



NORTH CAROLINA

SOUTH CAROLINA

GEORGIA

North Atlantic Ocean

Greenville

Anderson

Cowpens

Spartanburg

Rock Hill

Broad

Saluda

Camden

Florence

COLUMBIA

Lk. Marion

Savannah

Cooper

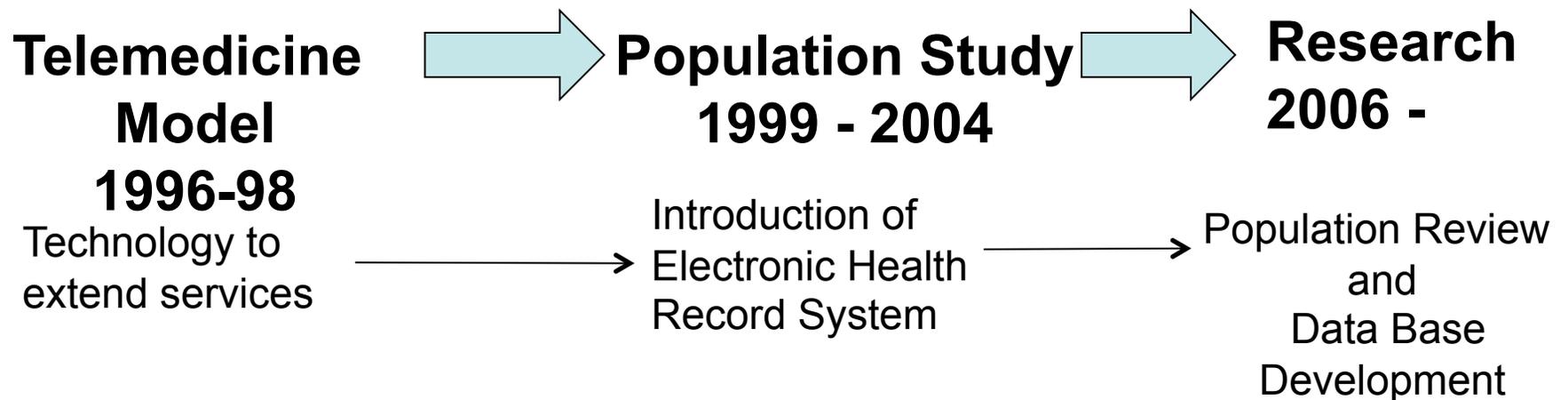
Santee

Myrtle Beach

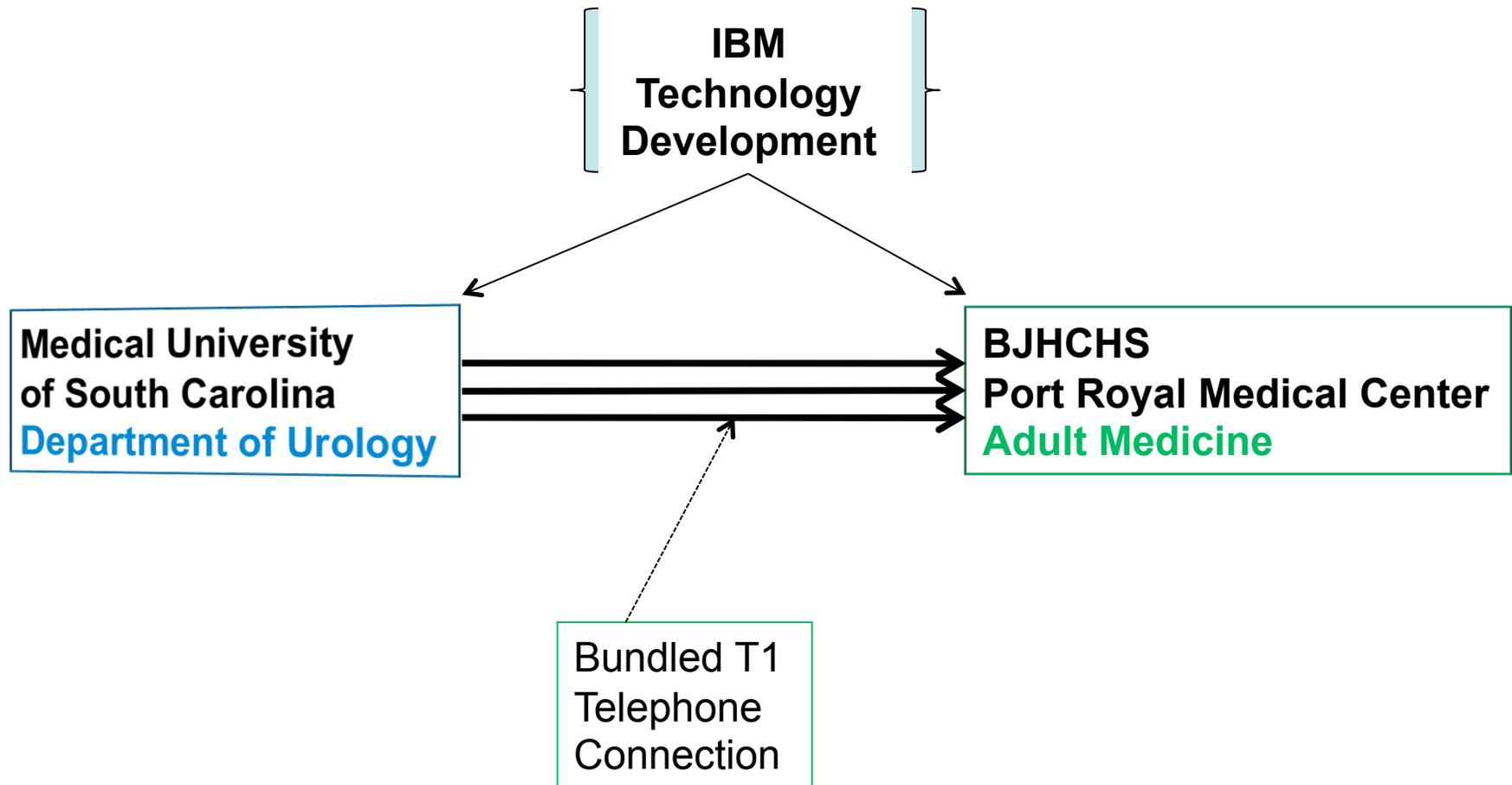
N. Charleston

Charleston

HIT/Research Evolution at BJHCHS



Guided Remote Prostate Biopsy by Nurse Practitioner



Telehealth Model

Success

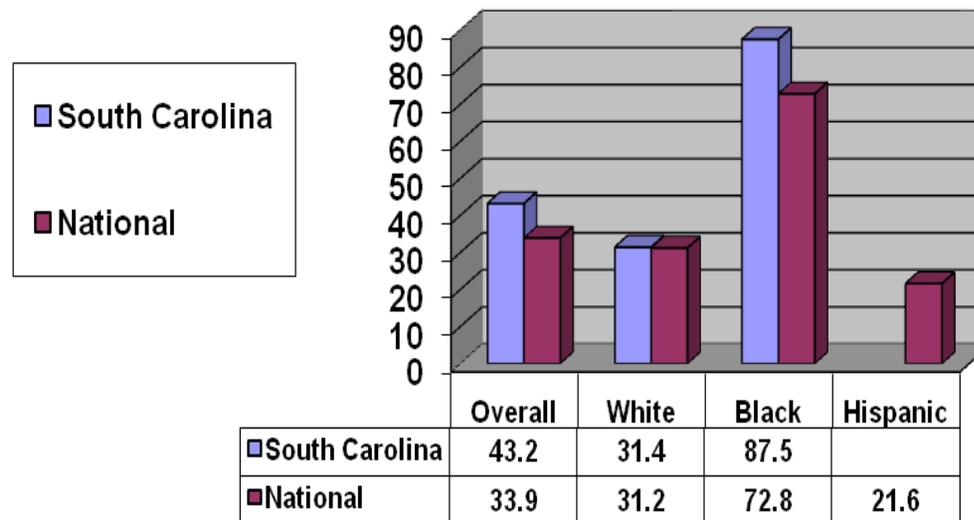
- Overcame technology challenges – real time image transmissions over a distance of approximately 90+ miles
- Located and trained a male nurse practitioner to do biopsies
- Purchased medical equipment and set up a procedure room

Unsuccessful

- Could not overcome objections of local Urologists
- Could not sustain costs of T1 lines

South Carolina Prostate Cancer/ Telehealth Program

The Disparity: Prostate Cancer In South Carolina



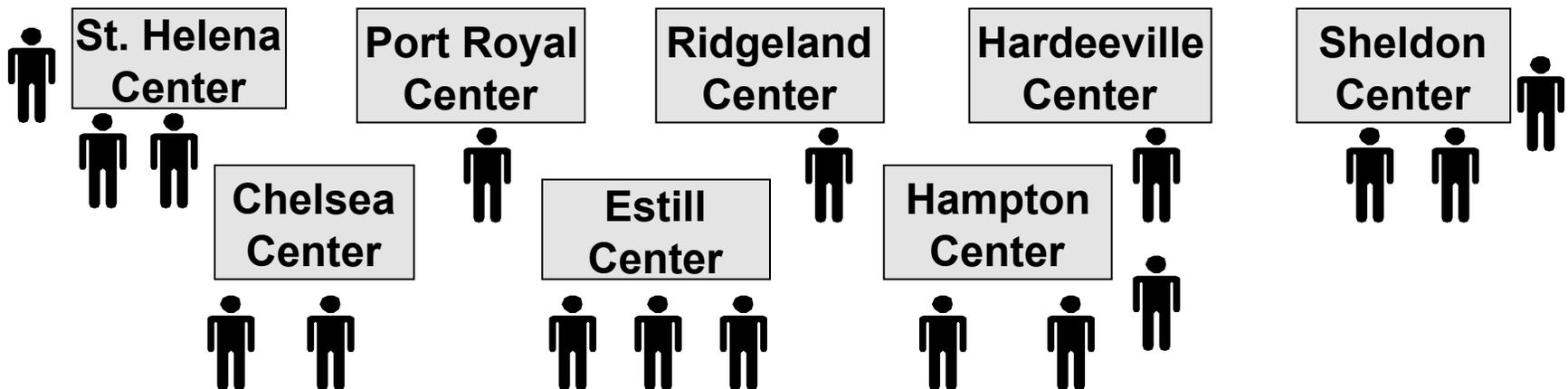


7TH Nationally Prostate Cancer

Public Health\Research Initiative
South Carolina Men Ages 20-79

Institute for Cancer Prevention
(Designated NCI Cancer Center)

Beaufort-Jasper-Hampton Comprehensive Health Services, Inc.
(Section 330 Community Health Center)



