Health Choice Network was one of the first networks to be funded as part of the federal Bureau of Primary Health Care's efforts to support community health centers taking collaborative efforts beyond coordination to standardization and true integration, and is one of only a handful of networks of community health centers in the nation to have achieved such a high level of integration. Health Choice Network operates an integrated management information system (MIS), which it launched in 1997 and continues to develop and improve.

Health Choice Network (the Network) and its member community health centers are linked by an integrated management information system (MIS) with centralized hardware, software and staff. Group purchasing, licensing and installation of software for the MIS system are handled centrally. Staff at the Network and all Centers use common, automated fiscal and patient accounting systems as well as common office system software. Health Choice Network's patient accounts software system, Medical Manager, allows the Network to enter, provide and track information covering the entire patient care spectrum including: patients' demographic and insurance information, clinical tracking for tests and immunizations, appointment scheduling and no-show tracking, electronic billing and payment posting, standard and custom reporting, case management tracking for special programs, quality care guidelines based on patient's age, sex and key health factors, patient education notices, centralized referrals to facilities and specialists, online lab requisition entry and electronic lab results, and automated appointment reminders to patients.

The first phase of the pilot was to roll out the modules that each of the community health centers had committed to. Three of the CHCs had agreed to pilot the EMR with one or two providers. The description of the modules and Centers that committed, are as follows:

I. Ultia/OmniChart –

- **Rx Writer** – recording and electronic transmission of prescriptions to any pharmacy
- **Clinical Task Manager** – means of capturing tasks that require provider and/or staff follow up as it relates to patient care (lab results, progress notes, prescription requests, transcriptions, messages, etc.)
- **Transcription Manager** – allows transcriptionists to transcribe providers dictated notes and stores notes within the patients electronic chart
- **E-Encounter** – electronic method of selecting visit's procedure and diagnosis code(s)
- **View Patient Chart** – area where all clinical and financial records are stored and viewed.

II. OmniDoc – Electronic Progress Notes system.

III. Document Imaging System – scanning and storage of paper documents

Community Health Centers Phase 1 Pilot Allocation -

Community Health of South Dade

Modules: ALL

Number of Providers: 2 providers from 2 sites

Economic Opportunity Family Health Centers

Modules: Ultia/OmniChart, Document Imaging

Number of Providers: 1 Family Practice, 1 Pediatrics

Family Health Centers of South West Florida

Modules: ALL

Number of Providers: 2 Family Practice

Date	Event	Outcome/ Lessons Learned
	Pilot sites identified • Method of rolling out the pilot was 1 to 2 providers per center. • Providers aren't necessarily in the same physical location nor representing the same specialty • Computer experience levels varied • Providers volunteered to be on the pilot and others were recommended and had agreed to participate • Each site had agreed to different modules, not all sites had agreed to do all of EMR modules • Mostly a provider initiative	Must identify Champions throughout the organizations that are committed to a successful implementation. Rather than identifying specific providers, would have been interesting would we had identified an entire clinical unit or site to follow the same procedures. Because of the variation in piloting, had to run dual (electronic and paper) system to accommodate the non-EMR providers. EMR providers were still tasked with the paper processes.
11/01	**Medical Manager Contract**	Upon signing, should have been provided with a thorough project plan outlining the tasks, timeline, resource and hardware requirements to ensure proper representation to board members and providers.
01/02	**Network Level EMR Project Manager Hired** • Extensive project management experience for large practice, practice management systems • No experience with Medical Manager systems • No EMR implementation experience • New to the network	Immediately began requesting project plan, documentation and hardware/software from Medical Manager Definite learning curve in understanding Medical Manager's methodology of implementations, system functionality, network structure and project resources. Very challenging in understanding and identifying core project team members from vendor and center side.

02/02	**Information Gathering** • Conference call scheduled between team members on Medical Manager and network sides. The imaging team members were not included on the initial calls. • Review of implementation questionnaire completed by the network for each center. Questionnaire was intended to provide Medical Manager with an outline of how to structure the implementation and training.	• Not very useful. Nor seemed to have been used or followed up on after completion. • Hardware and Network evaluation should be primary focus once starting up. Later realized that systems were slow and disrupted momentum during training and implementation. • Was very abstract on both sides. Medical Manager was not familiar with the structure of the various centers and the network was not at all familiar with the products being discussed. • On Site Kick off meeting should have taken place with all project team members as well as key center department heads. Overview of all modules should have been done to assist with the data gathering and understanding of workflow impact. As well as a complete project plan with a list of tasks each side is responsible for. • Began requesting sites to visit. Took months (4) to identify a comparable site. Project Manager scheduled a phone call with site contact to determine if worth visiting. Resulted in not visiting site because was not comparable to what we were doing or looking to implement. • Result is there isn't a CHC who is yet implementing the EMR modules we have committed to.
02/02	**Ultia and Imaging Hardware** • Medical Manager on site to begin surveying clinical sites for hardware needs. Specifically placement of wireless access points for hand held wireless devices. • Began receiving hardware for the Imaging Project • Working with Medical Manager on trying to schedule trainings with key project members	• Focus for the month was to get hardware installed, configured and begin laying out system setup training dates for the various modules. • Training was very delayed due to lack of dedicated training/implementation resources on

