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| 14. ABSTRACT<br><br>The Community Hospital Telehealth Consortium is a unique, forward-thinking, community-based healthcare service project organized around 5 not-for-profit community hospitals located throughout Louisiana and Mississippi. The central tenet of the CHTC project is the utilization of TeleHealth technology to improve and expand the opportunity for rural and urban underserved populations to receive quality, affordable health care. The CHTC's goals are to improve quality of and access to health care, to reduce system costs without jeopardizing outcomes, to position Louisiana and Mississippi for the emerging domestic marketplace, and to position Louisiana and Mississippi for the international marketplace. Considerable progress was made throughout the project period through our Telemedicine Clinics, our Home Health Telehealth initiatives, and our distance learning initiatives.                        |             |                         |                            |                                                          |                                           |
| 15. SUBJECT TERMS<br>CHTC – Community Hospital Telehealth Consortium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |             |                         |                            |                                                          |                                           |
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## **FORWARD**

The Community Hospital TeleHealth Consortium (CHTC) is a unique, forward-thinking network of TeleHealth providers. The CHTC has made significant strides in achieving its goals throughout the project period. Telemedicine clinics have been initiated, and improved health outcomes have been achieved, with our highest volume of encounters occurring in home care. Distance learning programs have afforded professionals in the outlying/rural communities the opportunity to gain interactive educational benefits previously unavailable without travel.

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## **INTRODUCTION**

The Community Hospital TeleHealth Consortium (CHTC) is a unique, forward-thinking, community-based healthcare service project organized around 5 not-for-profit community hospitals located throughout Louisiana and Mississippi. These hospitals are

- Lake Charles Memorial Hospital, Lake Charles, Louisiana
- Our Lady of Lourdes Regional Medical Center, Lafayette, Louisiana
- Our Lady of the Lake Regional Medical Center, Baton Rouge, Louisiana
- Slidell Memorial Hospital, Slidell, Louisiana
- North Mississippi Health Services, Tupelo, Mississippi

This multi-hospital collaboration breaks from the traditional structure of a TeleHealth network, giving the CHTC a unique diversity, which is its greatest strength. Each of the five project member hospitals have developed its own individual network with several satellite sites and a specialty focus based on specific regional needs.

## **Body**

The Community Hospital Telehealth Consortium is made up of 5 Community Hospitals in Louisiana and North Mississippi. Each hospital is a hub site and has developed spoke sites in its respective region in order to meet the unique needs of the community it serves.

Following is a description of the networks developed in each region.

- Lake Charles Memorial Hospital serves as the lead agency, coordinating the efforts of the entire consortium and overseeing the distribution of grant funds and the collection of outcomes. LCMH is a multi-specialty hospital with 362 beds and 300 physicians on staff that provides psychiatry consults to Leesville Developmental Center, and Southwest Louisiana Developmental Center. It is also a provider of distance-learning opportunities. Remote sites include 3 rural libraries in Beauregard Parish and 1 small hospital in Leesville, La. Four libraries in Cameron Parish were lost during Hurricane Rita.
- Our Lady of the Lake RMC is a multi-specialty facility with 852 licensed beds and 300 physicians that provides distance learning opportunities, and serves as a hub for specialty consults and clinical applications.
- Our Lady of Lourdes RMC is a multi-specialty facility with 293 beds and 420 physicians that serves as a hub for administrative meetings, continuing medical education, community health education and distance learning for Abbeville, Church Point, Crowley, Eunice, New Iberia, and Ville Platte, Louisiana.
- Slidell Memorial Hospital is a multi-specialty facility with 182 beds and 279 physicians that serves as a hub site for specialty consultations for the Picayune Family Practice Clinic and for medical and community health education and distance learning.
- North Mississippi Health Services is a multi-specialty facility with 650 beds and 300 physicians that serves as a consulting site for general health screenings, clinics, home health care, and education for school-based telehealth.

The CHTC has made significant progress towards the deliverables established in the project proposal. The following is a progress report on each specific deliverable proposed:

2.1 Telemedicine clinics serving a minimum of five (5) patients per month including the following specialties:

- **TelePsychiatry—**

- Lake Charles Memorial provides Tele-Psychiatry Clinics to Leesville Developmental Center and Southwest Louisiana Developmental Center. While Lake Charles Memorial Hospital experienced a moratorium on tele-psychiatry clinics due to administrative issues/decisions at both patient sites, the need for this service was re-established in late 2004, and clinics resumed during first quarter, 2005. 63 patients have been served in this clinic during the project period.

- **Neonatal Ophthalmology—**

- Lake Charles Memorial Hospital had replaced its Telecardiology/prison system project with a neonatal ophthalmology project involving the purchase of a neonatal retinal camera. This clinic transmits images from Lake Charles Memorial Hospital to a neonatal ophthalmologist in New Orleans and assists in diagnosing Retinopathy of prematurity (ROP), a potentially blinding eye disorder that primarily affects premature infants weighing about 2¾ pounds (1250 grams) or less that are born before 31 weeks of gestation (A full-term pregnancy has a gestation of 38–42 weeks). The smaller a baby is at birth, the more likely that baby is to develop ROP. This disorder—which usually develops in both eyes—is one of the most common causes of visual loss in childhood and can lead to lifelong vision impairment and blindness. ROP was first diagnosed in 1942. 212 patients have been served in this clinic during the project period.

