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Award Number: MIPR 4EBAVM4068

TITLE: Using Kiosks for Patient Self-service Check-in as a Technology Portal to Health Forces throughout a Health Care Network

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CONTRACTING ORGANIZATION: DeWitt Army Community Hospital
Fort Belvoir, VA 22020

REPORT DATE: September 2004

TYPE OF REPORT: Final

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
01-09-2004	Final	17 Feb 04 – 30 Sep 04

4. TITLE AND SUBTITLE
Using Kiosks for Patient Self-service Check-in as a Technology Portal to Health Forces throughout a Health Care Network

5a. CONTRACT NUMBER

5b. GRANT NUMBER
MIPR 4EBAVM4068

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
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5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
DeWitt Army Community Hospital
Fort Belvoir, VA 22020

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for Public Release; Distribution Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

No abstract provided.

15. SUBJECT TERMS
No subject terms provided.

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			USAMRMC
U	U	U	UU	38	19b. TELEPHONE NUMBER *(include area code)*

Table of Contents

Proposal Title: Using Kiosks for Patient Self-service Check-in as a Technology Portal to HealtheForces Throughout a Health Care Network

Funds MIPRed: $300,000

1. **Project accomplishments as of the date of the report:**

This project was funded in March 2004. The midterm report for this project ended December 2004. The hypothesis and study measures were as follows:

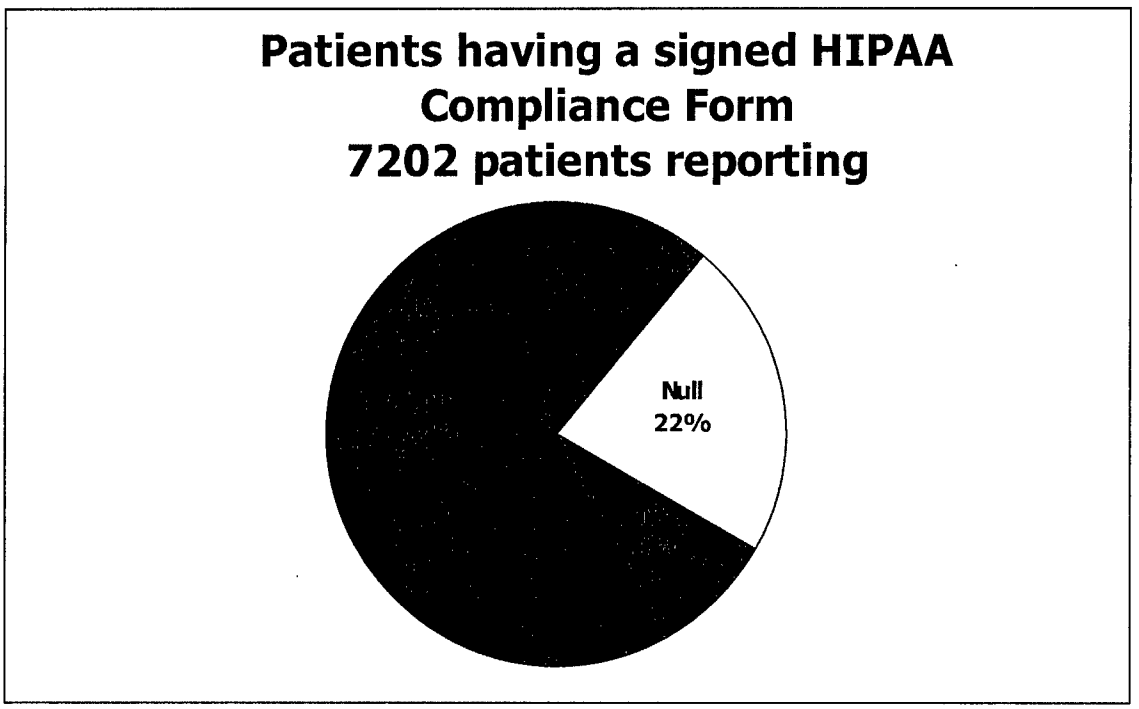
Hypothesis: Deployment of MICK throughout the DeWitt Health Care Network will: improve measures of patient satisfaction, wait times, and patient needs assessment; insure that JCAHO requirements such as HIPAA compliance and advance directives forms are completed; significantly increase third party collections (other health insurance-OHI).

Study measures: TOPS satisfaction data to include patient wait times and current third party collections will be used as historical controls. The following metrics will be tracked during the 6-9 months pre and post deployment on the MICKs (kiosks):

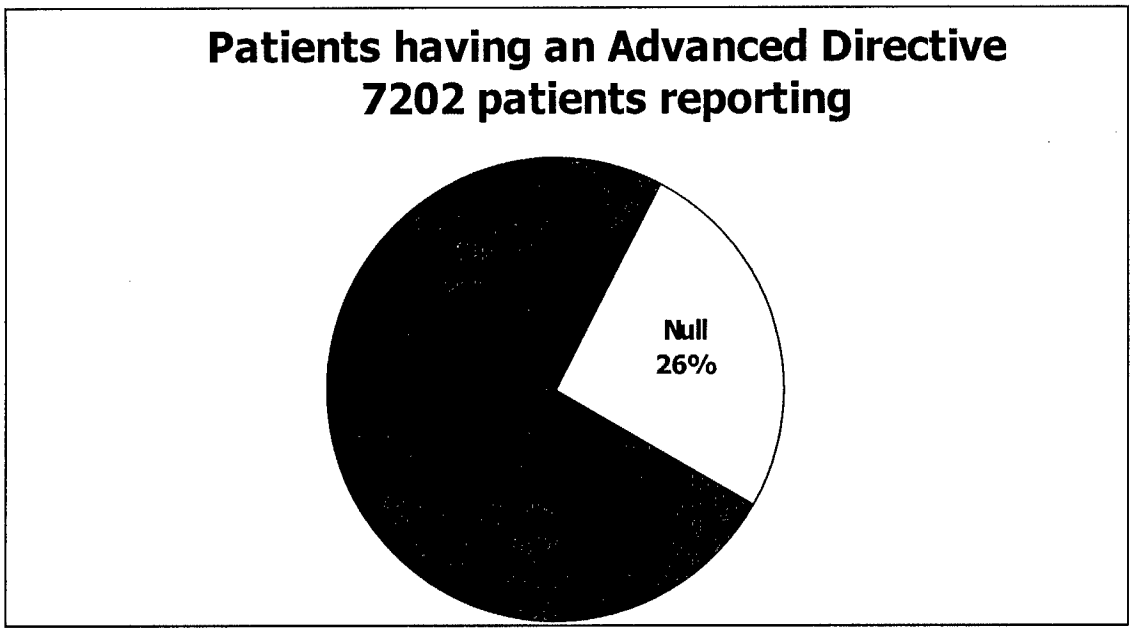
1. Time from MICK sign-in to seeing the provider. At the time of the mid-year review this data was not collected. The source of collection would require the clinician to annotate in a Health e Forces note the time that the patient was first seen. Subtracting the time that the patient first swiped his/her identification card in the kiosk from the time annotated by the clinician would give us the time from MICK (kiosk) sign-in until seeing the provider.
2. Percentage of time seeing the provider relative to the overall time within the respective clinic. At the time of the mid-year review, this data was not collected. This percentage can only be calculated in those patients that take the post visit survey. Again the provider would have to note the time spent with the patient (numerator). The denominator would be the time from check-in until the start of the post visit survey.

3. Percentage of patients who have signed a HIPAA compliance form. At mid-year review, 5537 patients (70%) signed a HIPAA compliance form and 677 patients (8 %) had not. 22% of patients did not answer the question.

Have signed a HIPPA compliance form		7202
	No	677
	Yes	5537
	Null	1770

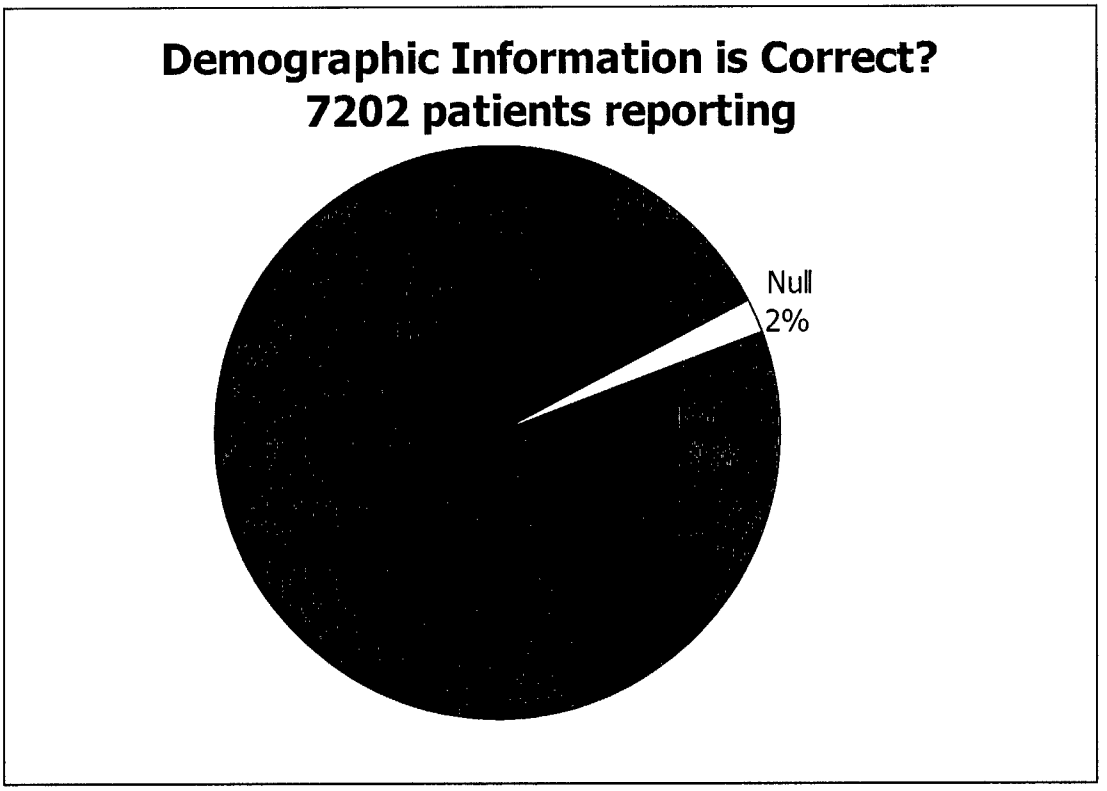


4. Percentage of patients who have been offered an outpatient advanced directives form. At mid-year review, 2941 patients (37%) had an advanced directives form and 3027 patients (37 %) had not. 26% of patients did not answer the question.
5.

