Evaluating Disruptive Technologies in Healthcare

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at
The Institute for the Future



Our Mission

- Advance the adoption of new technologies in healthcare
- Pooled research from a non-profit base





Funding Partners

- GPOs: VHA, Premier (70% of all hospitals)
- Hospital-based Systems: Sufter, Kaiser, Others
- Health Plans: Kaiser, Group Health, Wellpoint
- Consulting Firms
- Venture Capital
- Rapid growth: \$3M raised in Q3 2000, \$2M in 2001



Market Failure

- Accelerating pace of new technologies
- Health sector slow to adopt
- Costs outpace resources
- Regulatory bodies swamped
- Providers and plans fragmented, small
- Investors wary, intrigued by potential



Hospital Systems and Insurers

- Need forecasts of technology pipeline and impact on:
 - Hospital Construction
 - Workforce Needs
 - Clinical Programs
 - Market Strategies



Federal Policy, Health Plans

- Need information on pipeline technologies
- Need framework for deciding coverage & reimbursement
- Need neutral ground for discussions with developers, users of technology



Venture Capital, Other Investors

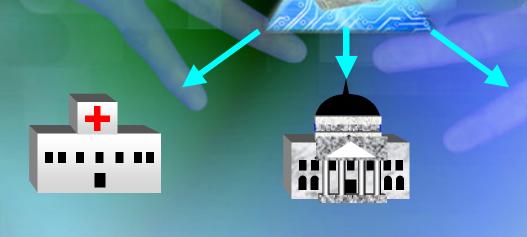
Need -

- Healthcare market insights
- Database on all technologies under development
- Access to clinical researchers and developers, management teams
- Forums for discussion with GPOs, plan and delivery system leaders, federal policy makers



One Part of a Solution

Establish a public-private partnership to create the knowledge, make it readily available, and help healthcare institutions, policy makers and even consumers use it.



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Technological Breakthroughs

- ▲ Inhaled Insulin
- PACS and IT Platforms
- Sensors: ICU in a Gurney
- Remote services: VISICU
- Physician receptivity: survey
- Telecom and Platform Convergence



- Nature of Scientific Advances
- Probable Products and Services
- Insurance, Delivery Systems Impact
- Cost & Reimbursement Considerations
- Developers & Potential Partners
- Strategic Assessment Framework
- Timelines & Wildcards





Product Offerings

- For Delivery Systems and Health Plans:
 - A Secure, Interactive Web Site
 - Annual Networking Conferences
 - A Summary Chart Book



Product Offerings

- **▲** For Consumers:
 - Information About Emerging Technologies
- **▲** For Policy Makers:
 - Analyses of reimbursement and coverage barriers to the use of technology to improve safety, quality, costs and outcomes.



Chartpack

Health Technology Center/Institute for the Future

Survey:

Internet Use by Medical Groups

March 20, 2001

85% use at least one Internet-enabled application

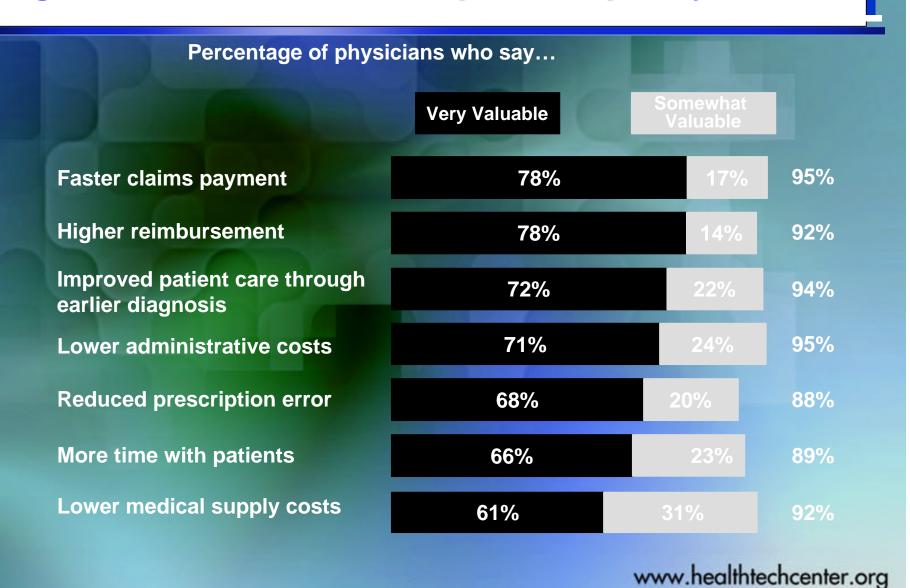
General medical research and news	71%
Access guidelines or protocols	50%
Submitting claims and claims status inquiry	35%
Diagnostic reporting (order or lookup data)	34%
Access pharmaceutical information	34%
Information technology support	31%
Communicate with patients (by email)	29%
Eligibility authorizations	29%
Purchase medical products	29%
Referral authorization	24%
Receive payments, earned remittance	21%
Electronic medical records	19%
Data analysis	18%
Document patient encounters	10%
Order and verify prescriptions	7% n = 215
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Over 80% agreed Internet applications were essential or important