- **Home Health—**

- North Mississippi Health Services continues to provide a TeleHealth Home Health Care project. TeleHealth equipment is currently being used in conjunction with nursing visits to treat patients with the following disease processes, but not restricted to: cardiac diagnoses, diabetes, chronic pain, psychiatric disorders, wounds, and respiratory diagnoses. These patients may reside in a rural or urban setting. Data is being and will continue to be analyzed to determine the impact on outcomes. There are 4 Home Health branches, each having a central monitoring unit.
- North Mississippi Health Services implemented a wound care project through home care. Home health nurses visit patients at home with various wounds. Those wounds are photographed and transmitted digitally to the wound care center for assessment of wound healing progress. This is their highest volume clinical application.

- Our Lady of Lourdes Regional Medical Center initiated a TeleHealth Home Health Care project in the first quarter of 2004. The program was discontinued because the facility sold its Home Health Agency.
- **Digital Mammography—**
  - Lake Charles Memorial Hospital has replaced its Ocular Plastics clinic with digital mammography, which will allow images to be shared between Lake Charles Memorial Hospital's main campus and LCMH Gauthier Campus. A total of 1450 patients have been served during this project period and has been inclusive of patients in rural & underserved areas.
- **Family Practice—**
  - North Mississippi Health Services is linked with six rural schools and provides Family Practice consults via TeleHealth. As a result the level of expertise available to the school nurses has been raised. A total of 105 patients have been served during this project period.

## 2.2 Telemedicine clinics which address specific needs in rural areas, including

- A rural prison system—As stated above this project has been replaced with a neonatal ophthalmology project.
- A rural school system--North Mississippi Health Services is supplying Telehealth Support to the School Nurse Program in six schools in northeast Mississippi: Belmont, Slatillo, North and South Pontotoc, Plantersville, and Okalona. The school nurse program was started to help improve the health of the children in our region, and in conjunction with the Catch Kids program has had an effect on providing affordable health care to the rural medically under served population. The telehealth system connects the Nurse and student with a medical residency doctor or teaching staff member to help diagnose and provide treatment. Working with the Catch Kids program, medication is prescribed and made available free of charge to young patients who would other wise be unable to pay.

2.3 Further expansion of our regional network visibility and ability for further rural outreach by adding at least one (1) new Mississippi hospital to our consortium during the contract period—This goal was not accomplished.

2.4 Any and all funding reporting requested by TATRC—Reports detailing budget activity have been submitted to date.

2.5 All data generated as a result of telemedicine clinics during the contract period—The following demographic data relative to our clinics has been collected and aggregated:

Patient Encounters/Year:

|                          |               |
|--------------------------|---------------|
| April 2002 - April 2003: | 19.3 pts/yr.  |
| April 2003 - April 2004: | 282.4 pts/yr. |
| April 2004 - April 2005: | 736 pts/yr.   |
| April 2005 - April 2006: | 1126 pts/yr.  |
| April 2006 - April 2007: | 1236 pts/yr.  |

2.6 All outcomes measured during the contract period.

Clinical Usage:

| Year                    | Connections | Clients Served |
|-------------------------|-------------|----------------|
| April 2002 - April 2003 | 0           | 0              |
| April 2003 - April 2004 | 1229        | 1229           |
| April 2004 - April 2005 | 1633        | 1633           |
| April 2005 - April 2006 | 3859        | 3859           |
| April 2006 - April 2007 | 6476        | 6476           |

