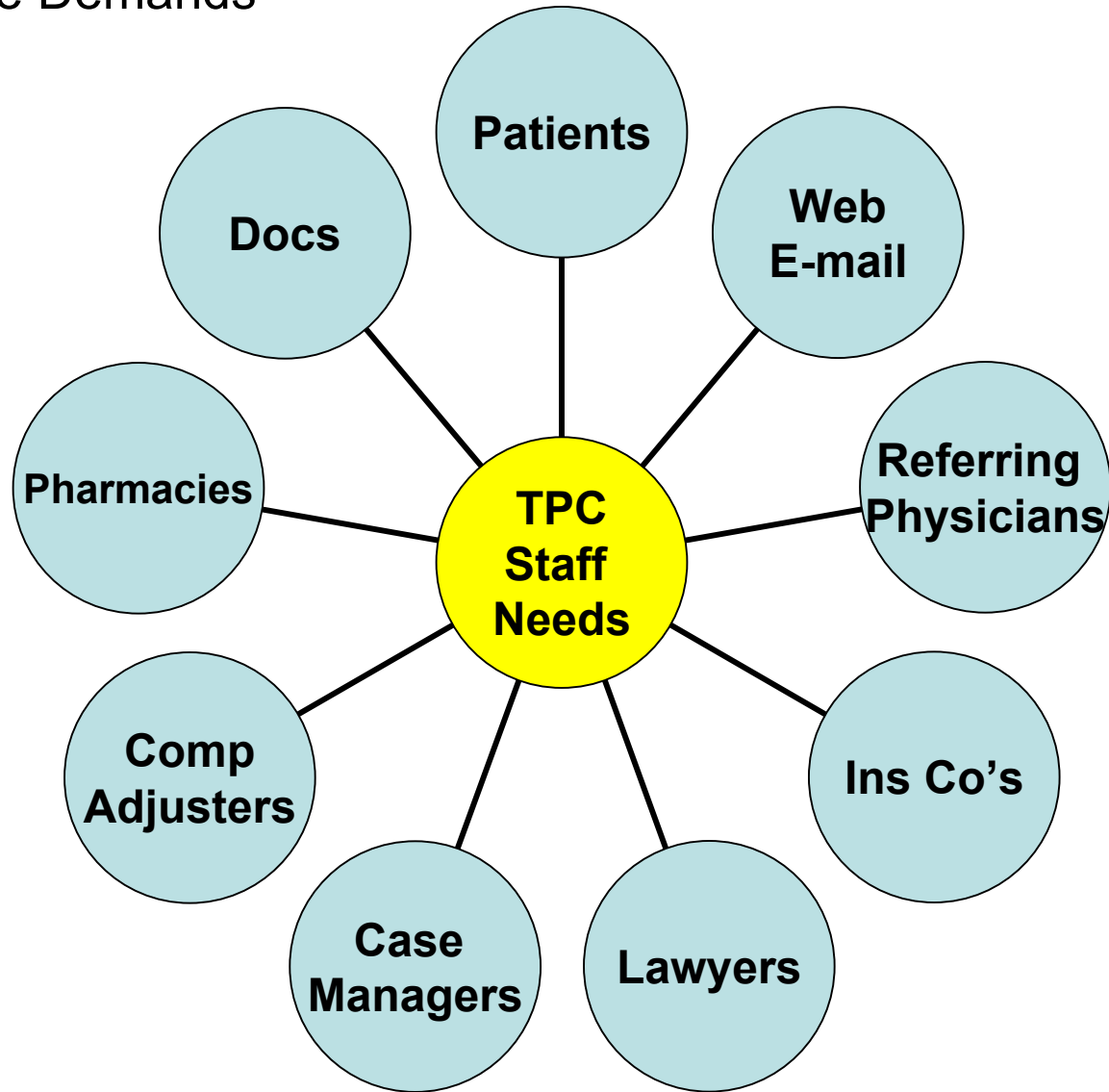# 6.01 Physicians and Physician Organizations: Case Studies that Highlight HIT Strategies Within Medical Practices

