

# *The Economics and Finance of the Healthcare Internet*



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**Greystone.Net, Inc.**

# *Greystone.Net, Inc ... Intro.*

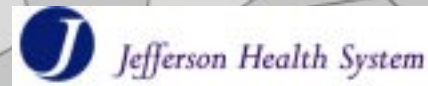
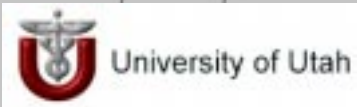


- **Strategic Internet Planning Firm ...1996.**
- **Strong healthcare experience throughout the company.**
- **Every month we review over *three million* user sessions (**information on how consumers are actually using health system web sites**)... allowing for benchmarking and business intelligence.**

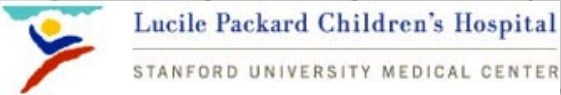




Sutter Health



JOHNS HOPKINS MEDICINE



Uva Health System



UAB HEALTH SYSTEM





When talking economics...

*Evolving Business  
Model*

# *Facilitating the Internet Strategic Vision*

- In healthcare the Internet has been thought of as a **technology or marketing** opportunity without realization of the evolving **new business model**.
  - Amazon Vs Barnes and Noble
  - Schwab Vs Merrill Lynch
  - other industries include travel, banking and retail
- Healthcare Web sites as **electronic billboards** have finally started to evolved into:
  - cost cutting,
  - service improvement,
  - transaction-oriented... **differentiation strategies**.



**Not an Information Revolution**

***But a Relationship  
Revolution***

# *Healthcare Power Shift*



- The web is no longer primarily about health information .... it is about

*transactions*

*and*

*consumer (patient) empowerment.*

**(and that changes the economics)**





**Greystone Mantra:**

***Strategy Matters***

# *Internet Strategy Development Barriers*



- No formal process of consideration and development specifically focused on the Internet .... **“strategy development is a purposeful process.”** *Michael Porter*
- No structured transition into a **Web-centric** culture.
- **Single/Dual Department Sponsorship.**
- **No multi-disciplinary senior level planning process** to craft and introduce this new business model ...



**Greystone Mantra:**

***Business and Financial  
Planning is Critical***

*Not referring to IT plan*

# *What does an Internet Business Plan provide ?*

- **Consensus** around your Internet vision or digital business model (for all key players)
- Provides a “**perspective**” on this new healthcare digital business model.
- The opportunity to **manage expectations and set ROI.**
- 4. A “model” to **measure vendor products** and other opportunities back against.

# *Business Plan Format*



- **Assumptions or Rationale**
- **Positioning Strategy**
- **Target Markets Analysis and Goal Development**
- **Environmental Assessments**
- **Internet Business Strategies (6, 12, 18, 24 months)**

**Infrastructure**

**Content and Functional Development**

**Operations Improvement**

**Revenue Generation**

**Organizational Web-culture**

**Marketing the Web Site**

**Tracking, Evaluating and Reporting (ROI)**

## *Business Plan Format...continued*



- **Budget -- Capital & Operating (2 years) ...virtual P&L**
- **Implementation Schedule**
  - **Responsible Party**
  - **Completion Date**
- **Appendices...**
  - **Policies and Procedures (basis for culture)**
  - **Marketing Phase-in Schedule**
  - **Content and Function Phase-in Schedule...let's talk.**

# *Clinical Content*



## **Strategic Issues** to consider (see handout)

- **Branding**
- **Ownership**
- **Editing ... Enhancements... Updating**
- **Search Engine performance**
- **Transaction accommodating ?**
- **Exit options**

# *Clinical Content*



## **Financial Issues**

to consider (see handout)

1. **Initial cost** and **“3 year total”** costs
2. **“Migrate”** costs
3. **Opportunity** cost
4. **Maintenance**
5. **Exit** costs





**Costs will be influenced by:**

***Web Culture***

# *The most over-looked issue*

## *Organizational Development*

- Content developed as a **by-product** of current work.
- **Revised Job Descriptions.**
- **Job Performance** for 2000 and 2001 that is partially based upon web application development.
- Organized efforts to change **culture.**
- The proper tools to support a change in culture – **Browser Based Web Content Development and Management Software.**