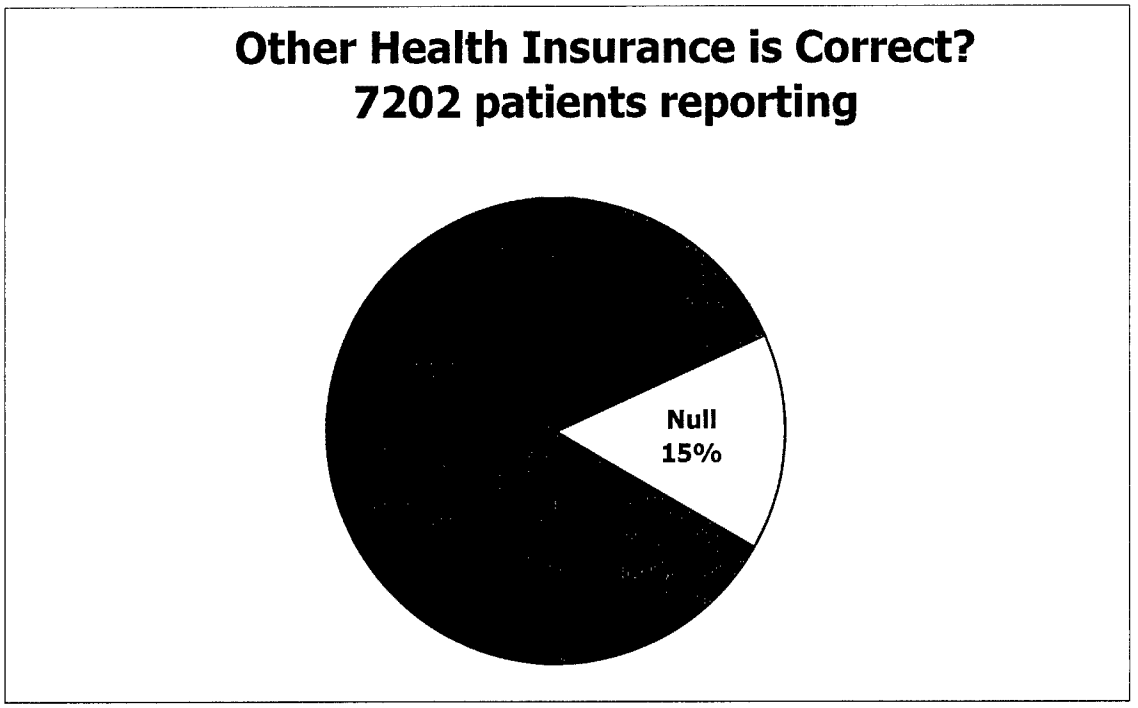


Have an outpatient advance directives form		7202
	No	3027
	Yes	2941
	Null	2048

6. Percentage of patients who need to change contact information or outside insurance information. 6286 patients (85%) stated that their demographic information was correct while 977 (13%) said it was incorrect. 69% of patients (n = 5207) reported that their other health insurance was correct while 16% (n = 1249) noted that the information was inaccurate.



Demographic information is correct		7202
	No	977
	Yes	6286
	Null	141



Other health insurance information is correct		7202
	No	1249
	Yes	5207
	Null	1138

7. Percentage of patients who need to see an administrative clerk after and while using the MICK. The data collected from August to December demonstrates a dramatic decrease in the need for clerk assistance to use the kiosk. We suspect that this is secondary to patient familiarity with the kiosk.

KIOSK DATA COLLECTION

WEEK OF:	2 Aug.04	9 Aug.04	16 Aug.04	23 Aug.04
FAMILY HEALTH CENTER OF WOODBRIDGE				
*number of "kept" appointments:	444	1140	232	1087
No. of patients using kiosk	88	110	13	162
No. of patients needing asst.	20	18	13	23
Percentage needing asst.	22.73	16.36	100	14.20
FAMILY HEALTH CENTER OF FAIRFAX				
*number of "kept" appointments:	started 11 Aug o4	790	695	613
No. of patients using kiosk		249	75	47
No. of patients needing asst.		35	13	7
Percentage needing asst.		14.06	17.33	14.89

DEWITT FAMILY HOSPITAL				
*no. of "kept" appointments:	408	232	479	407
No. of patients using kiosk	143	106	161	211
No. of patients needing asst.	8	20	0	21
Percentage needing asst.	5.59	18.87	0	9.95
RADER CLINIC				
*no. of "kept" appointments:				
No. of patients using kiosk			465	249	420
No. of patients needing asst.	28	73	26	51
Percentage needing asst.	12.12	15.70	10.44	12.14
SUMMARY				

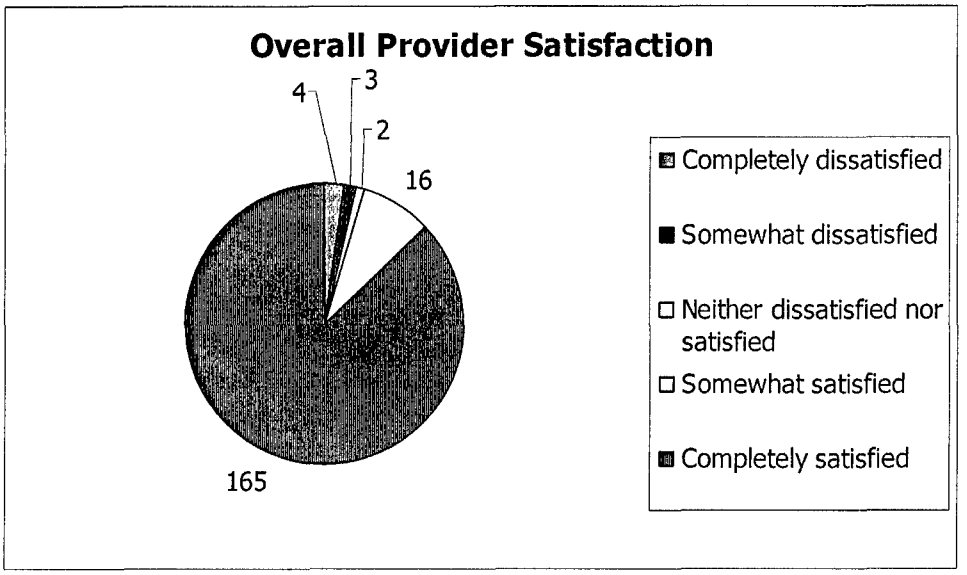
WEEK OF:	1, 4-9 Oct 04	12-16 Oct 04	18-23 Oct 04	25-30 Oct 04
RADER FAMILY HEALTH CLINIC				
No. of patients using kiosk	109	159	129	75
No. of patients needing asst.	6	23	4	0
Percentage needing asst.	5.50%	14.47%	3.10%	0.00%
WOODBRIDGE FAMILY HEALTH CTR.				
No. of patients using kiosk	130	59	10	2
No. of patients needing asst.	11	4	0	0
Percentage needing asst.	8.46%	6.78%	0.00%	0.00%
FAIRFAX FAMILY HEALTH CTR.				
No. of patients using kiosk	115	145	35	0
No. of patients needing asst.	6	15	5	0
Percentage needing asst.	5.22%	10.34%	14.29%	0.00%
DEWITT FAMILY HOSPITAL				
No. of patients using kiosk	91	101	174	157
No. of patients needing asst.	16	7	8	8
Percentage needing asst.	17.58%	6.93%	4.60%	5.10%
SUMMARY				
No. of patients using kiosk	445	464	348	234
No. of patients needing asst.	39	49	17	8

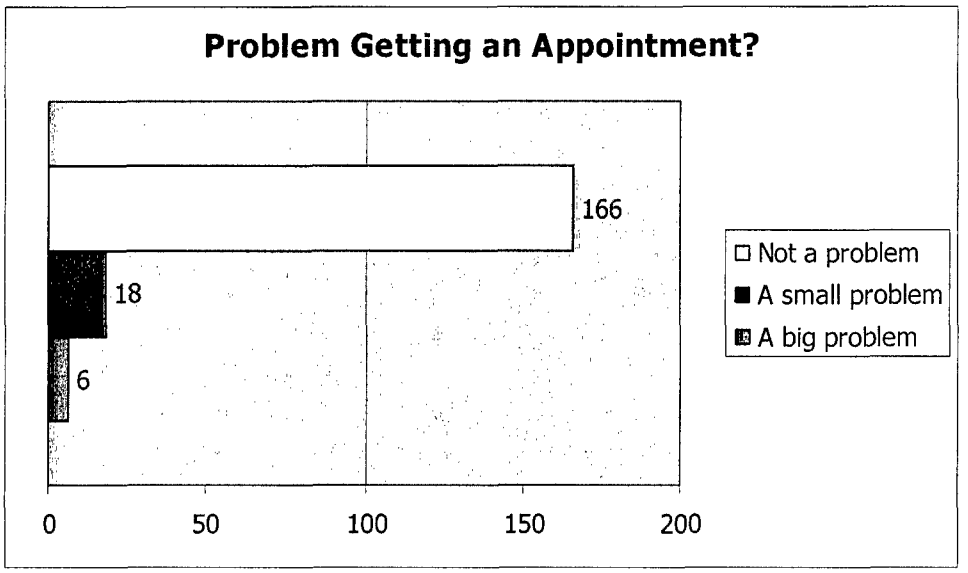
Percentage needing asst.	8.76%	10.56%	4.89%	3.42%

WEEK OF:	1-3 DEC 04	6-10 DEC 04	13-17 DEC 04	20-24 DEC 04	27-31 DI 04
RADER FAMILY HEALTH CLINIC					
No. of patients using kiosk	47	263	234	139	
No. of patients needing asst.	0	0	0	0	
Percentage needing asst.	0.00%	0.00%	0.00%	0.00%	0.(
WOODBRIDGE FAMILY HEALTH CTR.					
No. of patients using kiosk	49	118	143	51	
No. of patients needing asst.	0	0	0	0	
Percentage needing asst.	0.00%	0.00%	0.00%	0.00%	0.(
FAIRFAX FAMILY HEALTH CTR.					
No. of patients using kiosk	11	5	13	2	
No. of patients needing asst.	0	0	0	0	
Percentage needing asst.	0.00%	0.00%	0.00%	0.00%	0.(
DEWITT FAMILY HOSPITAL					
No. of patients using kiosk	226	280	417	214	
No. of patients needing asst.	0	0	2	0	
Percentage needing asst.	0.00%	0.00%	0.48%	0.00%	0.(
SUMMARY					
No. of patients using kiosk	333	666	807	406	
No. of patients needing asst.	0	0	2	0	
Percentage needing asst.	0.00%	0.00%	0.25%	0.00%	0.(