Tulsa Pain Consultants

2002 to Present

A Journey Through EHR Integration

Typical Office Demands

State of the practice in 2002

Operations

- 3 physicians
- 15 FTEs
- Fragmented Office
- Unclear Direction
- Outsourced Billing and Dictation
- Temporary Labor

Information Systems

- Unix Server
- 3 Fax Machines
- IBM Typewriter
- Fragmented Network
- 6 Bubble Jet and 2 LaserJet 3 Printers
- Dumb Terminals and Win 95 pc's (64MB)

Factors Driving Investment

- Adding more physicians
- HIPAA
- Additional remote office locations
- Privileges at additional hospitals
- Off site storage costs
- Labor costs to manage paper
- Duplicity because of simultaneous chart need by various individuals and depts.
- Difficulty

State of the practice in 2003

Operations

- 4 physicians + PA
- 28 FTEs
- Structured Office
- Clear Leadership and Direction
- In-House Billing
- Team Oriented

Information Systems

- Dedicated Network w/WAPs
- Servers: Unix, Exchange, Fax, Terminal, Dictation, NT,
- Network Services
- 3 HP LJ 4100
- Tablet pc's, 35 Win XP pc's (256MB)
- New UNIX based phone system
- T1 lines
  - Voice
  - Data
- Scanners
  - Cannon 3020 X2
  - Insurance card USB scanner
  - Fujitsu
- Firewall

Integration

- Early 2002 decision was made to modify corporate culture

- Invest in Technology

- Develop "Team Oriented" approach to operations

- Center/Build Practice and Operations Around Systems

IS @ TPC

- Transcription svr
- Exchange svr
- Unix Svr
- Windows 2003 svr
- Fax svr
  - Incoming 2x
  - Outgoing

- 35 pc
- 3 tablets
- 3 scanners
- 2 waps

Current Software

Server

- ezChart
- ezFile
- Medical Manager
- Bytescribe
- Exchange 2003
- SQL 2003
- Veritas Back-Up Exec
- Windows Server 2000 and 2003
- MARS

PC's

- Windows XP
- Office XP
- Terminal Emulation

Places of Service

2002

- St. John APC
- Southcrest
- Tulsa Regional

2003

- St. John APC
- Southcrest
- Tulsa Regional
- Tulsa Spine Hospital
- Orthopedic Hospital of Oklahoma
- Jane Phillips Med Ctr

IT infrastructure

- T1 Voice
- T1 Data
- Firewall
- Unix Based Telephone System

ezChart

- Repository for all clinical information
- Does not require doctor to change practice patterns
- Integrated with Medical Manager
- 2 incoming and 1 outgoing fax servers
- Dictation is managed and signed electronically
- Staff dialogues appended to chart
- Rx module minimizes errors and enhances security
- Web Access
- Alerts
- Security
- Pen/Mouse Driven
- Tablet PCs

Terminal Server

- Web Access
- Microsoft RDP Client
- Active X Component
- 128 bit encryption

ezFile

- Repository for everything that is NOT clinical, i.e., EOBs, encounter forms, contracts, credentialing, etc.

- Desktop faxing

- Secure

Medical Manager

- Scheduling
- Billing and Collections

Bytescribe

- Digital Dictation
- Browser Driven
- "First In" – "First Out"
- Documents Indexed and Typed then Sent on to Doctor for Electronic Signature