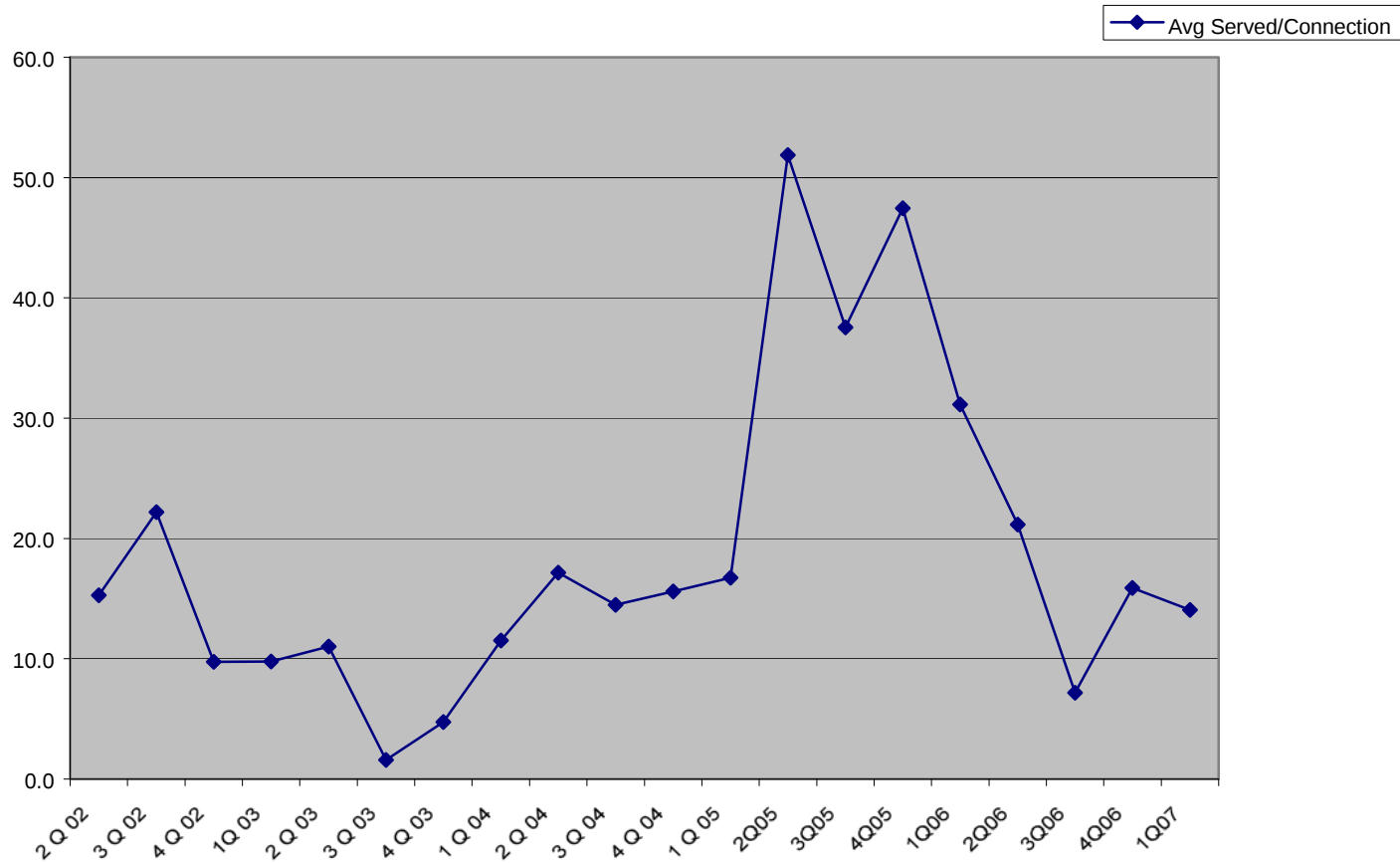
Distance-learning/Administrative Uses:

| Year                    | Non-Clinical Connections | Individuals Served |
|-------------------------|--------------------------|--------------------|
| April 2002 - April 2003 | 75                       | 976                |
| April 2003 - April 2004 | 263                      | 3194               |
| April 2004 - April 2005 | 265                      | 4246               |
| April 2005 - April 2006 | 95                       | 4622               |
| April 2006 - April 2007 | 313                      | 4740               |