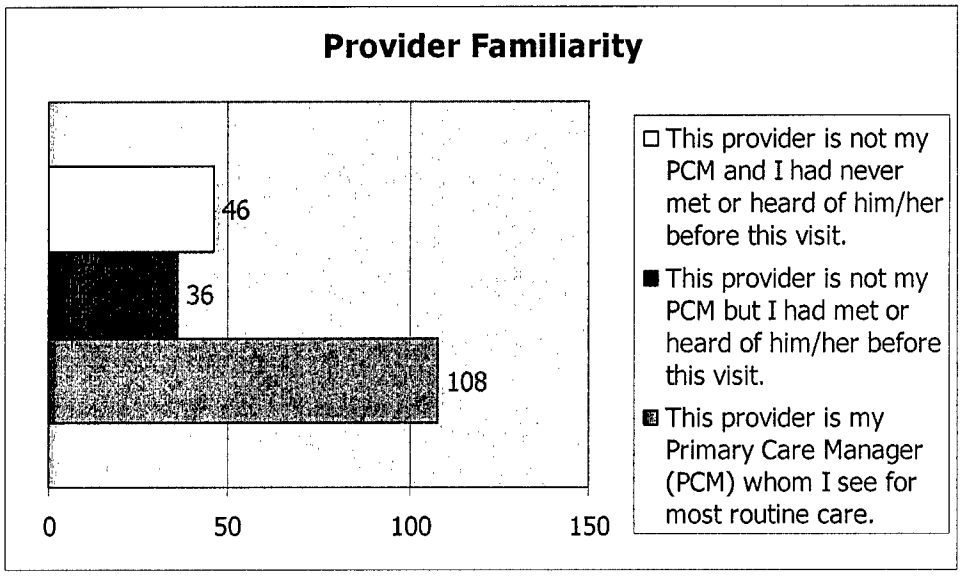
8. Reason(s) a patient needs to see an administrative clerk.
9. Patient satisfaction: Only 10% of patients opted to take a post visit survey. The graphs below capture that data.

   a. Patient satisfaction with the quality of care at the MTF.



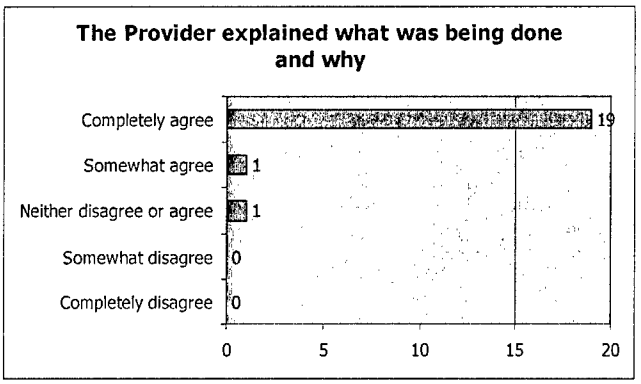


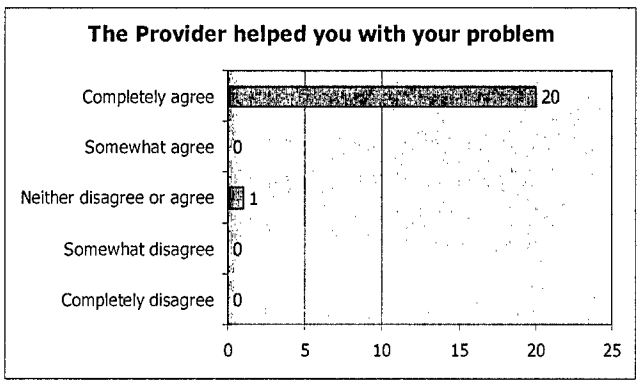
b. Overall satisfaction with the MTF visit.

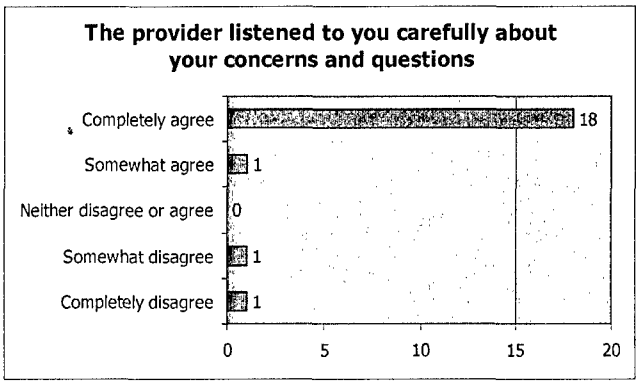


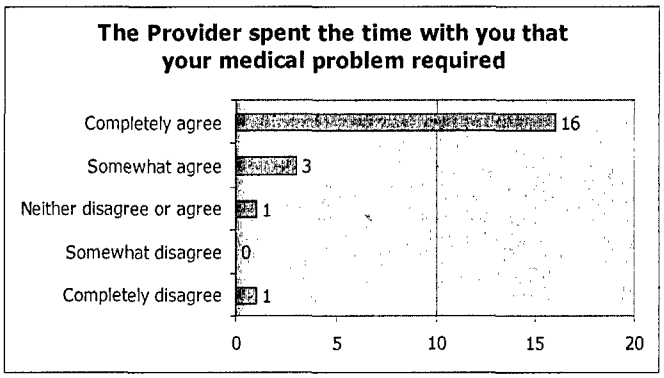
c. Overall satisfaction with care rendered at the MTF.

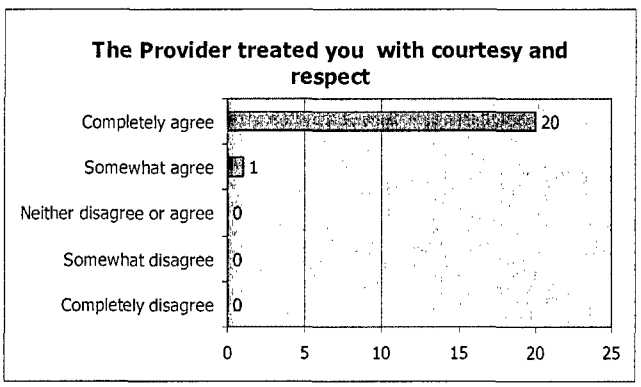
Satisfaction Survey (For one month- August 2004)

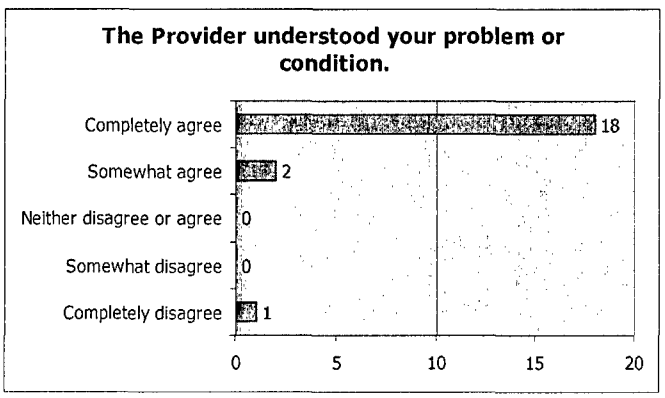


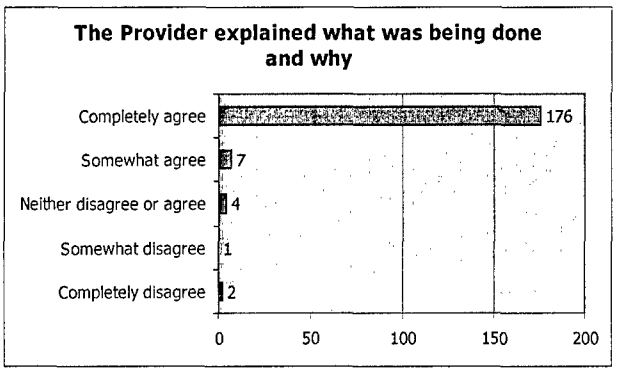


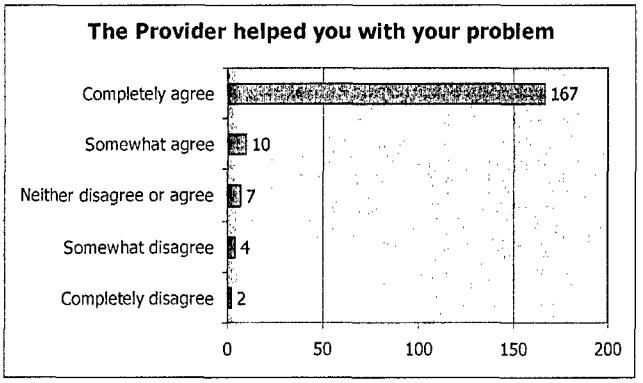

The provider listened to you carefully about your concerns and questions
Completely agree
Somewhat agree
Neither disagree or agree
Somewhat disagree
Completely disagree
18
1
0
1
1
0
5
10
15
20

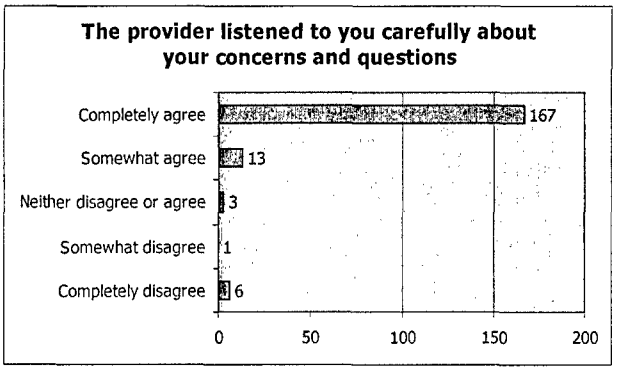

The Provider spent the time with you that your medical problem required
Completely agree
Somewhat agree
Neither disagree or agree
Somewhat disagree
Completely disagree
16
3
1
0
1
0
5
10
15
20