	Forming of Implementation Teams across Pilot Sites Multidisciplinary team representing the different clinical areas which will be affected by the implementation. Included upper level management and clinical staff	Medical Manager's side. • Slight delay with Imaging System due to hard drive issues and shipping delays from third parties. • Began forming the implementation teams from each site.
3/01	**Medical Manager Base System Upgrade** **Document Imaging System Setup Training** Began the MIS training with the Imaging System. Had HIM Managers involved with some of the setup training to familiarize them with the setup requirements and decisions needed. Medical Manager's goal at the end of the training was to have a fully implemented system with medical records being scanned. However, post meetings needed to be held to get buy in from providers on the setup of the electronic chart. **Project Timeline** No acceptable project plan had yet been provided. Vendor relies mostly on a training plan not taking into account client tasks and risks. Network project manager provided vendor with a high level project plan, but again did not fully incorporate vendor tasks. Project Plan reflected a live date of May 3rd on Imaging for one pilot site and May 6th live with Ultia/OmniChart with one pilot provider.	• Prior to loading EMR software, vendor notified us of the need to upgrade our base system to 9.30. • Began with imaging system set up training to get the ball rolling. • Experienced delays receiving the needed hardware and training for the main components of EMR. Was difficult to conduct group meetings without the proper training or system to be able to demonstrate to the staff and providers. • Held first workgroup with each two of the pilot sites to begin discussions on set up for the Imaging Project. Very challenging for the Project Manager due to numerous "non-imaging" type EMR questions.
04/01	**Ultia Hardware Roll out** Received hardware for wireless devices. Vendor on site to assist with the installation. **Ultia and OmniChart System Setup and Provider Training** Initial week long training was scheduled immediately after hardware install, but vendor resource needed to postpone. Affected project timeline by two weeks. However a May 3rd and May 6th Live dates for Ultia and Imaging were still anticipated.	
05/01	**Medical Manager System Down** Beginning on May 2nd, users across all centers we're either receiving errors or being kicked out of the system. This continued into the following week affecting our Live Date with	• During this time, providers' level of frustration grew and their confidence in an EMR with Medical Manager had diminished.

	EMR. Users had access to base systems by May 8th, however the EMR project was on hold due to the unknown reason for the system crash. Numerous calls took place between MM and HCN, trying to identify and isolate the cause of the problems. For several weeks following the first down time, Medical Manager worked alongside National Products Group and R&D on trying to identify and prevent any further down time. EMR was still on hold until further notice.	• Medical Manager was asked to send a representative to attend the Medical Director's Clinical Committee Meeting to address the issues and the corrective actions being taken to reduce/eliminate any future system disruptions. Regardless of the efforts to correct the issues, centers were now seeking other EMR vendors.
06/01	**Ultia Rx Writer Live Date** EMR was given the okay to start up again. A phase in approach was taken to ensure no further issues with system stability. First pilot provider was to begin with the electronic prescription module on June 4th. Day after Live, we began experiencing issues with issuing prescriptions. Medical Manager was working with the third party. The issue identified was related to the provider's DEA. 06/13 – Patient's began calling provider complaining that prescriptions were never received at the pharmacies. Issue was reported to Medical Manager. After several days and many phone calls, there appeared that the third party intermediary was experiencing phone line issues. This remained an issue for almost 3 weeks. Ultia project was put on hold again. **OmniDoc Training/Overview** Due to down time on Ultia Rx Writer, scheduled to have Medical Manager begin the first training on the electronic progress notes, OmniDoc. Visited both pilot sites who agreed to roll out this module (CHI/Doris Ison and EOFHC).	• Again, instability of the system became very concerning, especially when thinking about rolling out all EMR modules and doing away with paper. • DEA number issue was resolved, but Medical Manager wasn't certain on what caused the issue or how it was corrected. • Due to Rx Writer issues, was difficult to get provider buy in on rolling out other modules. Despite the issues encountered. Continued to work with second pilot site on setup for their imaging project. **OmniDoc Training**- • was a good first step to becoming familiar with the product. Additional one on one training would be required to continue to move forward on this module. • Need to have a system which providers feel confident in (connectivity and speed) as well as provider commitment to work through the issues. Otherwise, trainings are endless.