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	Essential	Important	
General research, news gathering	45%	44%	89%
Diagnostic reporting (order, look up)	43%	45%	88%
Eligibility authorizations	43%	43%	86%
Assessing guidelines, protocols	31%	53%	84%
Submitting claims; claims status inquiry	38%	46%	84%
Information technology support	35%	49%	84%
Referral authorizations	38%	42%	80%
Accessing pharmaceutical information	31%	53% www.neaimiec	84% hcenter.org

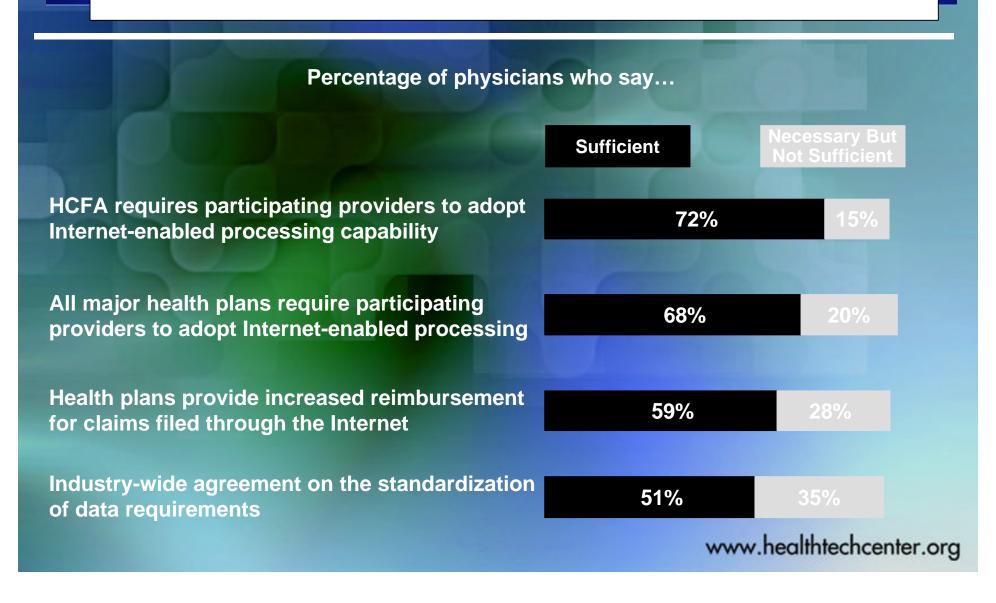
Value of Internet-enabled services: efficiency, higher reimbursement, improved quality of care



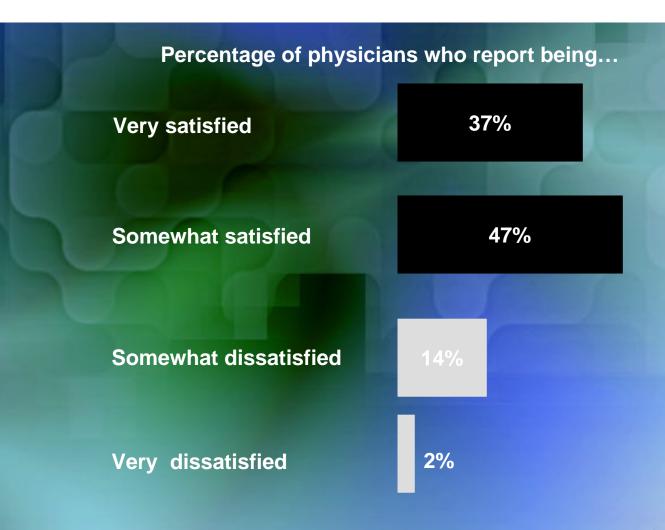
Physicians identified six barriers to broad-scale adoption of internet services

Percentage of physicians who say				
	Major Barrier	Minor B		
Lack of compatibility between systems	58%	35%		
Lack of resources to convert paper records	51%	39%		
Inability to find real world systems	50%	36%		
Lack of capital for investment	49%	40%		
Physician reluctance to change	45%	45%		
Concerns about confidentiality on the Internet	44%	44%		

Action by HCFA and major health plans would trigger rapid adoption



85% of surveyed physicians are satisfied with their current practice organization



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