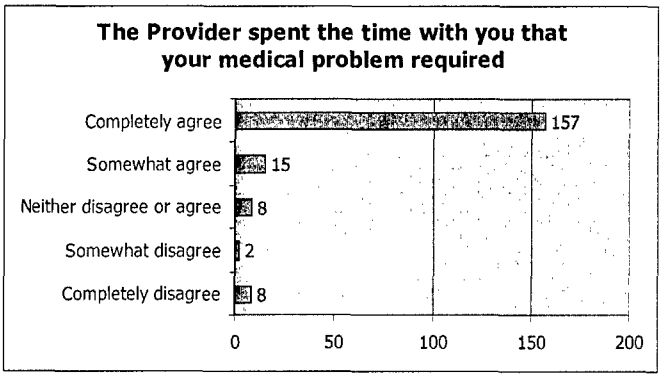

The Provider treated you with courtesy and respect
Completely agree
Somewhat agree
Neither disagree or agree
Somewhat disagree
Completely disagree
20
1
0
0
0
0
5
10
15
20
25

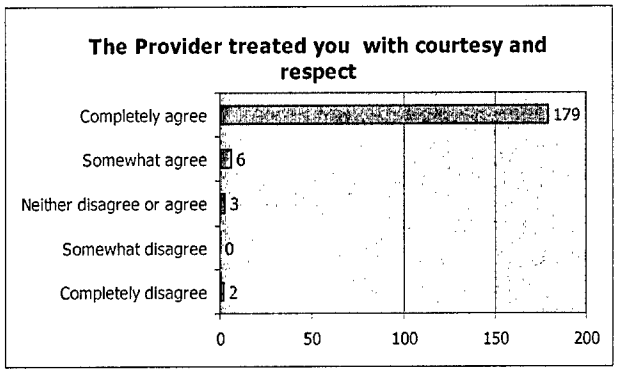

The Provider understood your problem or condition.
Completely agree
Somewhat agree
Neither disagree or agree
Somewhat disagree
Completely disagree
18
2
0
0
1
0
5
10
15
20

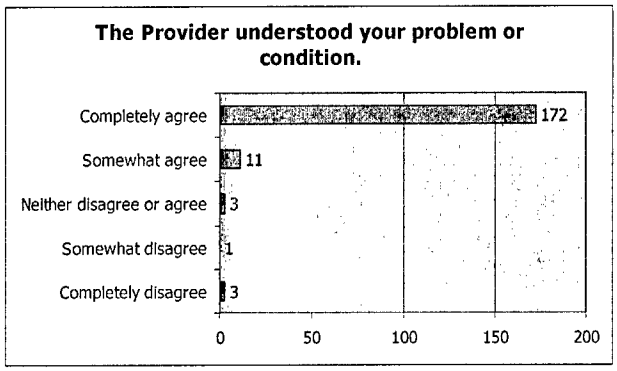

The Provider explained what was being done and why
Completely agree
Somewhat agree
Neither disagree or agree
Somewhat disagree
Completely disagree
176
7
4
1
2
0
50
100
150
200


The Provider helped you with your problem
Completely agree
Somewhat agree
Neither disagree or agree
Somewhat disagree
Completely disagree
167
10
7
4
2
0
50
100
150
200

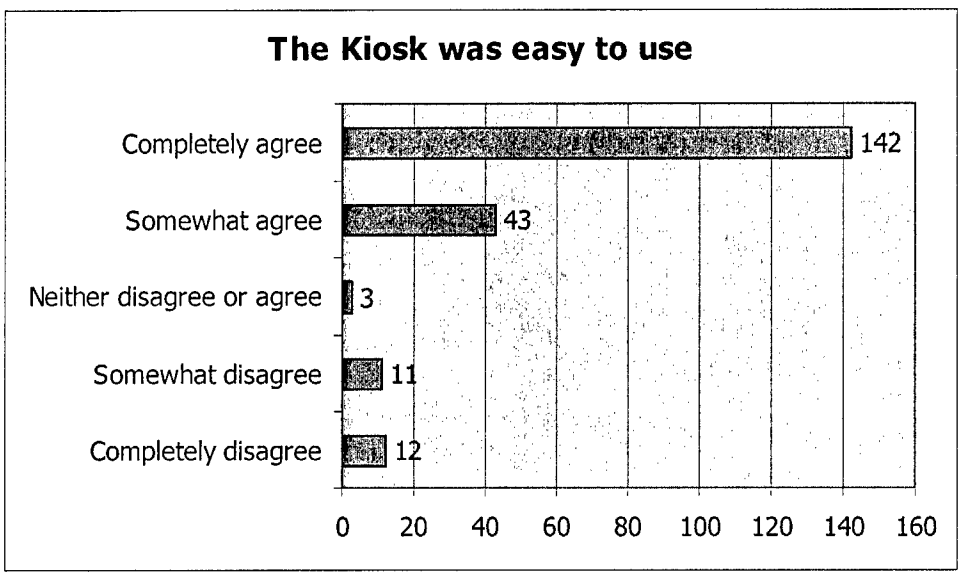

The provider listened to you carefully about your concerns and questions
Completely agree
Somewhat agree
Neither disagree or agree
Somewhat disagree
Completely disagree
167
13
3
1
6
0
50
100
150
200


The Provider spent the time with you that your medical problem required
Completely agree
Somewhat agree
Neither disagree or agree
Somewhat disagree
Completely disagree
157
15
8
2
8
0
50
100
150
200

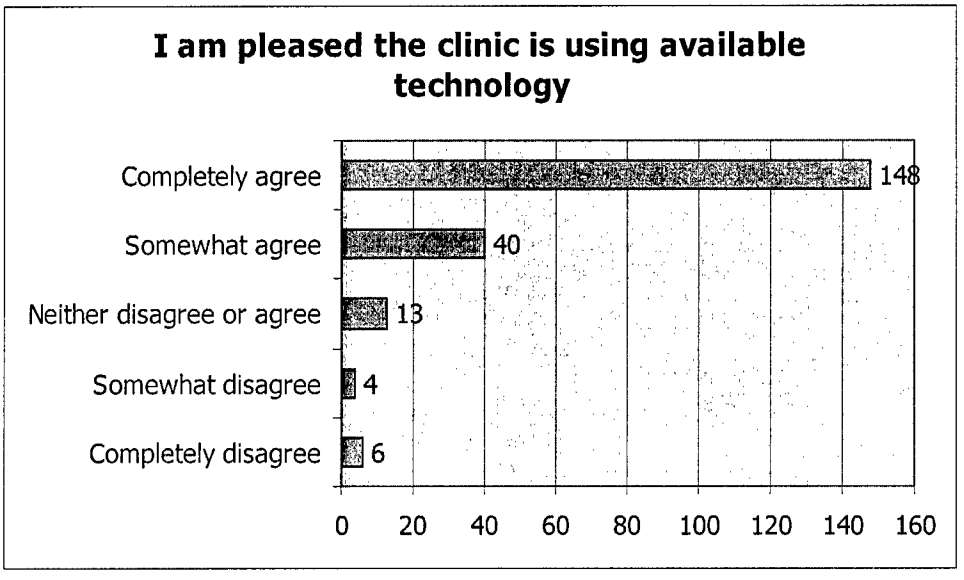




d. Overall satisfaction with the MICK. (4 months of data). Clearly this initial data demonstrates the ease of use of this device.

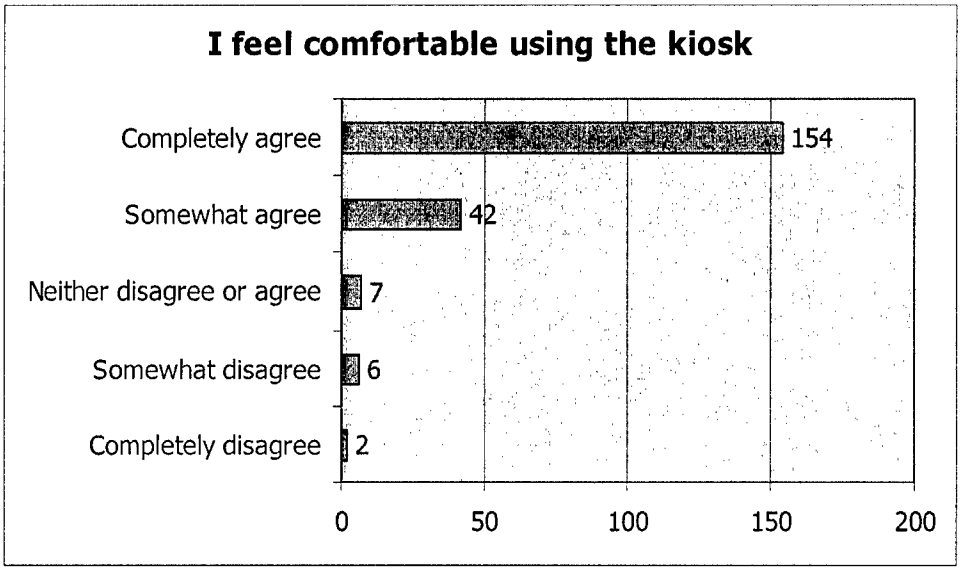


e. Overall satisfaction with technology integration throughout the health care network (use of ICDB.HealtheForces/MICK at all DHCN facilities). (4 months of data) All in all the patients were pleased that technology was being used to improve health care and health care delivery.



9. Percentage of patients who have used the MICK at more than one location throughout the DHCN.

10. Overall comfort level of using the MICK.



11. Percentage of patients who prefer to see a check-in clerk and would rather not use a kiosk to check-in.

2. **Problems/Issues encountered as of the date of the report.**

One of the most significant problems encountered when this project got underway was the need to coordinate efforts with 3 Clinics (Woodbridge, Fairfax, and Rader Clinic), one MTF (DeWitt ACH), and the home of the server (WRAMC). This required a project lead that had access to Health e Forces, CHCS, and other legacy systems. The most expeditious solution was to enlist the help of the Health e Forces project team. Fortunately, WRAMC and Kimbrough ACH were interested in using kiosks to enhance patient interaction and communication. The end result was expansion of the kiosk project to include more than the DeWitt Health Care Network. Included below is a synopsis of the network (the National Capital Area), problems encountered, and solutions for those problems. Only the DeWitt ACH portion of the NCA was under protocol. However, we were able to benefit from software enhancements using Health e Forces and WRAMC money.

HEALTHeFORCES and Medical Check-In Kiosks in the National Capital Area

HISTORY OF PROJECT

TNEX or the next generation of TRICARE contacts will reward organizations that can increase overall patient satisfaction through timely appointments and quick remuneration of claims. In addition, TNEX will provide incentives to keep patients within Military Treatment Facilities (MTF) allowing a mechanism to grow these clinics and hospitals. Strategically, this will provide military medical leaders an opportunity to re-demonstrate to patients why the best health care available is at the MTF. In the past, best medical practices were defined by the quality of care rendered by the health care professional. The reality though is that patients' perception of outstanding medical care encompasses more than the time spent with a physician or nurse practitioner. Patients want to receive quality care in an efficient and timely manner. In fact, to many patients, the assumption that quality care will be rendered is a given. Patients however would rather spend a greater percentage of their time with the clinician than waiting to see that clinician. The challenge is to minimize this so- called "hassle factor" of going to the MTF to see a provider. Included in this factor is travel to the MTF, parking, and patient check-in. In addition, patients within the DeWitt Health Care Network (DHCN) have additional travel (MTF to MTF) for specialty care.