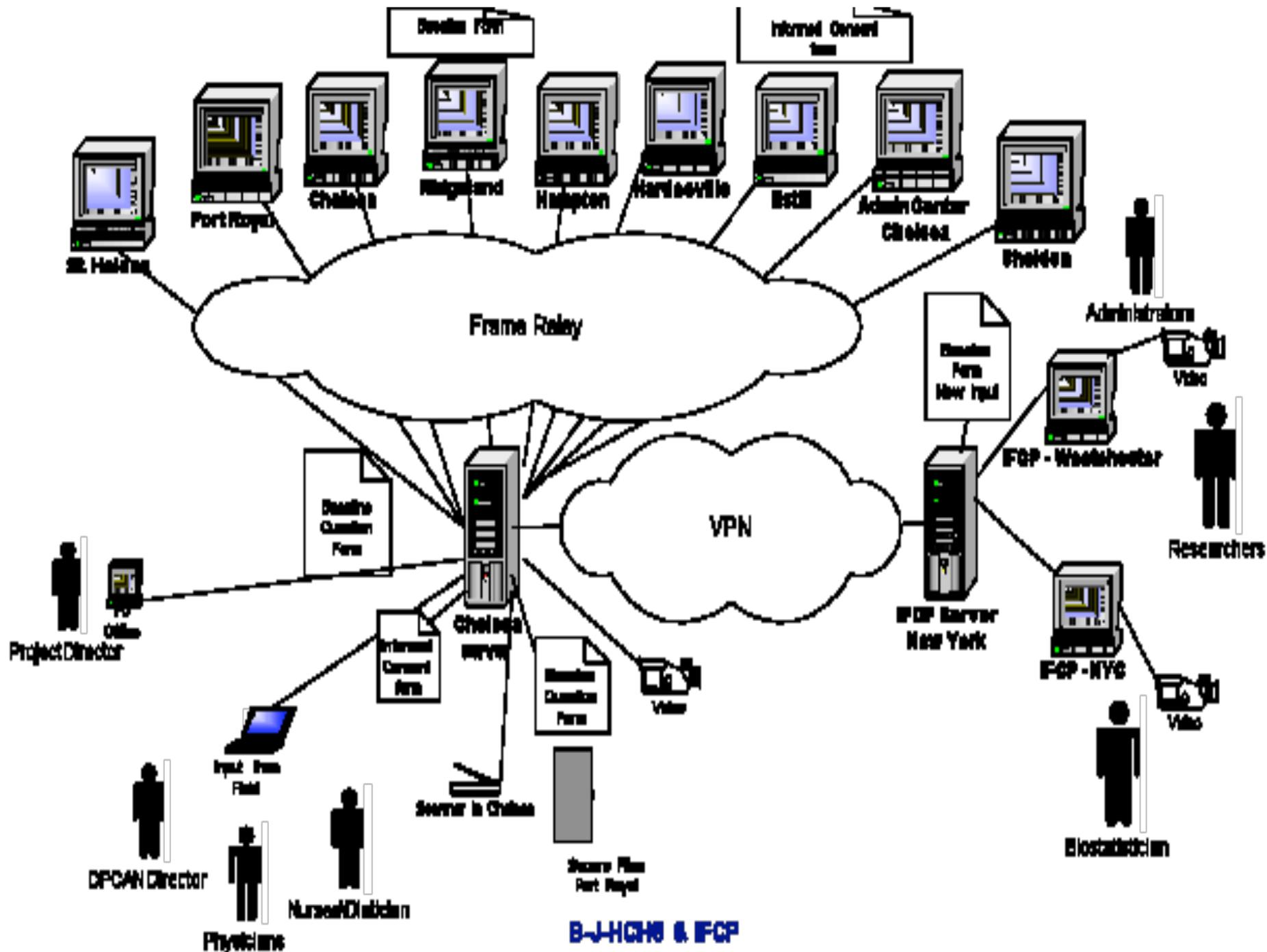
Population Study

Success

- Enabled the purchase of network technology and video conferencing equipment
- Overcame constraints of distance and cost through technology
- Recruited 420+ men into the study

Unsuccessful

- Used paper forms – minimal application of electronic data storage
- Research institution went bankrupt and some original data and samples were lost