MARS

- Medical Accounts Receivable Software
- Interfaces with Medical Manager
- Payor Timeline and Practice Expectation Initiate Formal "Letter Writing" Campaign from 3rd Party Collector
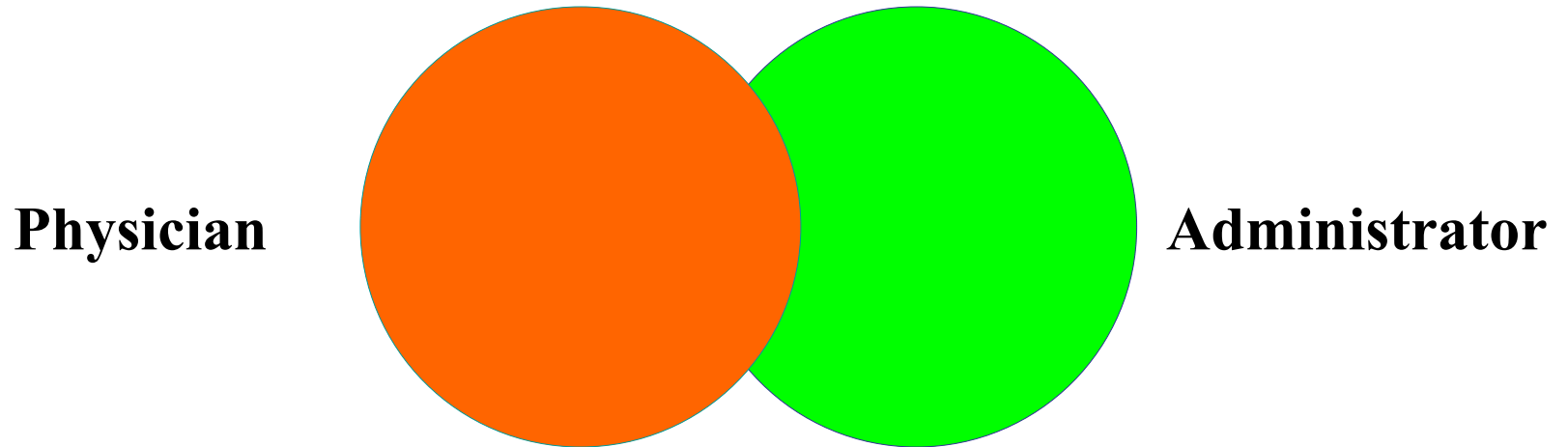- Nightly FTP Interface Eliminates Problems