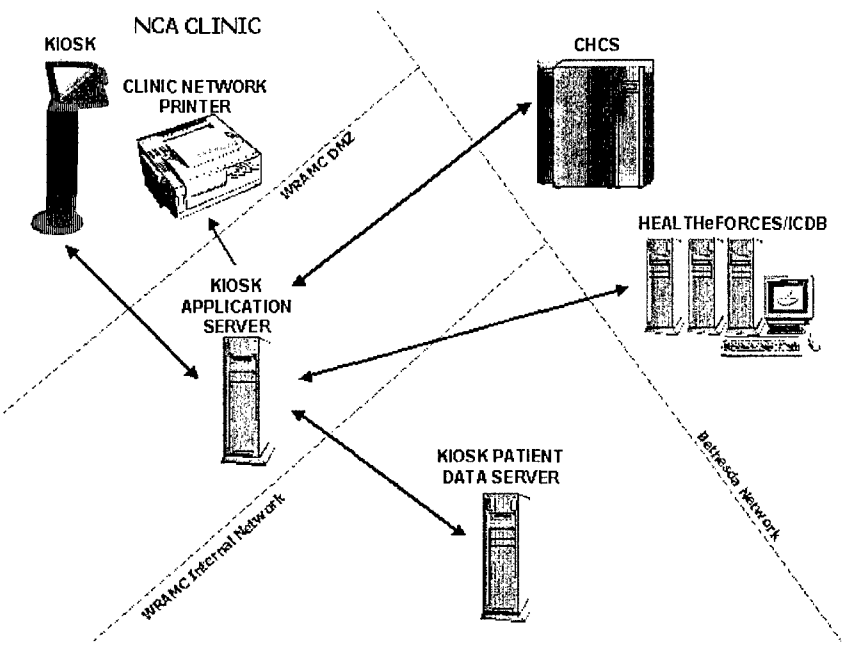
The DHCN serves a population of over 100,000 beneficiaries and includes DeWitt Army Community Hospital (DACH), Andrew Rader US Army Health Clinic, and the Family Health Centers of Fairfax, Woodbridge, and Fort Belvoir. Patients who are seen at the outlying primary care centers and are in need of further specialty care are referred to DeWitt Army Community Hospital. Communication between providers usually insures a smooth transition once the patient meets the clinician. The rate-limiting step to seeing the

provider is usually at check-in. This appears to be the case during peak periods especially at the primary care clinics. Ideally, a health care system that could integrate technology to improve efficiency at the point-of-service would go a long way toward improving patient satisfaction.

Our proposed solution utilizes Kiosks to facilitate patient check- in. These Kiosks would be placed throughout the DHCN and would provide a technology portal by which patients could also verify third party insurance, query individual preventive health issues, electronically sign a HIPAA compliance form, and answer whether the appointment today is related to the global war on terrorism (GWOT). Much like a bank automated teller machine (ATM), the medical check- in kiosk (MICK) would utilize touch screen technology. The presence of MICKs at the family health care clinics and DACH would certainly expedite the process of patient check-in through availability to the patient and subsequent familiarization of kiosk use. In other words, deploying kiosks throughout the DHCN would leverage available technology to improve and integrate health care into a seamless system. This is turn would ultimately improve overall patient satisfaction.

HARDWARE DESCRIPTION

There are multiple hardware components involved in the kiosk configuration in the National Capital Area. See the server layout below.



A quick overview of the flow of information details how the various components communicate.

1. Patient swipes ID card through the card reader attached to the kiosk unit.
2. Kiosk sends a data request to the Kiosk Application Server.
3. Kiosk Application Server accesses the HEALTHeFORCES/ICDB for appointment information.
4. Patient selects appointment for check-in.

5. Kiosk server accesses CHCS via telnet and changes appointment status to KEPT.
6. Kiosk server consults the HEALTHeFORCES/ICDB for demographics/third party insurance/survey information.
7. Patient answers questions/surveys as prompted.
8. Interaction with patient results in data saved to the Kiosk Patient Data Server and/or the HEALTHeFORCES/ICDB.

KIOSK Application Server

- DESCRIPTION: The Kiosk server is a Penguin Computing Relion 1XLS and holds all the business logic for the system. It interacts with the kiosks, the clinic printers, the CHCS server and the HEALTHeFORCES Database server. The server runs on RedHat Enterprise Linux ES 3 (x86), which is a Common Criteria approved Operating System. It performs its critical functions through a web application and an application server. The Kiosk server also serves as a web server with a current application load that includes Apache 2.0, Jarkarta Tomcat 4.1.30, the Vecna proprietary Patient Check-in Software, and the Vecna IDEA software 3.0.
- WARRANTY INFO: Standard 3-Year Warranty with a 3-Year, Next-Day, On-Site Service contract
- IP ADDRESS: 160.151.186.54
- PORTS USED TO COMMUNICATE: 443 to kiosks and database server; SSH (22) for remote vendor support; telnet connection to CHCS

Kiosk Patient Data Server

- DESCRIPTION: In site configurations other than the NCA, the patient data can be stored on the Kiosk Application Server. Because of the need to be accessible by sites throughout the NCA, the kiosk application server was placed in the WRAMC DMZ. To better safeguard patient information, the Kiosk Patient Data Server was setup on the internal WRAMC network (co-hosted on a server the serves as the HEALTHeFORCES ICDB Data Repository). The server runs on the Windows 2000/Oracle 9i database platform. The database will store all data items that are not part of the core ICDB data tables. For example, the customer satisfaction survey and the kiosk technology survey are site-specific needs that were not programmed to the core ICDB. Leveraging this database allows for site-specific needs to be accommodated without waiting for ICDB programming prioritization and/or release schedules.
- WARRANTY INFO: Hardware was an existing HEALTHeFORCES asset
- IP ADDRESS: 160.151.75.146
- PORTS USED TO COMMUNICATE: 443 to VECNA server

VECNA Kiosk

- DESCRIPTION: A kiosk is essentially a highly secured Linux desktop with a highly restricted input and functionality. The Kiosks run a modified web browser (Mozilla 1.2.1 JRE Version: **J2SE 1.4.1**) that points at the web application running on the server. A kiosk does not run any application code or store any data. Its operating system and browser are modified so that someone using it cannot switch away from the browser application,

can only follow links or click on buttons in the current page, and is unable to use things like the back button, address bar, etc. The kiosks are fully enclosed, and the computers inside them are contained in a locked compartment. The kiosks have no keyboard and mouse, and their operating system and browser are modified so as not to allow user interaction beyond clicking on buttons or links. Thus, the physical break-in method can be ruled out.

- WARRANTY INFO: Standard 3-Year Warranty with a 3-Year, Next-Day, On-Site Service contract
- IP ADDRESS: See spreadsheet of kiosk locations
- PORTS USED TO COMMUNICATE: 443 to kiosk server

Card Reader

- DESCRIPTION: ID Tech USB/Keyboard Wedge (Card Reader): This Card Reader is attached to the kiosk; assembled by the vendor prior to placement at the facility.
- Warranty Information: ID TECH warrants this product to be in good working order for a period of one year from the date of purchase. This warranty does not cover incidental or consequential damages incurred by consumer misuse, or modification of said product. Report all problems with the card reader to VECNA Corporation through established escalation procedures.
- IP ADDRESS: N/A
- PORTS USED TO COMMUNICATE: N/A

Clinic Network Printers

- DESCRIPTION: An optional printout can be generated upon patient check-in to a clinic's network printer (the printer must have an individual IP address in order for the kiosk application server to print directly to it—it cannot be a serial port connection to a PC). The print-out will delineate the patient's answers (YES OR NO) to the demographic question and the insurance question. The purpose of the printout is to alert the clinic staff that the patient has checked in, and to identify the need to call the patient up to the desk for corrections to demographic and/or health insurance information. The IP addresses of the designated clinic printers have to be configured in the VECNA KIOSK server. Each kiosk is assigned to a specific printer, so printouts are directed to printers based on check-in location.

EXAMPLE of PRINTOUT:

```
Patient:  MOUSE, MINNIE A
Address:  777 Disney World Lane
          Orlando, FL  77777
Address Correct?  yes
Supplemental Insurance:  No third-party insurance
found
Supplemental Insurance correct?  yes
Appointment:  DUCK,DONALD A at Friday May 05
08:00:00 EDT 2004
```

- IP ADDRESS: See Kiosk Location spreadsheet for current listing of printer IP addresses
- PORTS USED TO COMMUNICATE: 9100

Hardware activation status

Location	# of Kiosks	Activation Date
33 Funded by LTC Cho's TATRC grant		
Rader Clinic	7	10 May
Rader Clinic	1	6 October
Woodbridge Clinic	5	12 July
Fairfax Clinic	5	3 August
DeWitt Clinic	10	6 October
DeWitt Clinic	5	Pending network drops
27 Funded by HEALTHeFORCES Program Office		
WRAMC	8	12 July
WRAMC	14	21 September
WRAMC	3	Pending network drops
Kimbrough	2	Pending delivery
8 Funded by Malcolm Grow Preventive Medicine Budget		
Malcolm Grow	8	Pending delivery

SOFTWARE UPGRADE on 15 August allowed for pediatric patients without ID cards to check-in with the kiosk.

SOFTWARE UPGRADE on 21 October allowed for manual entry of patient SSN to make the kiosk usable even if ID card does not scan.

SOFTWARE UPGRADE on 26 October allowed for non-sponsors to execute family member lookup and check-in.

Security Process

An Interim Authority To Operate was issued by the WRAMC DOIM on 6 April 2004. Official Security and Architecture documents and DITSCAP paperwork approval is in process.

