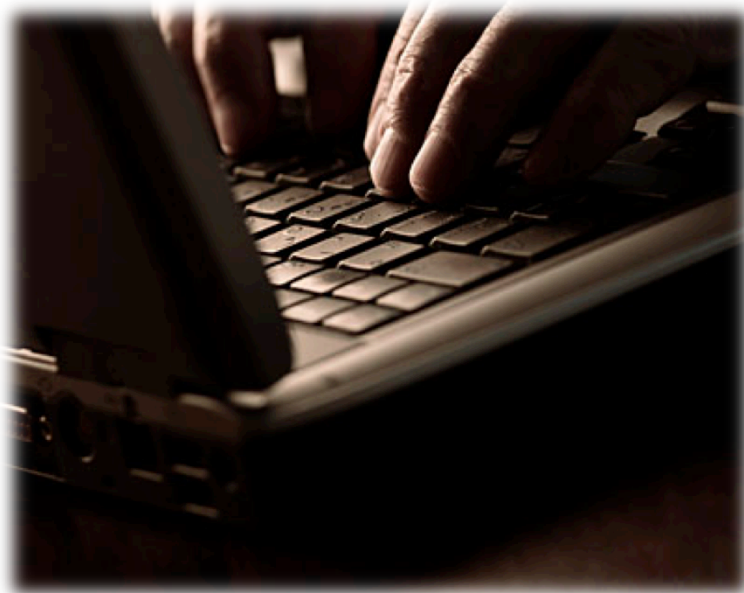


# Implementing Electronic Behavioral/Mental Health Records (EbmHR)

Background | Benefits | Barriers



NIATx

Oakwood Clinical Associates

May 11, 2010



*“Electronic health records reduced my job from  
40 hours down to 8 hours.”*

Nancy Lowndes

Coding & