church CSB relies on the county Department of Information Technology (DIT) for infrastructure support of its 1,100 staff, more than 80,000 consumer records, connectivity for 75 main sites and additional smaller sites where individuals receiving CSB services reside, and policy implementation/guidelines. The county has a modern enterprise-wide communications network connecting all agencies to data center resources. Most agency applications are on servers in the county's data center, including the current CSB system. DIT provides desk-top support and security standards. DIT also has provided funding for technology improvements including a more secure and improved database environment to comply with HIPAA (Health Insurance Portability and Accountability Act) regulations as well as expansion of the infrastructure to support increased capacity requirements. These enhancements have enabled the CSB to expand its user base (growing from 300 current users to 1,100 by the spring of 2009) without

increasing DIT support staff. The transformation of the behavioral health-care business model and advances in technology support the acquisition of a product that provides an up-to-date supportable system architecture capable of serving the CSB's evolving business needs.

Use of a strong EHR, integration of that EHR with a PHR, procurement of state-of-the-art software, and consistent network connections are critical success factors in supporting the CSB's service delivery system. The following basic principles underlie the CSB technology development:

- The Fairfax-Fall Church CSB must meet the federal and state guidelines for implementation of EHR and HIE in a timely manner.
- Privacy and confidentiality must be maintained.
- The EHR of the CSB should have the capacity for integration with a PHR and meet the needs of individuals receiving services and staff alike.
- Adequate infrastructure and staff resources should support the EHR.
- The type and implementation of this technology should be consistent with transformation principles.
- The use of technology that is more suitable for the unique and dynamically evolving requirements of the CSB and behavioral health industry should be embraced and championed by CSB leadership and incorporated in county technology strategic directions.

A critical juncture exists that could

be capitalized on. The CSB is facing expensive upgrades to its current system over the next two years that involve ePrescribing and changes to the Assessment and Treatment Planning module of the product. Newer products on the market have additional features that would enable the CSB to best support the transformation. In addition, a large number of the CSBs in Virginia are currently evaluating their software systems and, as a result, there is timely information available about these products and their ability to meet the needs of a transforming behavioral healthcare system. Through the county IT funding process, the funds have been approved to build additional server capacity and corresponding software licenses to meet an increased user base. Strategic implementation opportunities, including an upgrade of the system and/or the EHR with the vendor, could provide more efficiency and potential better use of county resources, while also ensuring that the CSB EHR supports the system reform that is under way.

To meet future requirements and in keeping with trends in technology, the EHR software for the CSB should be:

- A Web-based application (uses a browser) that is secure, user-friendly and intuitive.
- Accessible by individuals who receive services to view and update information in the EHR; capable of integration with PHRs maintained by individuals receiving services for self-management.
- Capable of health information exchange with other software, including what is used by medical practices and laboratories, and meet software guidelines for this interoperability
- ePrescribing capable.
- Document management ready, including the scanning and indexing of information generated on paper or electronically and its interface with the CSB EHR.
- Structured to integrate data collection and reimbursement functions.
- Capable of robust reporting to ensure that information in the system can be reported out and analyzed. This includes producing a dashboard of daily indicators for executive/manager/supervisor/staff.
- Inclusive of decision support opportunities that enhance the skills of staff and those receiving services.

The first steps to secure this EHR/PHR include the CSB, county staff, and outside experts, as appropriate, working together to:

- Assess current agreement, funding, support structure and capacity (including county IT, CSB and vendor staff) for the implementation of the EHR/PHR. Large-scale purchases or upgrades of software and related infrastructure are not included in the CSB budget, but rather handled through a process of county prioritization and funding through the county's IT Investments Fund.
- Issue a Request for Information (RFI) to assess the availability of EHR software to meet the future needs and requirements of the CSB. The process of review of respondents to this RFI should involve not only the staff supporting the CSB EHR efforts, but also line staff, individuals receiving CSB services, and county IT staff.
- In conjunction with this RFI, review the current application used by the CSB and upcoming upgrades to determine the most effective use of the funds to

either upgrade or purchase a new software product. This includes identifying gaps with the CSB's evolving behavioral healthcare business model requirements as well as the degree to which this application meets the needs of the CSB and those who receive its services.

- Analyze the possibility for hosting the current or future EHR application at the vendor site as an Application Service Provider (ASP) as opposed to within the county.
- Identify other hardware and connectivity requirements for the CSB to realize improved system performance at all sites and enhanced user capabilities in the implementation of a state-of-the-art EHR and PHR, and HIE; and provide adequate support for the system and individuals receiving CSB services through the use of technology.

To effectively support this EHR/PHR, the appropriately specified hardware and infrastructure that support the system and CSB business requirements must be in place. These items include:

- A system that is available 24/7 with sufficient redundancy to avoid down time.
- Increased funding and purchasing flexibility to determine and efficiently implement an appropriate system life-cycle so that the CSB can benefit most from state-of-the-art technology (computers, laptops, PDAs).
- Expanded network bandwidth regardless of location, allowing fast, consistent and reliable system response and facilitating secure remote access.
- Public access at CSB sites so that individuals receiving services can access not only the EHR/PHR at a CSB site, but also Internet sites that support their job seeking, information gather-

ing, and connection with others.

- Sufficient CSB support staff for ongoing training, and real-time support for clinical staff.
- Service Level Agreement with the service provider and county IT that provides a comprehensive support and system management capability based on roles, benchmarks, and best practices to enhance the ability of the CSB to maintain the EHR, including business continuity and disaster recovery.

Strategy 10.2: Purchase hardware (laptops and similar portable devices) that supports changes in business practice.

Technology clearly can support the move away from an office-based approach to service delivery to one of working in the community. Use of laptops and similar portable devices would improve the usability of the EHR and maximize its efficiency. Although a transition has occurred from desktops to laptops for certain identified positions within the CSB, rapid changes in technology are making available many different options that might prove more efficient and cost-effective.

Strategy 10.3: Establish, through a collaborative effort with the county Department of Information Technology, CSB-specific security guidelines and procedures that provide CSB greater flexibility to grant authorized staff certain system administrative rights when using desktops, laptops, and related peripherals.

In their daily work, staff encounter technology issues that need to be resolved quickly and efficiently. Support for these issues is frequently slowed

by the fact that the CSB is spread out across many sites. The CSB has staff identified by the county as “super users” who could assist with some of these common technical issues with computers and applications.

Strategy 10.4: Facilitate access to information for individuals receiving services by extending public access to CSB sites and purchasing computer “kiosks” for key CSB service sites.

The Internet has spawned a wealth of information that is a critical support to individuals receiving mental health services and their families. Websites are helpful in getting information about jobs and living arrangements. Other sites, including the Network of Care, provide opportunities for research on the latest medications, help groups, and connection with others seeking support. Some EHR products currently have methods for individuals receiving

services to complete information online as they wait for scheduled appointments. This information is then used to focus the time with staff as well as aid in overall decision support. For those individuals residing in CSB facilities, as well as those participating in outpatient activities, access to this type of information where they get service further supports their recovery and resilience. Computers and kiosks at sites, as well as staff computers with both staff- and public-access capacity, are required to realize this goal. Additionally, adequate training for individuals receiving services and their families around the use of computers and kiosks, relevant websites, and the use of the EHR will be critical to assure access to information.

Ultimately, the right combination of technology capabilities, software and hardware, and support for system reform will lead to increased efficiency.