Benefits Realized from HER and

- Secure Chart
- Retrieval Times
- Interface with Practice Management System Eliminated Need to "Pull Charts"
- Real Time, Documented Communication
- Web Access and 24 hr Chart Availability
- Decreased Paper/Supply Needs
- Patient/Referral Needs or Questions Answered Immediately
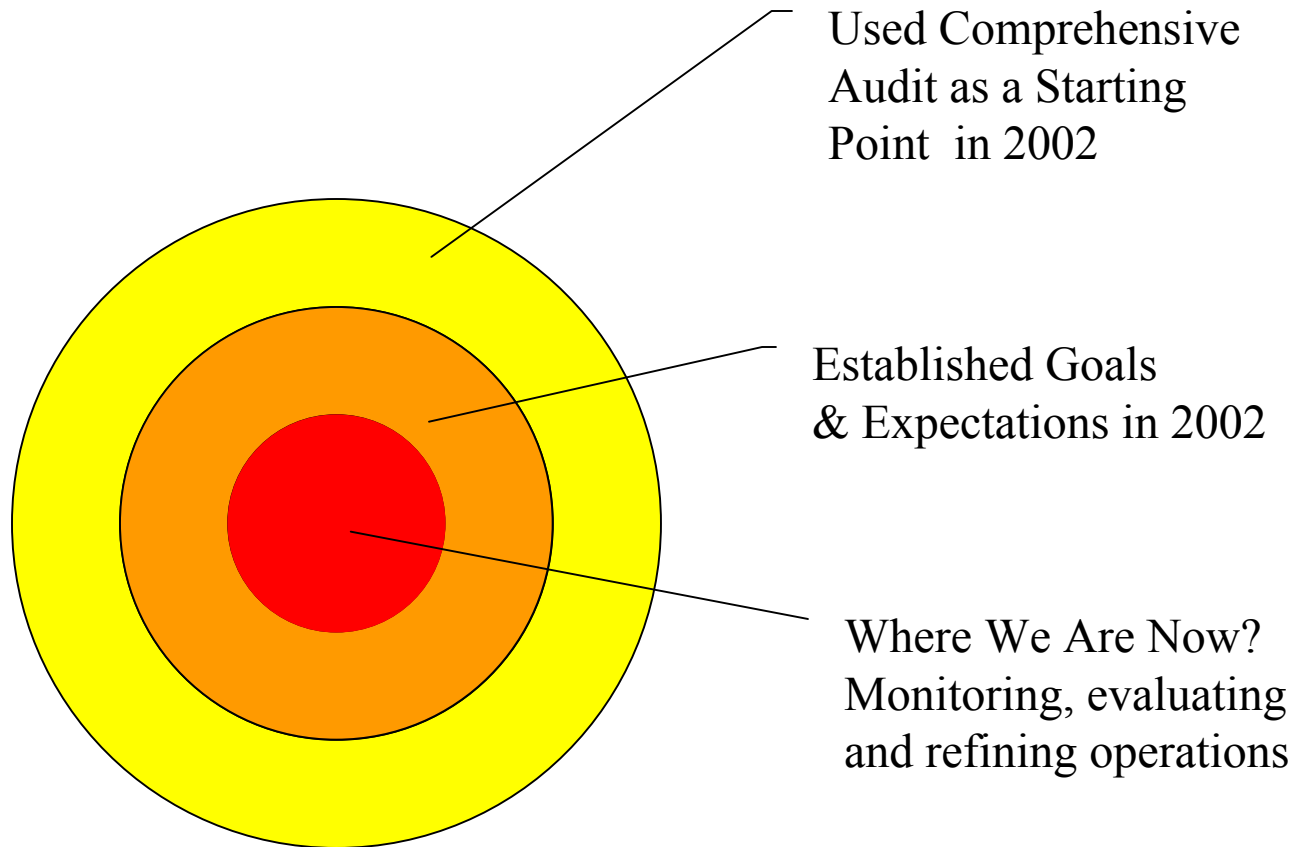- Desktop Faxing
- Chart Available Simultaneously

EHR Risks if not Managed/Monitored

- Back-Up
- Network Down Time
- Software Upgrades
- Technology Acceleration
- Firewall Vulnerability
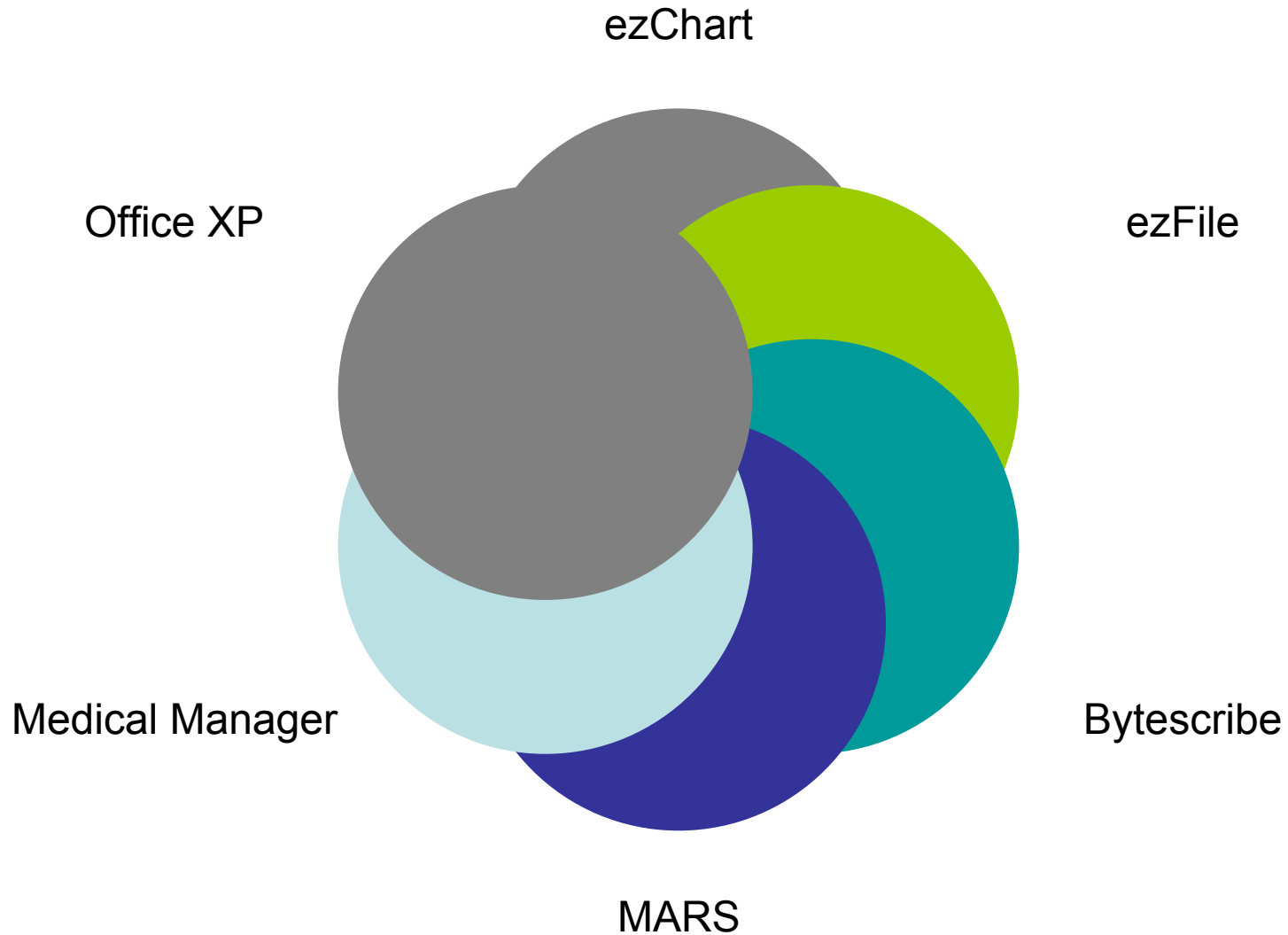- Staff Competency
- Desktop/PC Support