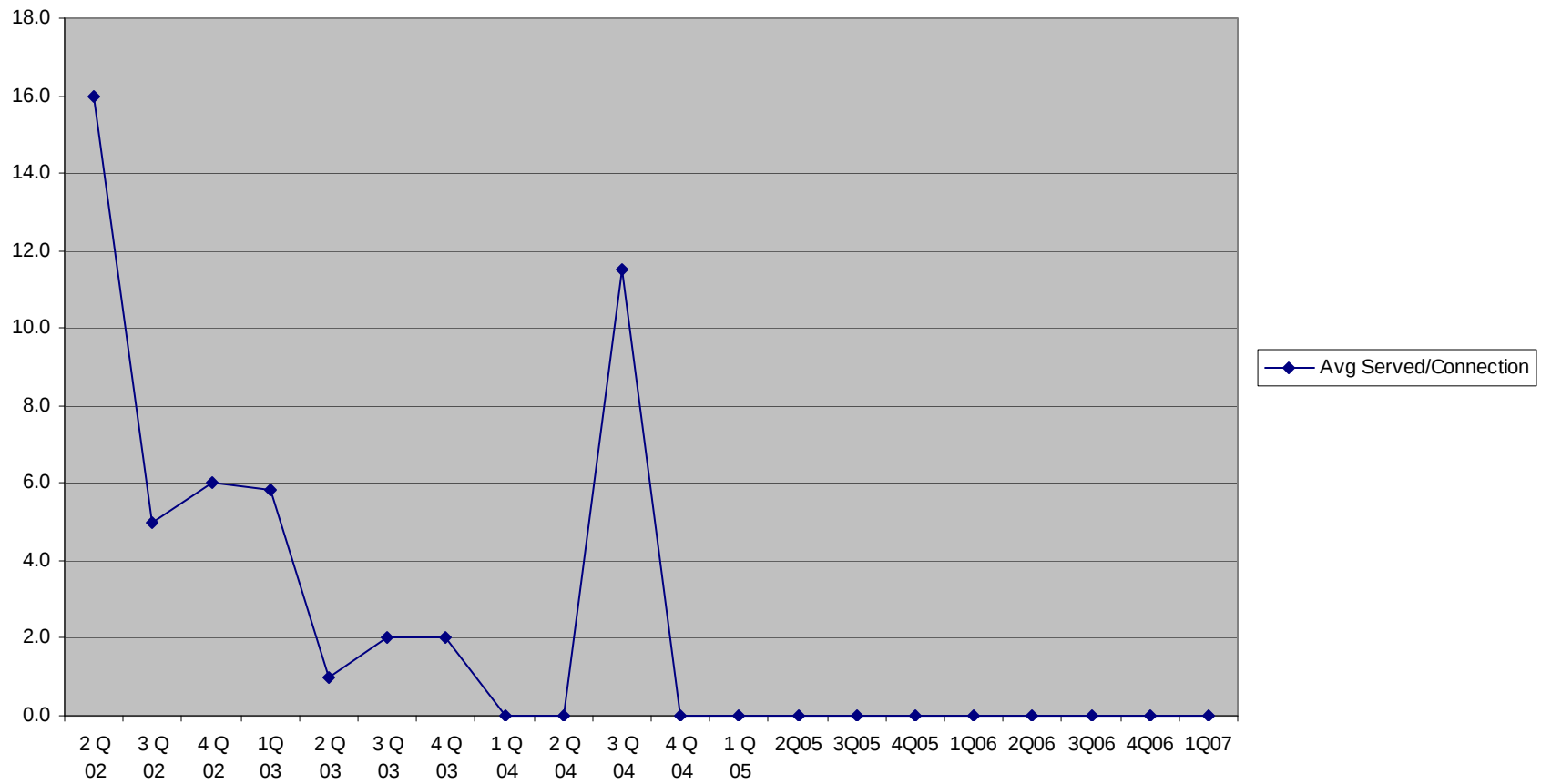
## **CONCLUSION/SO WHAT?**

The CHTC is a unique, forward-thinking entity that has made significant strides in achieving its goals over the past year. Telemedicine clinics have been initiated, and improved health outcomes have been achieved. The CHTC hub sites have served local regions, and providers and patients have expressed satisfaction with processes and outcomes. Patients have been evaluated by consulting specialist providers without the negative aspects of travel to metropolitan areas and its associated costs. Distance learning programs have afforded professionals in the outlying/rural communities the opportunity to gain interactive educational benefits previously unavailable without travel. Federal funding in the form of Grants is fundamentally supporting the efforts of communities to build telehealth infrastructure, and to pilot processes that will ultimately improve the access and quality of health care well into the future.

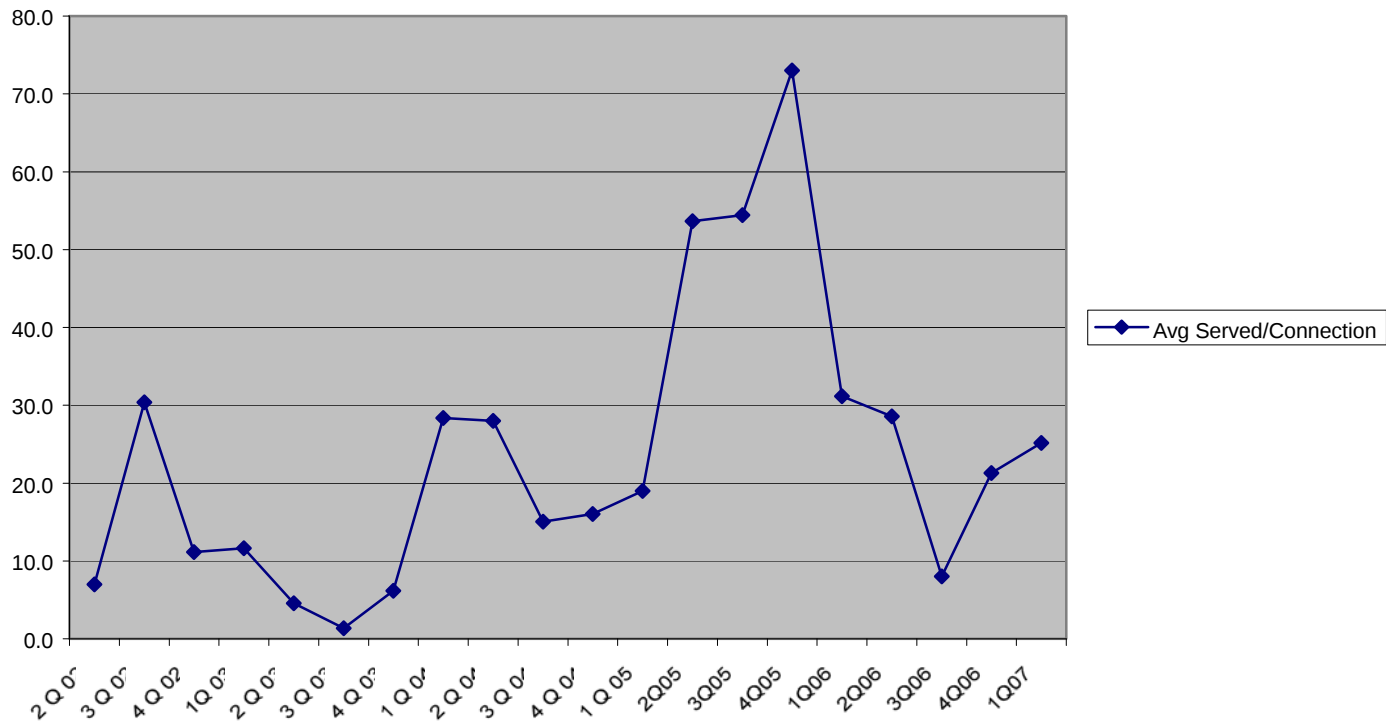
**Non-Clinical Connections  
Average Patients Served**



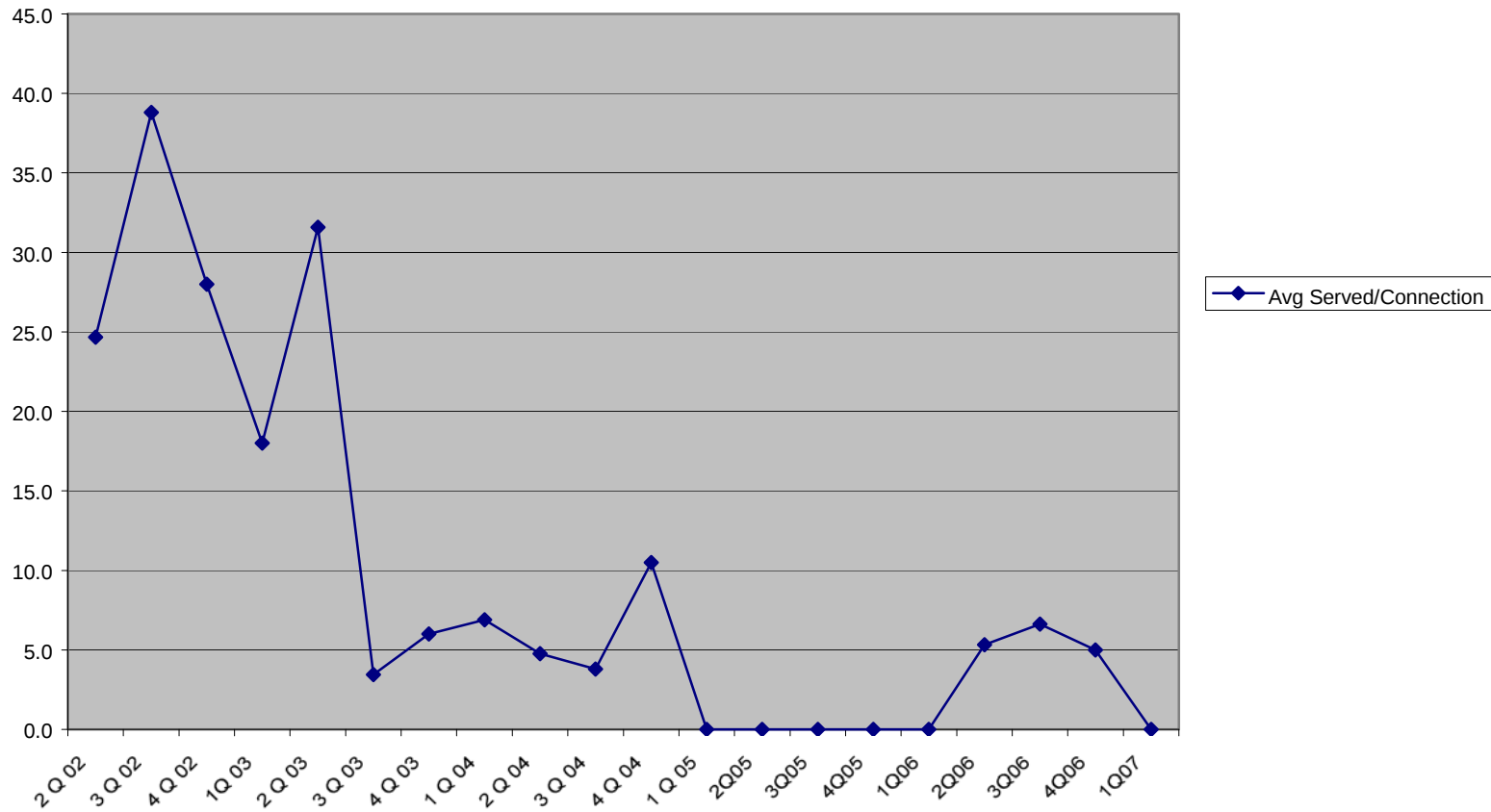
Demonstration Connections



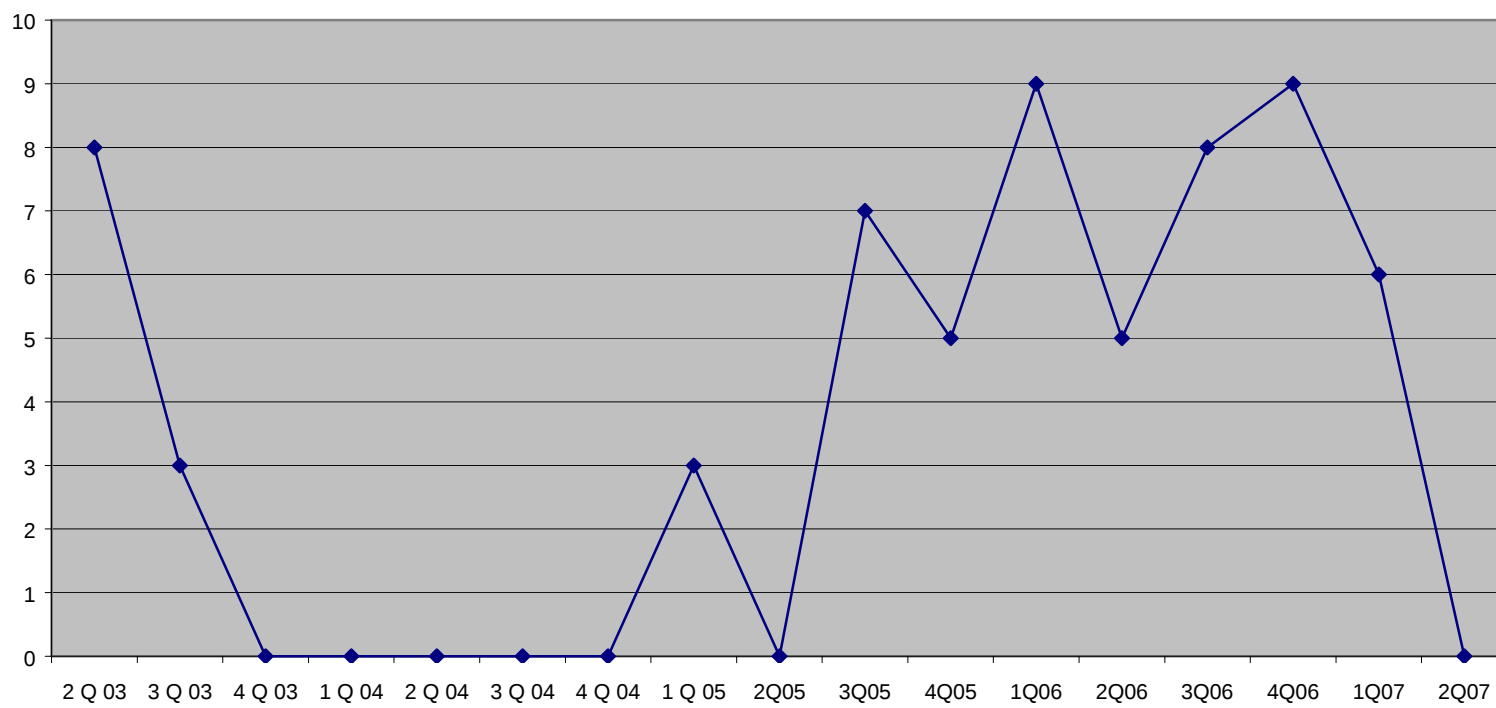