# *Organizational Development*

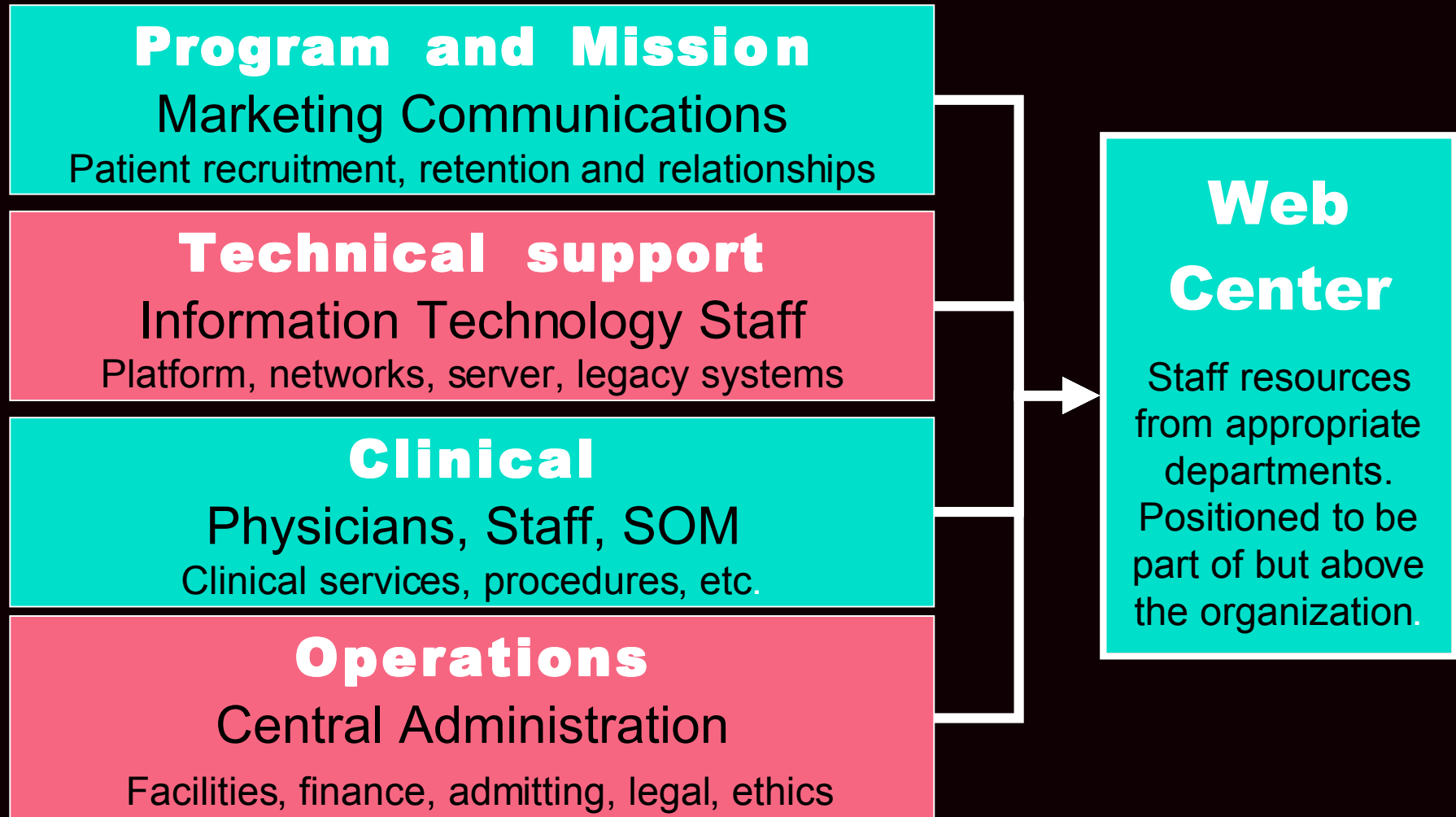


**In addition to Culture ... you must have  
some administrative structure.**

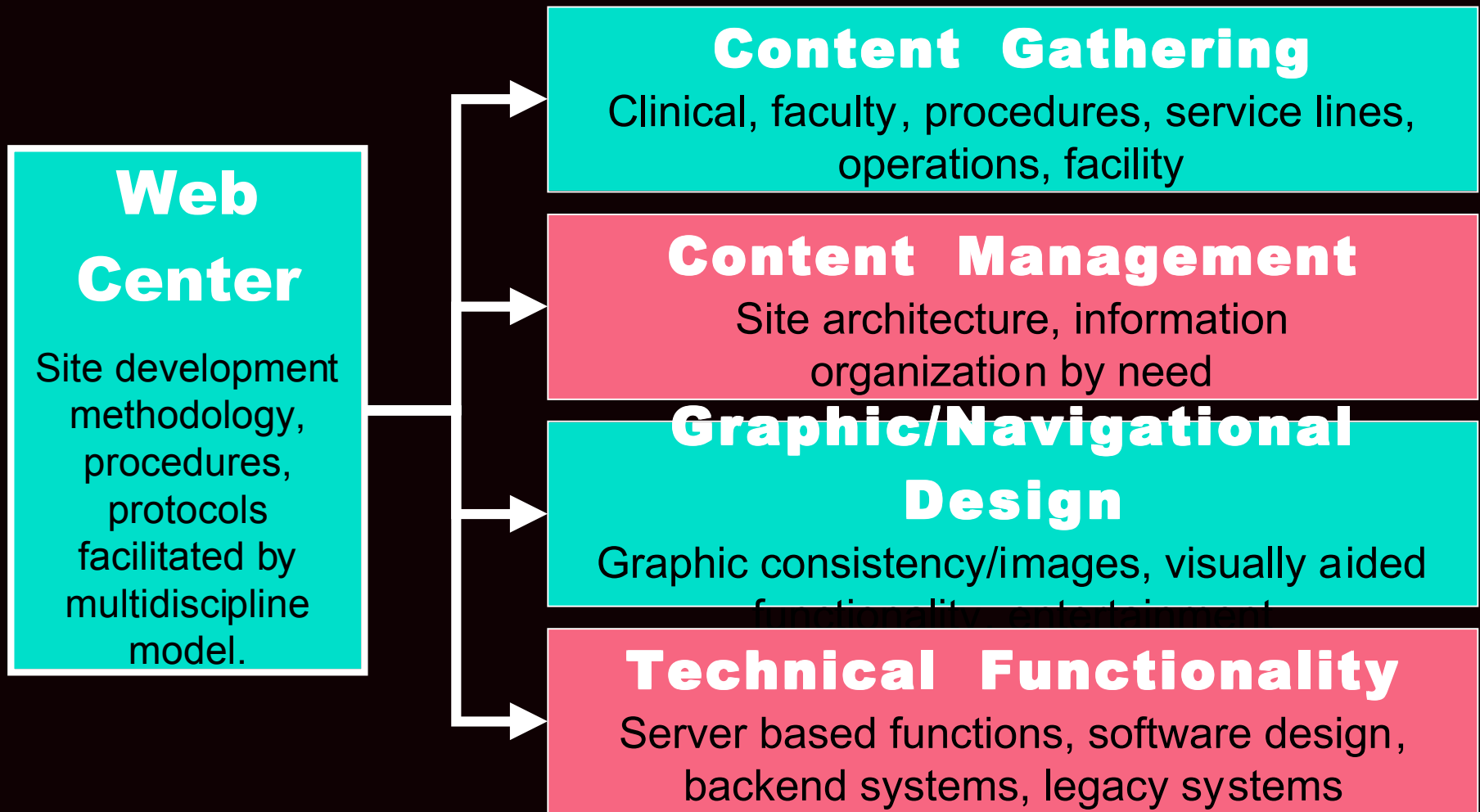
**Seeing a growing use of the...**

**Web Center**

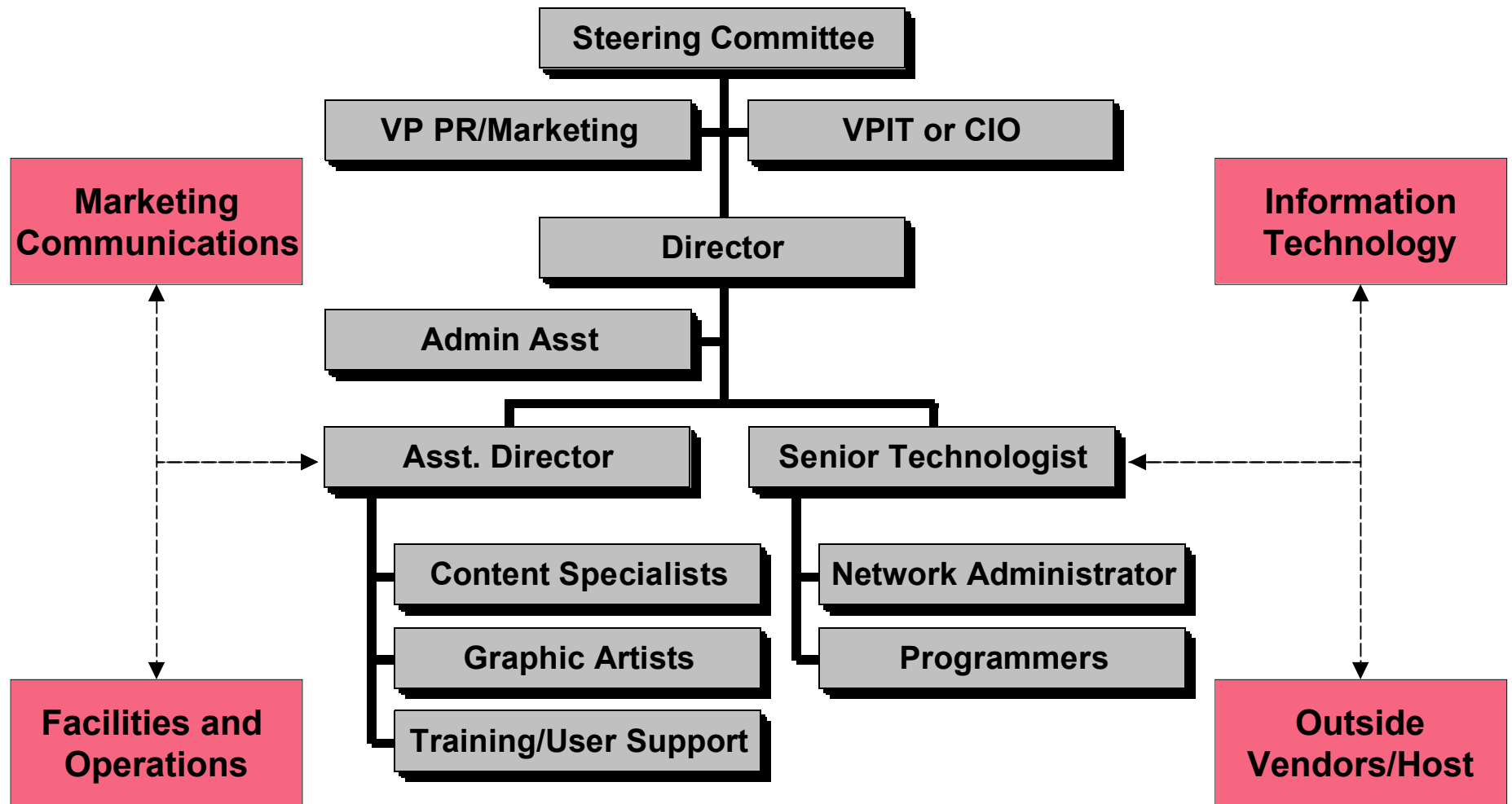
# *Web Center Concept: **Division of Responsibility***



# *Web Center Concept: **Division of Activity***



# *Web Center Organizational Structure*



*Senior Management Team*

**Administrative  
Director**

**Advisory  
Groups**

**Work Groups**

**Web Resource Center**

**Clinical  
Advisors**

**Internet  
Partnership  
Assessment  
Team**

**Web Resource  
Center Director**

**Marketing  
Advisors**

**Internet  
Advisory  
Council**

**Project  
Manager**

**Site/Graphic  
Design  
Coordinator(s)**

**Content  
Manager**

**Training  
Coordinator**

**IT  
Advisors**

**Senior Web  
Technologist**

**Information  
Technology**



*Budget  
and  
Return On Investment*



# *Web Site Development Phases*



- Phase I - Information**
- Phase II - Interaction**
- Phase III - Transaction**
- Phase IV - Personalization and Portal**