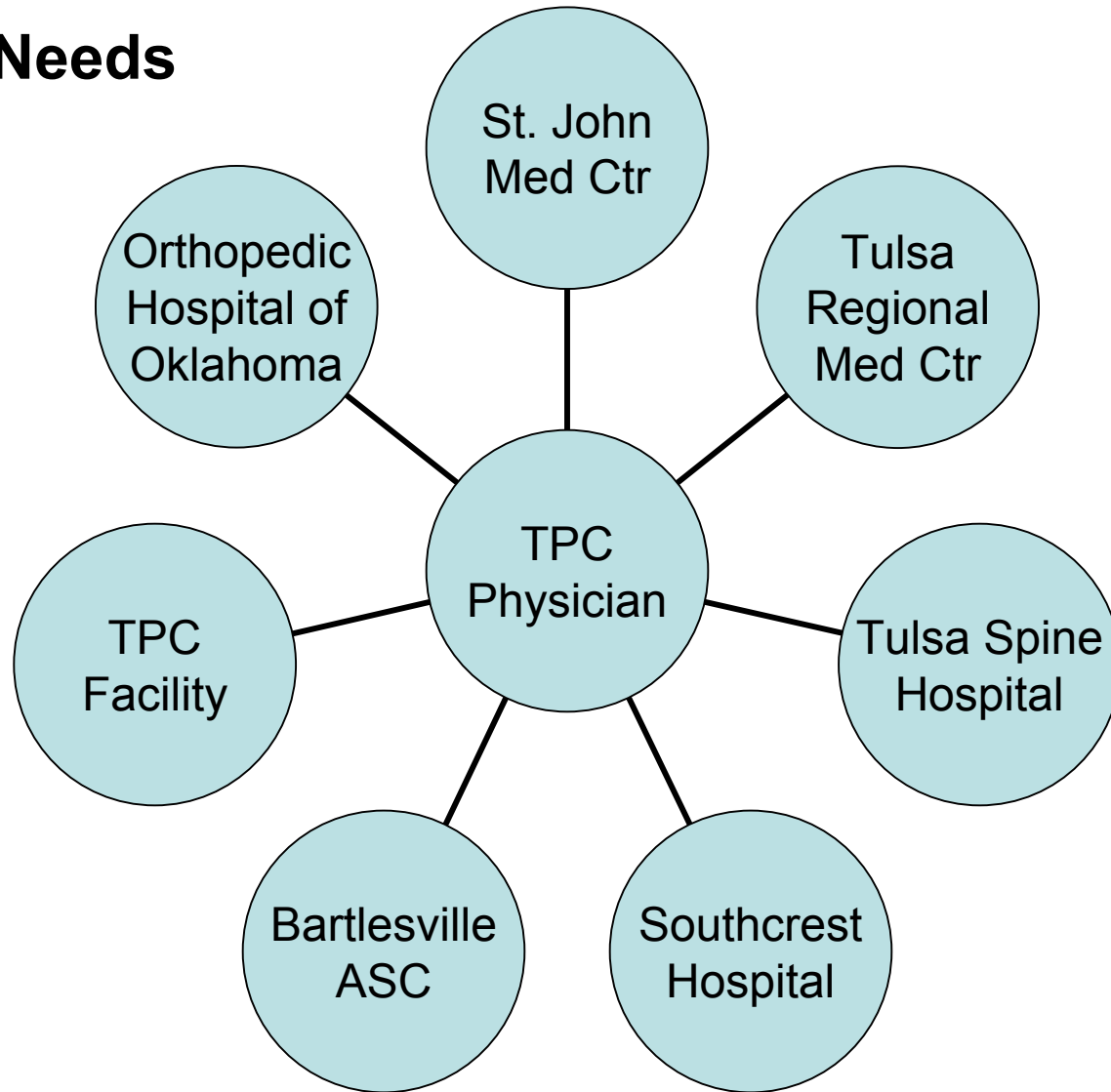# What it takes to pull this process off:

Physician

Administrator

What Made/Makes it Happen:

Used Comprehensive
Audit as a Starting
Point in 2002

Established Goals
& Expectations in 2002

Where We Are Now?
Monitoring, evaluating
and refining operations

How we use the pieces:

