

12:48:12

OCA PAD AMENDMENT - PROJECT HEADER INFORMATION

12/13/96

Active

Project #: B-03-617

Cost share #:

Rev #: 3

Center #: 10/24-6-R8638-0A0

Center shr #:

OCA file #:

Contract#: A-060

Mod #: C.O. 3 & 4

Work type: RES

Prime #:

Document: PO

Contract entity: GTRC

Subprojects?: N

CFDA: NA

Main project #:

PE #: NA

Project unit:

BEC

Unit code: 03.010.203

Project director(s):

PEIFER J W

BEC

(404)894-7233

Sponsor/division names: MEDICAL COLLEGE OF GA

/ AUGUSTA, GA

Sponsor/division codes: 400

/ 018

Award period: 950801 to 961231 (performance) 961231 (reports)

Sponsor amount	New this change	Total to date
Contract value	17,600.00	121,376.00
Funded	17,600.00	121,376.00
Cost sharing amount		0.00

Does subcontracting plan apply?: N

Title: ADMINISTRATIVE MANAGEMENT DATABASE FOR THE GSAMS TELEMEDICINE SYSTEM

PROJECT ADMINISTRATION DATA

OCA contact: Ina R. Lashley

894-4820

Sponsor technical contact

Sponsor issuing office

LAURA ADAMS
(706)721-6616

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Security class (U,C,S,TS): U

ONR resident rep. is ACO (Y/N): N

Defense priority rating: NA

NA supplemental sheet

Equipment title vests with: Sponsor X GIT

EQUIPMENT TO BE PURCHASED SEPARATELY BY SPONSOR.

Administrative comments -

P.O. CHANGE ORDERS 3 & 4 AUTHORIZE NEW FUNDS (\$17,600) AND EXTEND PERIOD OF PERFORMANCE THRU 12/31/96.

GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION

NOTICE OF PROJECT CLOSEOUT

Closeout Notice Date 01/21/97

Project No. B-03-617

Center No. 10/24-6-R8638-0A0

Project Director PEIFER J W

School/Lab BEC

Sponsor MEDICAL COLLEGE OF GA/AUGUSTA, GA

Contract/Grant No. A-060 Contract Entity GTRC

Prime Contract No.

Title ADMINISTRATIVE MANAGEMENT DATABASE FOR THE GSAMS TELEMEDICINE SYSTEM

Effective Completion Date 961231 (Performance) 961231 (Reports)

Closeout Actions Required:	Y/N	Date Submitted
Final Invoice or Copy of Final Invoice	Y	
Final Report of Inventions and/or Subcontracts	N	
Government Property Inventory & Related Certificate	N	
Classified Material Certificate	N	
Release and Assignment	N	
Other	N	
Comments		

Subproject Under Main Project No.

Continues Project No.

Distribution Required:

Project Director	Y
Administrative Network Representative	Y
GTRI Accounting/Grants and Contracts	Y
Procurement/Supply Services	Y
Research Property Management	Y
Research Security Services	N
Reports Coordinator (OCA)	Y
GTRC	Y
Project File	Y
Other	N
	N



Georgia Institute of Technology

Biomedical Interactive Technology Center

B-03-617
1, 2

January 13, 1997

Ms. Laura Adams, Director of Operations
Telemedicine Center, Bldg. EA 1120 15th Street
Medical College of Georgia
Augusta, GA 30912-1655

Re: Final Letter Report On Ga. Tech Project B-03-617:
Administrative Management Database For The Georgia Statewide Telemedicine Program

Dear Laura,

Under Georgia Tech project B-03-617, the Biomedical Interactive Technology Center has developed a computerized administrative database for the Medical College of Georgia in support of the Georgia Statewide Telemedicine Program (GSTP). The database management system collects information at GSTP sites, and makes this information available through a central database located at the Medical College of Georgia (MCG) in Augusta. The initial effort under B-03-617 started with telemedicine consultations only, and through an expansion of this effort, a new database design has been developed to track other types of GSTP utilization as well. In addition, funds provided by the Medical College of Georgia have been used to purchase upgrades for the GSTP sites that will provide faster access and better communications links to the central database. This letter summarizes the database efforts completed under this program, and it represents the "Final Letter Report" deliverable item on Georgia Tech project B-03-617.