CONFIGURATION

The configuration of the kiosks is a multi-step process because of the rather complicated network schema and the number of parties involved. The following steps are required from kiosk delivery to patient usage:

1. Pre-delivery requirements:

a. The individual clinic must select an appropriate location for the kiosk, which ideally will include an objective assessment of patient flow throughout the clinic. The ideal kiosk placement will insure that:
    i. The kiosk placement meets safety, fire, and facilities standards.
    ii. The kiosk is visible by the front desk staff to monitor usage and or problems
    iii. The kiosk is visible by incoming patients to attract usage
    iv. The kiosk can divert flow from the front desk to alleviate long check-in lines
    v. The kiosk is accessible for patients departing the clinic to accommodate post-appointment satisfaction survey collection.
    vi. The security of the Kiosk is maintained.
b. The individual clinic NCOIC/administrator must submit work orders to install and/or activate a LAN drop/port and a power outlet in the vicinity of the kiosk location. The outlet and port should be working prior to Kiosk delivery. The use of extension cords is not supported by the vendor or by facility management, so the placement of the outlet should be within 3 feet of the kiosk location. The LAN drop can be elsewhere, as long as the aesthetics of the LAN cable extension is taken into consideration.
c. A network printer needs to be identified to accommodate the printout that is generated upon patient check-in. The printer must be connected directly to the network and be readily accessible by front desk personnel.
d. Clinics can customize the welcome screen of the kiosk to include a JPEG image and a welcome sentence. Clinics should decide on these elements early in the process.

2. Kiosk delivery
    a. The vendor delivers the equipment and unloads it at a specified location.
    b. HEALTHeFORCES and clinic personnel place the equipment in target locations.
    c. The kiosk is delivered with a network cable.
    d. The kiosk is plugged into the network drop, plugged into the power outlet and powered on.
3. IP assignment and Firewall Access (see Appendix A for sample Firewall Access Request forms)
    a. DHCP Lookup is required for IP assignment, so once the kiosk is on the network, the local network administrator is provided with the MAC addresses and physical locations of the kiosks so that, with the assistance of the DHCP Lookup Manager, the IP address can be found and statically assigned.
    b. A WRAMC DOIM Security policy states that every device on the WRAMC network successfully pass a STAT security scan prior to firewall penetration. A firewall access request form is submitted to WRAMC DOIM to initiate the security scan process. The kiosk IP address and the Army Regional Computer Emergency Response Team (RCERT) security scan server IP address are included on the request.
    c. Once the firewall request is processed, the WRAMC DOIM solicits a scan from the RCERT office in Ft Huachuca. The completion of the scan depends on the workload of the RCERT office and can take from 30 minutes to 3 days. If the scan is not successful, troubleshooting is required to determine network connectivity problems, hardware problems, etc., and the scan request must be re-submitted.
    d. With results from a successful scan, the WRAMC DOIM will accept a firewall access request to allow for the individual kiosk to communicate with the kiosk application server. A second firewall access request is required to open a port between the clinic network printer and the kiosk application server.
4. Kiosk Application Server Configuration
   The kiosk vendor has developed a web application to facilitate server configuration for kiosks (https://amedwswramc04.wramc.amedd.army.mil/unavailable/content/index.html). Access requires username and password, and two personnel on the HEALTHeFORCES team are trained in its use. The kiosk configuration can be done prior to IP assignment.
    a. Kiosk Group Configuration
       Kiosk groups are setup based on the following shared criteria. There is no upper or lower limit to the number of kiosks in a group, so if a single kiosk needs to be configured differently than the rest of the clinic kiosks, this can certainly be accommodated:
        i. Front Page Image

ii. Welcome Text
iii. Style sheet (color schema for screen background and buttons)
iv. Whether or not the printout is generated upon patient check-in.
v. Whether or not patients can make changes to their demographics via on-screen keyboard input.
vi. Whether or not patients can make changes to the insurance information via on-screen keyboard input.

b. Kiosk Configuration
i. The kiosk is given a reference name and the kiosk unit's serial number is entered.
ii. The kiosk is associated with a kiosk group.
iii. The kiosk is associated with a network printer.

c. Network Printer Configuration
The network printers must be configured at the console of the kiosk application server. WRAMC DOIM personnel must escort HEALTHeFORCES personnel to the WRAMC computer room to access the kiosk application server. The network printers are entered by IP address and the printer name as referenced in the web-based application.

5. Kiosk Usage
Once steps 1-4 are completed above, the kiosks are ready for use.

FUNCTIONALITY DESCRIPTION

Screen shots of the kiosk screens are the easiest way to represent the kiosk functionality, but below is a text summary of functionality. Please see Appendix B for actual screen shots.

1. **ID Card Scan**: Patients can scan the bar code of their Department of Defense (DoD) ID Card or a Common Access Card (CAC) card in the kiosk bar code reader. The kiosk will display the name of the individual for verification.
2. **Appointment Check In**: Because family members under the age of ten may not have DoD ID cards, kiosk users are prompted as to whether they are checking in for an appointment for themselves or for a dependent. If they are checking in a family member, they must enter the family member's date of birth to confirm the patient identification. The system will return a list of appointments to be selected for check-in. If no scheduled appointment exists for the patient, he/she will be directed to the front desk for walk-in appointment processing.
3. **Demographic Information Verification**: The system will display the current demographics as listed in the HEALTHeFORCES/ICDB database. Demographics are downloaded into the ICDB from CHCS, but the ICDB allows for the update of contact information, independent of CHCS. The patient is prompted to verify the demographic information. A clinic can decide whether or not the kiosk will allow for patients to update the demographics via an on-screen keyboard. This correction will update the ICDB data tables—IT WILL NOT UPDATE CHCS. Either way, the printout will indicate whether or not the demographic information was correct. Clinic business processes should accommodate the necessary steps to have the patient update the demographics in DEERS/CHCS.
4. **Insurance Information Verification**: The system will display the patient's current insurance carrier as listed in the HEALTHeFORCES/ICDB database. Insurance information is downloaded into the ICDB from CHCS on a real-time basis. The patient is prompted to verify the insurance information, and is provided with a list of insurance carriers to select from if the current carrier is incorrect. A clinic can decide whether or not the kiosk will allow for patients to update the insurance information via an on-screen keyboard. This correction will update the ICDB data tables—IT WILL NOT UPDATE CHCS. Either way, the printout will indicate whether or not the insurance information was correct. Clinic business processes should accommodate the necessary steps to have the patient update the insurance information in DEERS/CHCS.
5. **HIPAA Information**: The patient is asked whether or not he/she has received a copy of the Military Health System Notice of Privacy Practices. If they have not, they are prompted to take a copy of the brochure. Clinics should make brochures available in close proximity to the kiosks in

order to make this process work effectively. Once a patient answers YES to the receipt of HIPAA brochure, this question will not be asked again for one full calendar year.

6. **Advanced Directive Information:** The patient is asked whether or not they have an advanced directive on file. They are prompted to take a copy of the brochure. Clinics should make brochures available in close proximity to the kiosks in order to make this process work effectively. Once a patient answers YES to the receipt of HIPAA brochure, this question will not be asked again for one full calendar year.
7. **Global War on Terrorism (GWOT) question**: The patient is asked "Is your visit today for a deployment-related health concern?" The answer to this question is recorded in the HEALTHeFORCES/ICDB database, and if a provider completes a HEALTHeNOTE is completed for this appointment, the GWOT question on the HEALTHeNOTE will populate with the patient's answer.
8. **Customer Satisfaction Survey Administration**: Patients are prompted to return to the kiosk after the appointment to complete a Customer Satisfaction and Kiosk Technology Satisfaction survey. If the patient answers yes to this prompt, when they return after the appointment to a kiosk and scan the ID card, the system will acknowledge that they are returning to take the satisfaction survey.
9. **HEALTHeFORCES Survey Administration:** Clinics can opt to have the standard HEALTHeFORCES surveys administered via the kiosk. Please contact the HEALTHeFORCES Help Desk for more information on this configuration.

TRAINING

A HEALTHeFORCES Training Resource (Mr. Virgil Yauger) has been dedicated to the kiosk implementation effort for the NCA. The Dewitt Healthcare Network also has a designated point of contact (Ms. Judy Thomas) to assist clinics with the use of kiosks. These two resources partner in pre-implementation training of clinic personnel and perform daily "rounds" with active kiosk clinics.

TROUBLE REPORTING

There are multiple teams involved in support of the functionality of the kiosk hardware and software. In an effort to provide the most efficient and proficient service to all kiosk users, we must streamline the reporting process for any kiosk-related issues. All issues with any kiosk should be reported to the HEALTHeFORCES help desk immediately—please do not call the kiosk vendor directly. The HEALTHeFORCES help desk staff will isolate the problem and bring in all resources as necessary. The help desk can be reached via 202-782-0324 or healtheforces@amedd.army.mil

The kiosks WILL NOT WORK as designed if there is no connection with CHCS and/or ICDB. Troubleshooting problems with the kiosks will start with verifying CHCS and ICDB access/viability; troubleshooting network issues; troubleshooting kiosk server problems; and then troubleshooting kiosk hardware problems. The kiosk vendor will only be consulted for verifiable problems with the kiosk server and/or hardware.

TRIAGE/ESCALATION PROCEDURE

- INITIAL REPORT: HEALTHeFORCES Help Desk, 202-782-0324, healtheforces@amedd.army.mil
- HEALTHeFORCES Help Desk will troubleshoot network and CHCS/ICDB connectivity issues through normal help desk channels.
- If problem is isolated to Kiosk hardware and/or Kiosk server, the HEALTHeFORCES Help Desk will notify the VECNA vendor via wramc-kiosk-archive@vecna.com and/or Project Manager: Nathan Jackson at njackson@vecna.com or (301) 864-7253 x1125 or cell (845) 401-5459. Alternate POC is Patrick Campbell at (301) 864-7253 x1113. An operator can

always be reached at VECNA by calling the main phone number and reporting the need for HEALTHeFORCES support.

- If remote access is needed for VECNA to access the kiosk server, the WRAMC DOIM will be notified at 202-782-0330 during the day or 202-782-1068 after hours to authorize remote access to the VECNA vendor. All security paperwork and remote accounts have been prepared for such access. The HEALTHeFORCES Help Desk will arrange for VECNA's access through this established procedure.

CURRENT DEPLOYMENT STATUS

For a complete list of individual kiosk implementation dates and configuration details, please see Kiosk Location details in Appendix C.

Location	# of Kiosks	Activation Date
33 Funded by LTC John Cho's TATRC grant		
Rader Clinic	7	10 May
Woodbridge Clinic	5	12 July
Fairfax Clinic	5	3 August
Rader Clinic*	1	6 October
DeWitt Clinic	9	6 October
DeWitt Clinic	6	Pending LAN/printer setup
27 Funded by HEALTHeFORCES Program Office		
WRAMC	8	12 July
WRAMC	14	15 September
WRAMC	4	In place, pending LAN/printer setup
Kimbrough	1	Pending delivery
8 Funded by Malcolm Grow Preventive Medicine Budget		
Malcolm Grow	3	Pending LAN/printer setup
Malcolm Grow	7	Pending delivery (ordered October 2004)

*SOFTWARE UPGRADE on 15 August allowed for pediatric patients without ID cards to check-in with the kiosk.