Continuing Education



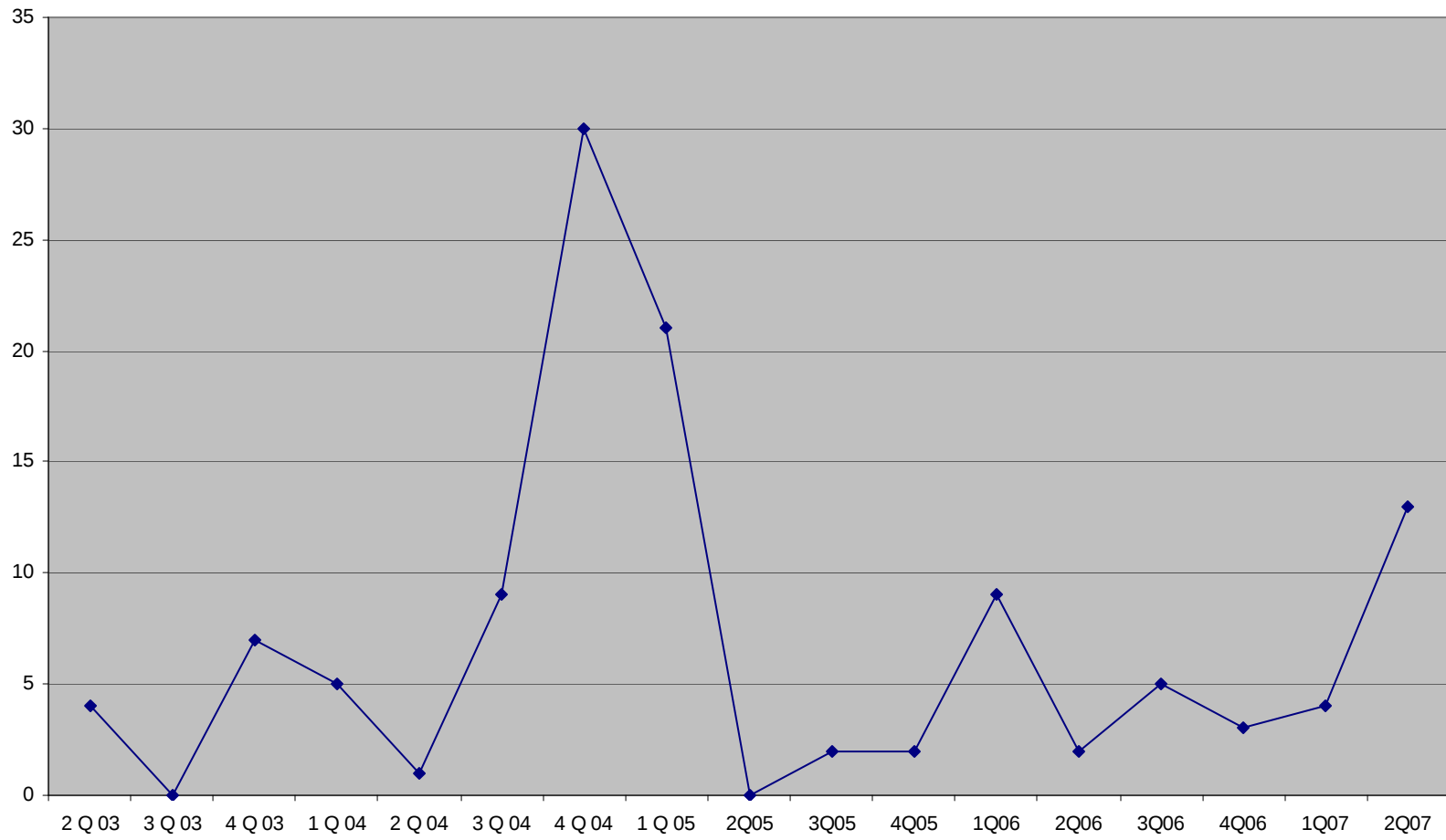
# Community Education