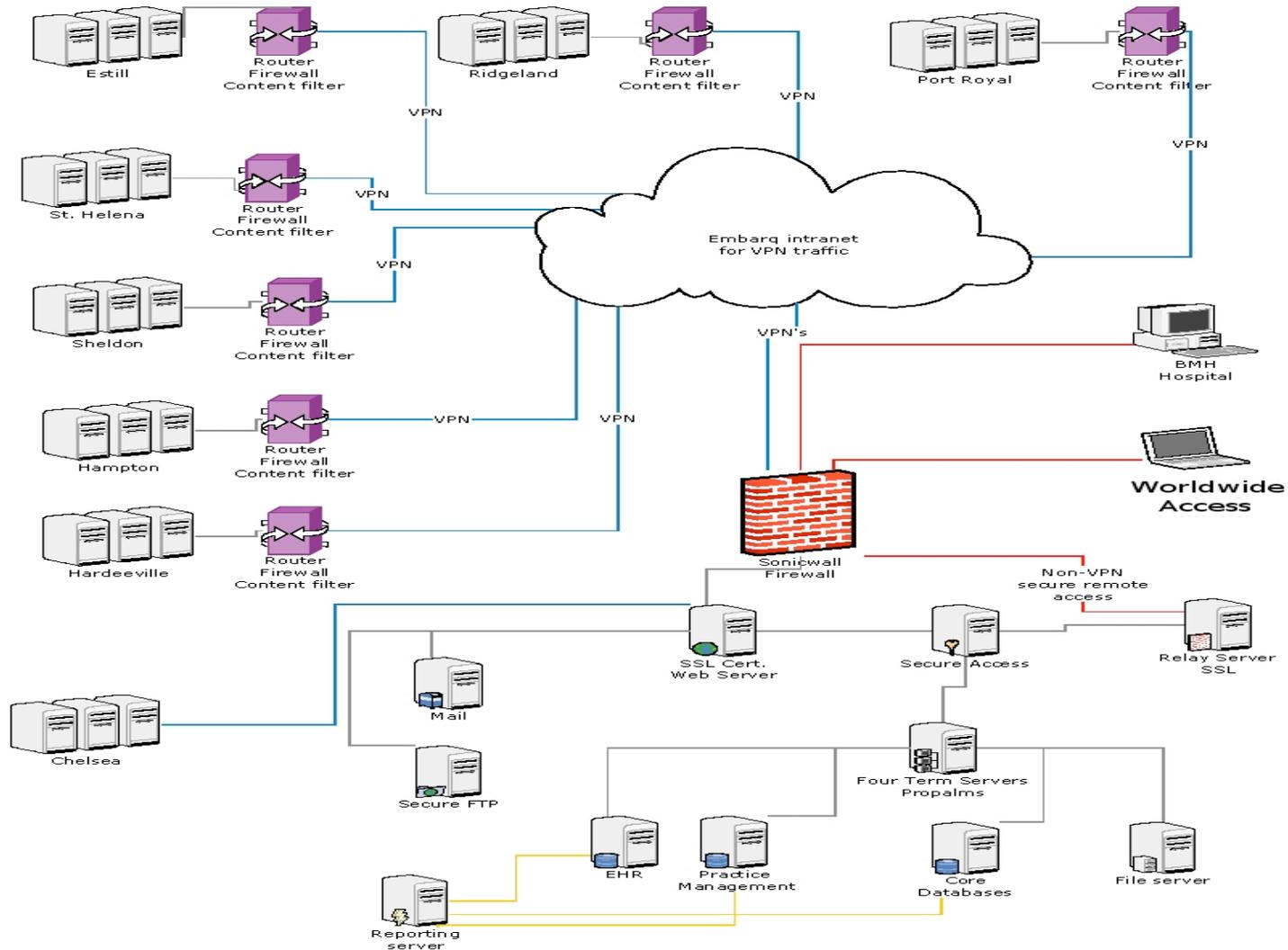


B-J-HCHS & IFCP
Data Access and Security

Research Model

- Used Electronic Health Record system understand the universe
- Developed an electronic data base enabling potential participants to be seen at any of the 8 BJHCHS centers
- Web based virtual office established for all participants from inside and outside of agency to share documents, set meetings, review copies of text, store vital documents, etc.
- Established a foundation for use of HIT technology for future research studies

Current IT Network at R.I.H.C.H.S



Lessons Learned

Our IT Director, Jeffrey Ratzel studied under the famous Dr. Murphy.

Here is some of Mr. Ratzel's wisdom advancing the foundation of his lessons from Dr. Murphy:

Lesson Learned

Ratzel's First Law:

- Technical solutions can be developed, but human relations issues enabling the use of any given technical solutions will likely be a bigger obstacle.

Lessons learned

- The best work of the scientists at IBM's experimental research laboratory resolved the specific technology issues.
- The community Urologists could not resolve their differences with:
 - the perceived threat of the Medial University's Department of Urology encroaching on their patient base
 - Suspicion of encroachment by BJHCHS

Lessons Learned

Ratzel's Second Law:

A well defined technical solution will never overcome a poorly defined hypothesis.

Lessons Learned

- The technology applied to one of our research models overcame the cost of a working relationship with a distant partner, collect data accurately at many different locations and manage patient relationships
- The protocol designed around the hypothesis made it impossible to recruit participants into the study.

Lessons Learned

Ratzel's Third Law:

The most complex, and by definition, most expensive IT solution has a high probability of not being the best solution.

Lessons Learned

- Our second project received more than a million \$.
- The technical solution was adequate but not efficient and left us without our hard earned data set.

Lessons Learned

Ratzel's Fourth Law:

Dead end solutions require very little thought

Gardner's Axiom:

Multiple perspectives mixed with a tincture of time will usually yield cheaper, more comprehensive results

Lessons Learned

- Throughout we knew that we needed to make sure our mission as a CHC was enhanced by our participation in research programs
- We realize that many heads are better than one as we review our potential participation with our senior staff and board members.

Lessons Learned

Ratzel's Fifth Law:

The evolution of available IT solutions for any given research question will always far outpace today's given solution.

Lessons Learned

Gardner's corollary to Ratzel's Fifth Law:

**You have to start some where, some
time!**