FUNCTIONALITY CHANGE REQUESTS

The HEALTHeFORCES Program Office encourages clinics to assess how the kiosk screens can be modified to best suit local, NCA and AMEDD business practices. The process through which changes are made to kiosk screens depends on the type of change and type of data being requested. There are two programming teams involved, and depending on the request, one or both teams will be required to perform work.

- Requests to collect data that is needed for storage and/or integration into the HEALTHeFORCES/ICDB database have to be processed through the HEALTHeFORCES requirements process since changes to the database will be required. The kiosk application can display questions as prompted by the HEALTHeFORCES application, so kiosk vendor programming may or may not be required. Timelines for this process are dependent on the standard HEALTHeFORCES software release schedule.
- Requests to collect data that is not required for integration, for example, the kiosk technology survey, can be stored in the kiosk patient data database, and will require kiosk vendor

programming. There is a cost associated when involving the vendor in programming efforts, so requirements must be defined and refined in order to get a cost estimate. The feasibility of incorporating such a change will depend on the cost and the widespread clinical value of the data to be collected.

The HEALTHeFORCES Program Office is planning to establish a kiosk user work group in November 2004 to provide a forum for kiosk users to cross talk on effective business processes and to collaborate on functionality change requests. This group will be the author of change requests to be submitted to the programming teams for consideration.

DATA RETRIEVAL

The HEALTHeFORCES Decision Support Center has a tool for mining the data in the kiosk patient data server. The Decision Support Center also can mine all data in the HEALTHeFORCES database. There are plans to make standard reports available to kiosk users, but in the meantime, data requests should be submitted to the HEALTHeFORCES Help Desk.

INVOLVED PARTIES

Because the kiosks support so many business processes and interface with multiple systems, the parties involved in the kiosk implementation are many. The current points of contact are listed here to detail the complexity of project coordination.

Specialty Area	**Role**
Clinic Management	Assess business practice to accommodate kiosk into environment; submit work orders for LAN drops/outlets, etc.
Clinic front desk personnel	Engage in patient use of the kiosk for check-in. Report problems with kiosk hardware/activity. Provide feedback on usefulness of kiosk and suggestions for improvement.
Patients	Use the kiosk according to their comfort level; leverage availability of customer satisfaction survey.
HEALTHeFORCES Programming Team	Support the software change requests.
Kiosk Vendor	Kiosk hardware and software maintenance and troubleshooting; support software change requests
WRAMC DOIM	Process firewall access requests for new kiosk implementation; provide access to kiosk servers as needed for software maintenance and upgrades.
Local Facility DOIM	Process firewall access requests and accommodate kiosks on the LAN.
Facilities Management	Advise on kiosk placement throughout the facility.
Infection Control	Advise on local policies for cleaning kiosk screens.
HEALTHeFORCES Training Team	Support clinics and kiosk users.
HEALTHeFORCES Help Desk Team	Troubleshoot kiosk problems
CHCS Help Desk	Support testing and implementation of kiosk software change requests.
HEALTHeFORCES Decision Support Center	Support data requests.

PROBLEMS SPECIFIC TO NCA

The following items have caused delay in implementation and/or delay in clinic/patient acceptance.

- Network cables supplied by VECNA were not tightly seated. Unfortunately, because the first test of such connectivity was between RCERT in Ft Huachuca, there were several rounds of testing required before the problem was identified. Several days were lost in this duplication of effort. The solution was to tip the kiosks over and re-seat the network cable.
- DOIM Processes: The WRAMC DOIM
- Generally the kiosks are used effectively in those clinics where clinic leadership and clinic business process owners have embraced the concepts and made the necessary changes in clinic business flow to accommodate the kiosks.
- There is a pattern of retiree/dependent ID cards not being acknowledged 100% of the time. Newer cards seem to be the problem. It sometimes takes up to 10 swipes before a card is recognized due to "swiping technique" (fast/slow/slanted/swiping from the top/bottom). Sometimes the patient gets a beep when the card is scanned and it just cycles back to the main screen. Other times it beeps and gives a card not recognized message. Additionally, sometimes there is no beep, a blank screen appears and then immediately the main screen reappears. Solution: Software change request has been funded for the patient to have the option of typing in the FMP and SSN to initiate the check-in when the ID card swipe fails. Anticipated deployment of software fix is 20 October.
- Family Member appointments do not always display. The sponsor card is read and after the dependent's birth date is entered it will not bring up the appointment - birth date not recognized. Team will continue to monitor the problem and consult with vendor for a solution.
- Xerox printers: Many clinics have Xerox copier/printers as their primary network printer. A firmware upgrade is required to make the machines compatible with the kiosk application server communication protocol. The Xerox printer POC in each of the clinics have to log a ticket with Xerox to get the firmware upgraded (Xerox only accepts tickets from registered POC). Clinics have been reticent in taking this step towards full implementation.
- Cleaning of screen and documentation: All areas informed of requirement to use cavicide wipes and not spray and document cleaning. Most areas are documenting daily cleaning on a checklist.

APPENDIX A:
WRAMC DOIM FIREWALL ACCESS REQUESTS

FOR SECURITY SCAN OF KIOSK

MCWR-IM
SUBJECT: WRAMC Firewall Security Policy (Policy #02-03)

Enclosure 7
Request for Access Form

REQUEST FOR ACCESS THROUGH WRAMC FIREWALLS

This document represents a formal request to allow outside network traffic access to resources within the WRAMC network. WRAMC Security and network personnel will evaluate the information for potential security risks and will forward request to the approving authority. Please restrict requests to mission critical needs only so as to maintain the secure posture that is being implemented.

Information about the WRAMC Device or Resource
* If you do not have a site security ID please fill in the POC information at the bottom of the form and one will be assigned.

Site Security ID*	
Site/Agency Name	DOIM
Site/Agency POC	Bruce E. Davis
Site Admin Phone	202-782-5166

Internal Resource Name / Description	Patient Appointing Kiosks
Internal Resource IP Address	INSERT KIOSK IP ADDRESS AND LOCATION HERE
Port(s) requiring access	
Resource Administrator	Bruce E. Davis
Resource Administrator Phone	202-782-5166
Justification of Mission Critical Requirement	RCERT scan for device vulnerabilities.

Information about the outside traffic requiring access

Source IP Address	207.133.205.202 and 207.133.205.203
Source Description	RCERT IP Addresses

Information about the POC permitted to make requests for a site. If you do not have a site security ID this information is required. The Site admin should be an authorized official for the agency providing the request. The backup POC's may be anyone assigned by the

Site Admin. These contacts will be used to validate the authenticity of a request and provide feedback and status info on requests.

Site Name	WRAMC
Site Admin	Lovell White
Site Admin Phone	202-782-3385
Site Admin Email	Lovell.white@na.amedd.army.mil

Site Backup POC	Bruce Davis
Site Backup Phone	202-782-5166
Site Backup Email	Bruce.Davis@na.amedd.army.mil

Site Backup POC	
Site Backup Phone	
Site Backup Email	

We realize the time sensitive nature of all requests and will promptly evaluate requests as they are submitted. Please allow time for them to be considered. Please direct all questions or inquiries to the DOIM Security Office at (202) 782-1090/1049/5167.

_____ _____

Requesting Department POC Date

_____ _____

Chief, Network Management Division, WRAMC DOIM Date

_____ _____

Firewall Administrator, WRAMC DOIM Date

_____ _____

Information Assurance Network Manager, WRAMC DOIM Date

_____ _____

Information Assurance Manager Date

FOR KIOSK TO COMMUNICATE WITH KIOSK APPLICATION SERVER

MCWR-IM
SUBJECT: WRAMC Firewall Security Policy (Policy #02-03)

Enclosure 7
Request for Access Form

REQUEST FOR ACCESS THROUGH WRAMC FIREWALLS

This document represents a formal request to allow outside network traffic access to resources within the WRAMC network. WRAMC Security and network personnel will evaluate the information for potential security risks and will forward request to the approving authority. Please restrict requests to mission critical needs only so as to maintain the secure posture that is being implemented.

Information about the WRAMC Device or Resource
* If you do not have a site security ID please fill in the POC information at the bottom of the form and one will be assigned.

Site Security ID*	
Site/Agency Name	DOIM
Site/Agency POC	Bruce E. Davis
Site Admin Phone	202-782-5166

Internal Resource Name / Description	Patient Appointing Kiosks
Internal Resource IP Address	INSERT KIOSK IP ADDRESS AND LOCATION HERE
Port(s) requiring access	443
Resource Administrator	Bruce E. Davis
Resource Administrator Phone	202-782-5166
Justification of Mission Critical Requirement	Kiosk hardware at facility needs to reach kiosk server located at WRAMC

Information about the outside traffic requiring access

Source IP Address	160.151.186.54
Source Description	KIOSK SERVER

Information about the POC permitted to make requests for a site. If you do not have a site security ID this information is required. The Site admin should be an authorized official for the agency providing the request. The backup POC's may be anyone assigned by the Site Admin. These contacts will be used to validate the authenticity of a request and provide feedback and status info on requests.

Site Name	WRAMC
Site Admin	Lovell White
Site Admin Phone	202-782-3385
Site Admin Email	Lovell.white@na.amedd.army.mil

Site Backup POC	Bruce Davis
Site Backup Phone	202-782-5166
Site Backup Email	Bruce.Davis@na.amedd.army.mil

Site Backup POC	

Site Backup Phone	
Site Backup Email	

We realize the time sensitive nature of all requests and will promptly evaluate requests as they are submitted. Please allow time for them to be considered. Please direct all questions or inquiries to the DOIM Security Office at (202) 782-1090/1049/5167.

_____ _____

Requesting Department POC Date

_____ _____

Chief, Network Management Division, WRAMC DOIM Date

_____ _____

Firewall Administrator, WRAMC DOIM Date

_____ _____

Information Assurance Network Manager, WRAMC DOIM Date

_____ _____

Information Assurance Manager Date

FOR NETWORK PRINTER TO COMMUNICATE WITH KIOSK APPLICATION SERVER
MCWR-IM
SUBJECT: WRAMC Firewall Security Policy (Policy #02-03)

Enclosure 7
Request for Access Form

REQUEST FOR ACCESS THROUGH WRAMC FIREWALLS

This document represents a formal request to allow outside network traffic access to resources within the WRAMC network. WRAMC Security and network personnel will evaluate the information for potential security risks and will forward request to the approving authority. Please restrict requests to mission critical needs only so as to maintain the secure posture that is being implemented.