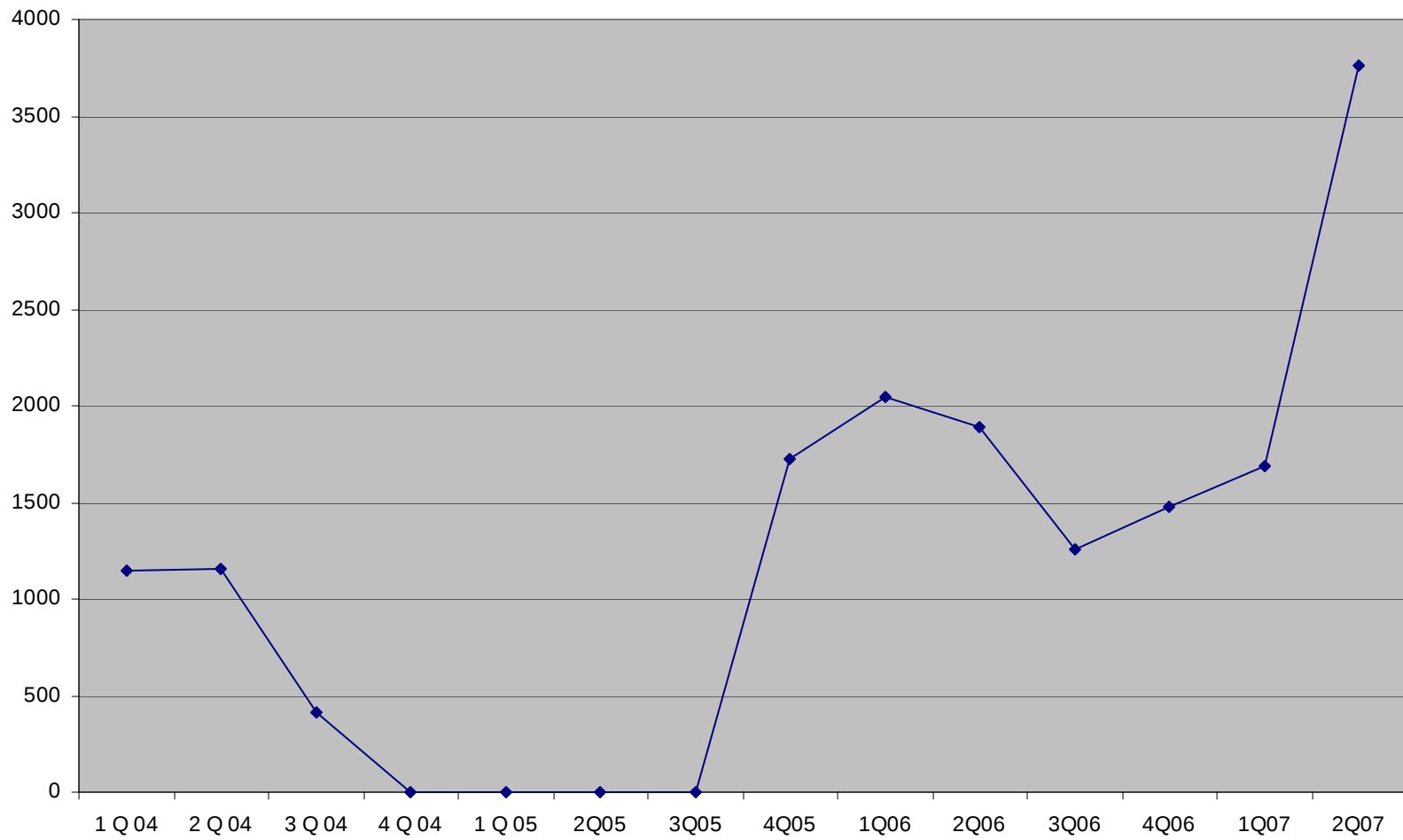
Telepsych Patients Per Quarter



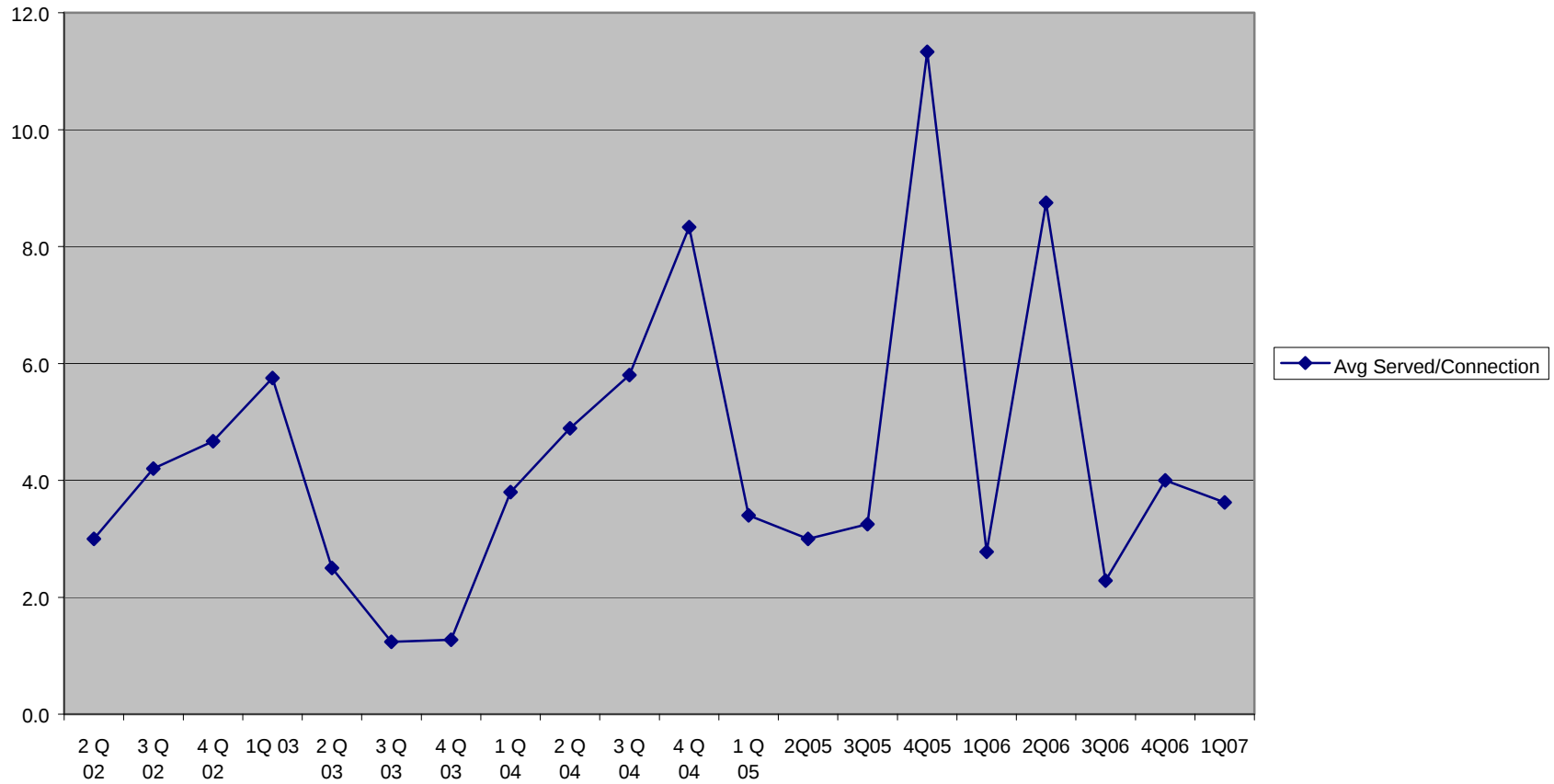
Family Practice



Wound Care Home Health



### Administrative Connections



# Neonatal Ophthalmology