07/01	**Restart of Ultia/Rx Writer** 07/08 – Proxymed line issues had been resolved and gave the okay to first pilot provider to begin using once again for electronic prescriptions. No issues encountered throughout the month. Due to stability in prescription writer, was able to roll out this module to three other pilot providers. We now had 2 of the 3 initial pilot sites Live with the Rx Writer. 07/20 – performed an upgrade to the Ultia software, delivering added additional functionality desired by the initial pilot provider. **Imaging System Live at one Pilot Site (EOFHC)** 07/22 – First pilot site decided to scan complete charts for the two pilot provider's future appointments. However, paper charts will still be provided.	**Rx Writer** – Had a good month with neither down time nor system issues. Felt comfortable to roll out the Ultia product to three additional providers. **Imaging Project** – Had a successful live with one site on their imaging project. Did not hire additional resource to scan but have one dedicated FTE responsible for the cataloging and scanning of medical record documents. Chose to fully scan the medical records for the pilot provider's future appointments. Providers were trained on how to view the images on line. However, accessibility of viewing terminals are limited therefore is not relied on as intended. Second site continuing to work through what they will be scanning into the system.
08/01	**New Vendor Project Manager Assigned** In response to our concerns over the lack of project management from a vendor stand point. Medical Manager assigned a new Project Manager who will assist HCN with the completion of the pilot project. **Pilot Site Number Four, FHCSWF (Family Health Centers of SW Florida) Kick Off** As a result of a more stable system, we felt comfortable with proceeding with another Pilot Site. The new Medical Manager Project Manager developed a project plan specific for this site. The Live date for this site to become fully paperless was set for October 1st, 2002. **Work Flow Assessment for FHCSWF**	FHCSWF on hold due to network performance issues. Center is working on increasing their lines to a T1 connection. After completion, this will ensure a more stable environment to continue with training and roll out. Spent time with fourth site to conduct a thorough Worflow Assessment to then modify with the oncoming EMR modules. We had not done this for the first two Centers since EMR was throught of as a "Provider" and "Medical Records" project. Realized that the Modules being turned on affect all areas and staff.

09/02	**Demo to FHCSWF EMR Committee Members** Took the opportunity while lines were being upgraded to re-demo all the modules and the revised workflow to the FHCSWF committee members. This would allow the opportunity for providers and staff to share their concerns and be aware of the upcoming changes. FHCSWF was in the middle of decentralizing their Medical Records department and wanted to see how EMR may address/correct their current issues with availability of records. FHCSWF decided to proceed with the decentralization of Medical Records and Pilot the EMR at only one site, due to the timing of implementation.	**Meeting Outcomes:** • Rollout all EMR Modules at one site • Rollout Electronic Sign-Off of Lab results to all providers across the organization • Evaluate whether or not scanning of medical records will address the issues with availability of medical records
10/02	**FHCSWF Progress** T1 line in on October 30th. Prior to lines being upgraded, decided to train the one provider on electronically signing off on lab results and issuing prescriptions. **Retraining of E-Progress Notes for Start up Provider** MM was asked to be on site again to continue with the training efforts on the OmniDoc (electronic progress note). The modules requirements of building templates became very cumbersome and the one provider trained, grew frustrated with module.	A nice introduction to a portion of EMR. Provider consistently utilizing both modules trained on and very receptive to incorporating EMR into his practice. OmniDoc Retraining was a great benefit. MM had trained the provider on documenting through Forms. The Forms were much more user friendly and found that the number of patient's documented on a daily basis, doubled. Submitted a request to have Forms delivered with the software in addition to the Lists already provided. Forms were the user interface which providers were sold on during the sales process. However, the forms had to be created by the client and has resulted in a very time consuming task. Medical Manager is currently in the process of establishing a library of forms that will be delivered with future releases.

11/02	**Site Visit at a Non-CHC EMR Site** Summary of Who's doing what Imaging – 3 Sites Live on Scanning Medical Records Rx Writer – 5 Providers Live on Issuing Prescriptions Electroically On-Line Lab Results Sign-Off – 5 Providers electronically signing off on their labs	Had the opportunity to finally visit an EMR site who has implemented all modules we were interested in. Found that the site visit, although delayed, was of great benefit especially since we had become very familiar with the modules and their functionality and limitations. Never too late to visit an EMR site.
11/02	**Provider Compliance and Use** Evaluating the use of the EMR modules across the pilot sites. The top issues encountered: • Staffing Issues • Same expectation in productivity while learning new systems • Line Performance Issues and Inconsistency	Finding providers are growing more and more frustrated and becoming a little less tolerant with system issues. Productivity expectations remain high regardless of new tasks being imposed on providers and staff alike. EMR is taking a lesser priority while demands on work remain high. Things to look at if using monitors, be sure the video card is sufficient to display scanned images.