ezChart

Office XP

ezFile

Medical Manager

Bytescribe

MARS

Remote Needs

Body of Knowledge

Financial Mgmt

Information Mgmt

Human Resource Mgmt

Medical Practice

Risk Mgmt

Planning & Marketing

Governance & Organizational Dynamics

Business & Clinical Operations
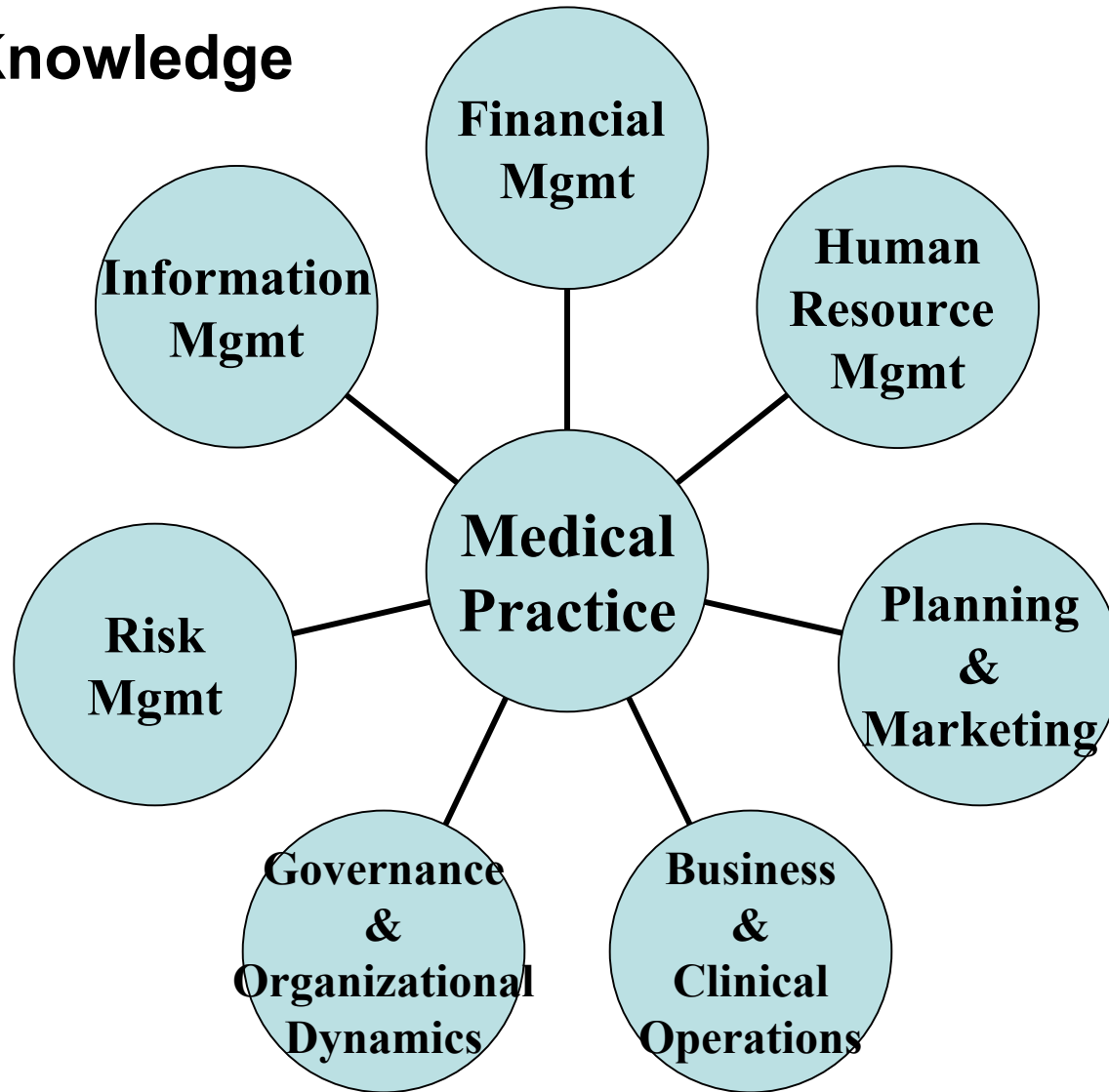
Signs of Success

- 60% revenue growth in 2003
- Added doctor & PA without FTE increase
- Eliminated all direct costs associated with building and maintaining paper charts
- Increased indexing (filing) help with current staff matrix
- Telephone calls answered at the time received
- Doctors embracing and utilizing software
- Virtual office requires only telephone and computer
- Days in A/R decreased
- Cash flow increased
- Common for network resources/files to be centrally managed by front line managers for staff to view

Matt Griffin, MPH, CMPE

Tulsa Pain Consultants

918-745-6211

matt@tulsapain.org