Information about the WRAMC Device or Resource
* If you do not have a site security ID please fill in the POC information at the bottom of the form and one will be assigned.

Site Security ID*	
Site/Agency Name	DOIM

Site/Agency POC	Bruce E. Davis
Site Admin Phone	202-782-5166

Internal Resource Name / Description	Network Printers in clinic check-in areas needing to print from KIOSK SERVER
Internal Resource IP Address	INSERT NETWORK PRINTER IP ADDRESS AND LOCATION HERE
Port(s) requiring access	9100
Resource Administrator	Bruce E. Davis
Resource Administrator Phone	202-782-5166
Justification of Mission Critical Requirement	Printers needing to communicate with newly installed registration kiosks via the KIOSK SERVER

Information about the outside traffic requiring access

Source IP Address	160.151.186.54
Source Description	KIOSK SERVER

Information about the POC permitted to make requests for a site. If you do not have a site security ID this information is required. The Site admin should be an authorized official for the agency providing the request. The backup POC's may be anyone assigned by the Site Admin. These contacts will be used to validate the authenticity of a request and provide feedback and status info on requests.

Site Name	WRAMC
Site Admin	Lovell White
Site Admin Phone	202-782-3385
Site Admin Email	Lovell.white@na.amedd.army.mil

Site Backup POC	Bruce Davis
Site Backup Phone	202-782-5166
Site Backup Email	Bruce.Davis.1@na.amedd.army.mil

Site Backup POC	
Site Backup Phone	
Site Backup Email	

We realize the time sensitive nature of all requests and will promptly evaluate requests as they are submitted. Please allow time for them to be considered. Please direct all questions or inquiries to the DOIM Security Office at (202) 782-1090/1049/5167.

_____ _____

Requesting Department POC Date

_____ _____

Chief, Network Management Division, WRAMC DOIM Date

_____ _____

Firewall Administrator, WRAMC DOIM Date

Information Assurance Network Manager, WRAMC DOIM Date

Information Assurance Manager Date

APPENDIX B:
KIOSK SCREEN SHOTS as currently deployed in NCA (12 October 2004)

The screen shots shown are specific for WRAMC. These are the same shots that were used in the DHCN except for a different logo.

APPENDIX C:
KIOSK LOCATIONS

Not functional; pending LAN or power modifications
Not functional or partially functional; pending paperwork or approval process
In use

KIOSK #	Clinic	Deploy Date	Activate Date	OUTSTANDING ITEM
ANDREWS-1	Family Practice 1	14-Jun		Pending IP assignment
ANDREWS-2	Family Practice 2	14-Jun		Pending IP assignment
ANDREWS-3	Internal Medicine	14-Jun		Pending IP assignment
BELVOIR-01	Pharmacy	4-Aug	6-Oct	
BELVOIR-02	South Post Clinic	4-Aug	FAR 9/28	LAN & outlet ready/Xerox printer
BELVOIR-03	Ortho/Podiatry Clinic	4-Aug	6-Oct	
BELVOIR-04	Physical Therapy Clinic	4-Aug	6-Oct	
BELVOIR-05	Ortho/Podiatry Clinic	4-Aug	6-Oct	
BELVOIR-06	Family Health Clinic	4-Aug	6-Oct	
BELVOIR-07	Pediatric Clinic	4-Aug	FAR 9/28	LAN and outlet ready
BELVOIR-08	Internal Medicine Clinic	4-Aug	6-Oct	
BELVOIR-09	Optometry	4-Aug	6-Oct	
BELVOIR-10	Family Health Clinic	4-Aug	6-Oct	
BELVOIR-11	Sub Specialty Clinic	4-Aug	FAR 9/28	IMD LAN cable and RCERT Xerox printer
BELVOIR-12	Sub Specialty Clinic	4-Aug	FAR 9/28	IMD LAN cable and RCERT Xerox printer
BELVOIR-13	Occupational Health	4-Aug	FAR 9/28	LAN & outlet ready/Xerox printer
BELVOIR-14	Nutrition Clinic	4-Aug	6-Oct	Printer not on LAN
BELVOIR-15	Well Woman Clinic	4-Aug	FAR 9/28	LAN and outlet ready and RCERT Xerox Printer
FAIRFAX-1	Registration Area	14-Jun	3-Aug	
FAIRFAX-2	Registration Area	14-Jun	3-Aug	
FAIRFAX-3	Registration Area	14-Jun	3-Aug	
FAIRFAX-4	Registration Area	14-Jun	3-Aug	
FAIRFAX-5	Registration Area	14-Jun	3-Aug	
RADER-1	Primary Care	3-May	10-May	
RADER-2	Primary Care	3-May	10-May	
RADER-3	Specialty	3-May	10-May	
RADER-4	Primary Care	3-May	10-May	
RADER-5	Allergy	3-May	10-May	
RADER-6	Wellness	3-May	10-May	

RADER-7	Physical Therapy	3-May	10-May	
RADER-8	Pediatrics	29-Jul	6-Oct	Need Printer Info/IP/RCERT
WOODBRIDGE-1	Reception Block #1	14-Jun	12-Jul	
WOODBRIDGE-2	Reception Block #2	14-Jun	12-Jul	
WOODBRIDGE-3	Reception Block #3	14-Jun	12-Jul	
WOODBRIDGE-4	Reception Block #4	14-Jun	12-Jul	
WOODBRIDGE-5	PT/OT CLINIC	14-Jun	12-Jul	
WRAMC-01	OB/GYN	15-Jun	12-Jul	Xerox Printer Issue (firm ware) pending
WRAMC-02	OB/GYN	15-Jun	12-Jul	Xerox Printer Issue (firm ware) pending
WRAMC-03	OB/GYN Ward 43 (IVF)	25-Aug		Clinic under construction; not safe to place unit in hallway
WRAMC-04	Primary Care	15-Jun	12-Jul	
WRAMC-05	Primary Care	15-Jun	12-Jul	
WRAMC-06	Primary Care	15-Jun	12-Jul	
WRAMC-07	Infectious Disease	15-Jun	12-Jul	
WRAMC-08	Optometry	15-Jun	12-Jul	
WRAMC-09	Neurology-Peds Clinic 1X	25-Aug		Need hole drilled in reception desk
WRAMC-10	Pediatrics	25-Aug	29-Sep	Process Support with no printer in reception area
WRAMC-11	Allergy	18-Aug	29-Sep	need Printer RCERT
WRAMC-12	Allergy	25-Aug		No power outlet available. Uses same printer as WRAMC 11
WRAMC-13	Pulmonary	25-Aug	22-Sep	No printer NIC card
WRAMC-14	Rheumatology	25-Aug	15-Sep	No printer NIC card
WRAMC-15	Neurology-Adult Ward 61	25-Aug	21-Sep	need Printer RCERT
WRAMC-16	Neurology-Adult Ward 62	25-Aug		Need hole drilled in reception desk
WRAMC-17	Cardiology	25-Aug	29-Sep	need Printer RCERT
WRAMC-18	GI	18-Aug	22-Sep	
WRAMC-19	Hematology	25-Aug	29-Sep	
WRAMC-20	ENT	25-Aug	21-Sep	need Printer RCERT
WRAMC-21	Peds Hem/Onc	25-Aug	29-Sep	Ticket #195793 to configure printer onto LAN 1 Oct
WRAMC-22	Ophthalmology	25-Aug	15-Sep	
WRAMC-23	Urology	25-Aug	21-Sep	
WRAMC-24	Kimbrough	25-Aug		Pending delivery from WRAMC to Kimbrough
WRAMC-25	Orthopedics Clinic	18-Aug	13-Sep	
WRAMC-26	PM&R Clinic	18-Aug	15-Sep	Ticket #195249 to configure printer onto LAN 30 Sep
WRAMC-27	Kimbrough	25-Aug		Pending delivery from WRAMC to Kimbrough

3. **Plan for the second half of the project life-cycle.** The goal of the second half of the project is to fully integrate DeWitt ACH proper into the kiosk network. MAJ Haby Ramirez assumed the PI lead for the second half of the study. Our intent is to get a better handle on metrics 1 and 2 by retrograde analysis of the data.

4. **Update of the status/nature of the deliverable as identified in the original proposal.** The project met over 90% of its overall goals in the first 9 months. We feel that the project demonstrated that technology can be used to enhance healthcare delivery. We will focus a bit more on metrics 1 and 2 over the next nine months.

5. **Financial information to include funds spent, obligated, cost savings, etc.**

All $300,000 was utilized. The monies were allocated as follows.

1. $223,700.00 was MIPR'd out to actually buy the kiosks (33 kiosks and set up with 1 year support contract)

CONSOLIDATED PROJECT COST TABLE

No	Task Description	Est. Total Hours	Est. Total Cost
1	Link Survey Questions to Check-in Process	120	$18,000.00
2	*Test Plan, Testing & QA*	100	$15,000.00
3	*Initial On-site Deployment Support and Training*	80	$12,000.00
4	*Follow-on Kiosk Applications Support Services for 12 months*	100	$15,000.00
5	IDEA™ License Agreement (*if paid by WRAMC, otherwise $7,500 per year*)	Annual	$0.00
6	Thirty-three (33) Kiosk Units with HIPAA Privacy Filter ($4,900 per unit)	N/A	$161,700.00
7	Shipping (33)	N/A	$1,000.00
8	ODCs (Local Travel/Mileage, Supplies, etc.)	N/A	$1,000.00
	TOTAL (Includes Labor, Hardware & ODCs)		**$223,700.00**

2. $ 67,885.08 as obligated against an LPN to run the program and help collect data.

3. $ 8,413.69 was obligated for some setup and other expenses from the outset of the program. These costs included LAN drops, new power outlets, and minor infrastructure adjustments.
4. The DHCN Resource management Division handled and executed all MIPRs. The MIPRs are on file at DeWitt ACH.
5. As previously mentioned one area of significant cost savings came by utilizing the health e Forces Team for IT/IM support. In addition, software upgrades were paid for by either WRAMC or Health e Forces. These upgrades would have added $50,000 to the project cost.

a. SOFTWARE UPGRADE on 15 August allowed for pediatric patients without ID cards to check-in with the kiosk.

b. SOFTWARE UPGRADE on 21 October allowed for manual entry of patient SSN to make the kiosk usable even if ID card does not scan.

c. SOFTWARE UPGRADE on 26 October allowed for non-sponsors to execute family member lookup and check-in.