The database management system documents transactions on the Georgia Statewide Telemedicine Program (GSTP). The initial effort only supported telemedicine consultations, and it is referred to as Phase I in this report. An expansion of the project provided time and funding to incorporate other types of GSTP system utilization (such as training, distance learning and meetings), and this expansion is referred to as Phase II. The Phase II effort also includes a redesign of the database structure to take advantage of faster modems and operating system upgrades that will become available at GSTP sites. In addition, the Phase II design establishes a foundation for the future Phase III GSTP database that will support image and sound capture as well as shared consultation sessions. The efforts performed under Phase I and Phase II are reviewed below:

PHASE I EFFORTS

1. Database Design: The Georgia Institute of Technology (GIT) worked closely with the Medical College of Georgia (MCG) to design and implement the database. The design provides the same capabilities as the paperwork forms that are currently used for tracking a telemedicine consultation. The design was selected to match the hardware and communications resources of the GSTP system. The database was written in Microsoft Access 2.0 running under Windows 3.1. Under the Phase I design, a local copy of the database resides at each GSTP site, and communications tools (also created during Phase I) are used to synchronize the local databases with the central database.

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2. Software interface: The user interface for the Phase I database was created using Microsoft Access forms and reports. The user enters data on their GSTP computer workstation while running a local copy of the database program. Options were provided to fax request forms and reports to any site, and to synchronize records with the central database.
3. Reporting Tools: With Microsoft Access the database administrator can generate almost any type of report or analysis from the GSTP database tables. In addition, a customized reporting tool was incorporated in the Phase I database for site coordinators to generate the most frequently produced reports on system utilization. These reports can be viewed locally or faxed to another site.
3. Communications Utilities: Communication tools were developed for the Phase I database to transfer information from GSTP sites to the central database at MCG, and to update the site tables with recent request and completion data. The data is transferred in Microsoft Access table format, and protections were included to limit the distribution to authorized users.
4. Integrated system components: The software tools were installed and demonstrated at several sites at the Medical College of Georgia. The hardware components of the GSTP system including the modem, computer, and fax machine were all verified to work with the Phase I database. A new computer system provided by the Medical College of Georgia was set up as the Central Server. This system is connected to a bank of phone lines and can answer calls from multiple sites simultaneously.
5. Testing and evaluation: Georgia Tech and the Medical College of Georgia Performed testing of the database in the lab and as part of special training and evaluation sessions at MCG. Each feature of the system was tested to ensure that the data entry, report generation, and information transfer features were working.

PHASE II EFFORTS

Under the Phase II expansion of the database effort, the design was modified to track other types of system utilization in the Georgia State Telemedicine Program. In addition, new resources made it possible to upgrade the Georgia Statewide Telemedicine Program (GSTP) sites to utilize faster modems and the Windows 95 operating system; and plans moved forward to incorporate image snapshots captured during telemedicine consultations. To take full advantage of these upgrades and expansion, it was necessary to take a new program direction. Specifically, the Phase II efforts involved:

1. Revised Database Design: The Phase II database design was modified to take advantage of the recently approved Windows 95 operating system and faster modems to be installed at GSTP sites. The expanded design also lays the foundation for Phase III image management capabilities and utilizes a Client/Server arrangement in which each site will log into the central database and thereby prevent conflicts in synchronizing multiple copies of local databases.
2. November Design Review: The Phase II design was presented to MCG for review during a project meeting in Augusta on November 13. Database table structure and field descriptions were reviewed. Plans for database administration and security in the new client/server arrangement were also discussed. Four levels of authorization were agreed upon: system administrator, regional coordinator, site coordinator, and site users. The new database design will allow GSTP database users to log into the database from any site with a username and password that identifies their site affiliation and authorization level. A second design review was conducted by telephone conference on November 21.

3. December Demonstration: A demonstration of the preliminary Phase II database was made during a project review meeting at the Medical College of Georgia on December 17, 1996. The demonstration was made from a laptop computer dialing into the database server at Georgia Tech. The client/server arrangement was illustrated and a revised "Telemedicine Request" data entry form was presented. The new patient finder tool was employed to display a list of sample patients on the laptop client after the patients with the requested attributes were downloaded from the central database server running a computer at Georgia Tech in Atlanta. This remote data entry and access demonstrates how the GSTP sites will log in and interact with the GSTP database application.

DELIVERABLES

The official deliverables for Georgia Tech project B-03-617 include this final letter report and the database management software. The database program and the central database server software have been delivered and installed at the Medical College of Georgia. Copies of this software and the Users Manual are also being delivered on CDROM. Using funds provided by MCG, Georgia Tech purchased Microsoft Windows 95 software and faster modems for upgrading GSTP sites. Sixty copies of the operating system upgrades and sixty US Robotics 28.8 Sportster modems will be delivered to MCG during our next Phase III project meeting on January 14, 1997. The efforts and deliverables described in this letter fulfill the project requirements on B-03-617, and we look forward to working with the MCG Telemedicine Center on the Phase III database under the new Georgia Tech project B-03-624. Please contact me if you have any questions or need additional information regarding this report of the deliverable items.

Respectfully submitted,

 John W. Peifer