The Economics and Finance of the Healthcare Internet

John Eudes
info@greystonenet.com

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.
When talking economics…

Evolving Business Model
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**

**Program and Mission**
Marketing Communications
Patient recruitment, retention and relationships

**Technical support**
Information Technology Staff
Platform, networks, server, legacy systems

**Clinical**
Physicians, Staff, SOM
Clinical services, procedures, etc.

**Operations**
Central Administration
Facilities, finance, admitting, legal, ethics

**Web Center**
Staff resources from appropriate departments. Positioned to be part of but above the organization.
Web Center Concept: *Division of Activity*

**Web Center**
Site development methodology, procedures, protocols facilitated by multidiscipline model.

**Content Gathering**
Clinical, faculty, procedures, service lines, operations, facility

**Content Management**
Site architecture, information organization by need

**Graphic/Navigational Design**
Graphic consistency/images, visually aided functionality, entertainment

**Technical Functionality**
Server based functions, software design, backend systems, legacy systems
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.