# *Annual Budgeting & Capital Investment*



- **Phase I - \$300,000 to \$400,000**
- **Phase II - \$500,000 to \$600,000**
- **Phase III and IV - \$1,200,000 ++**

## *Yes, but what about ROI*



- The return on investment for ***transaction oriented Internet applications*** is well documented in financial services and other industries.

# *Internet Impact on Transaction Costs*



- **Airline Ticket Processing Costs:**

**Travel Agent with a computer  
reservation system..... \$ 8.00**

**Internet reservation and purchase  
by traveler..... \$ 1.00**

*U.S. Department of Commerce, 1999*

# *Internet Impact on Transaction Costs*



- **Banking Costs per Transaction:**

1. **Through a Teller at a Branch..... \$ 1.07**
2. **Through the Telephone..... \$ .52**
3. **Using an ATM ..... \$ .27**
4. **Using the Internet..... \$ .01**

*U.S. Department of Commerce, 1999*

# *Yes, but what about healthcare*



- Healthcare organizations are under intense cost pressures - the **cost reductions** possible from Internet transaction applications could offer a real competitive advantage.

## **Efficiencies in ...**

- **Operations**
- **Clinical Services**
- **Marketing**

# *Internet Impact on Transaction Costs*

## **Managed Care Referral Costs Insurance Eligibility and Coverage**

- 1. Completing referral form, transmitting to specialist, transmitting to health plan for authorization, dealing with denials and receiving approval.....2 hours... \$ 70.00**
- 2. Internet submission and simultaneous transmission .....10 minutes... \$ 10.00**

*Modern Health Care, August 9, 1999*

# Sample ROI Issues

- **Target Market (user) driven**
  - Consumers ... market share, payer mix, e-retailing.
  - Patients ... retention, cost reduction, quality, etc
  - Physician ... operations improvement, productivity, patient referrals, risk management.
- **Match** the stage of your evolution to the stage of ROI evaluation...*Phase I development, then Phase I evaluation.*
- **Leading and Lagging indicators.**



## *Evolving ROI Measures*



- Leading Indicators for **consumer** focused web:
  - Monthly increases in **consumer web site user visits**.
  - **Revenue from book and medical supplies** sold over the web site.
  - Monthly increase in **calls going to the Call Center** that cite the reason they are calling is because of the web site.
  - Growing number of people registering for **PUSH**.

## *Evolving ROI Measures...continued*

- Lagging Indicators for **consumer** focused web:
  - **Increased revenue from patients** with no previous medical record directly attributable to the web site (or a change in payer mix).
  - Increase in consumers participating in **clinical research trials** directly attributable to the web site.
  - Increase in consumers registering to attend **educational classes and programs** directly attributable to the web site.

# *Negotiating ROI*

- Should be **done during planning stage**...not at the end of the fiscal year.
- Specific **accountability must be established** ...tied to budget.
- Convergence of the **technology will make ROI determination easier** in the near future.
- **Allow for enough elapsed time** to properly measure ROI.

# Conclusions



- Healthcare organizations must **evolve their strategies and infrastructure** to match the evolution of the new Internet Healthcare Business Model ... going from:
  - ✓ **static marketing sites to ...**
  - ✓ **transaction oriented relationship development business strategies.**

## *Conclusions*

- The Internet is a fundamental change in our business relationships with primary audiences ... **it is a new business model.**
- The Internet requires a **culture change** where administrators / physicians rethink healthcare business and clinical processes, leveraging the Internet.
- While the Web is the most **efficient relationship development tool** available ... it is, however, still the most underutilized new business strategy in healthcare today.

## *Conclusions*



- In this rapidly changing environment, a solid business plan is essential to:
  - **crystallizing vision**
  - **coordinating development**
  - **securing required resources**
  - **demonstrating value**



**Thanks for your attention  
and  
we will field questions in a few minutes.**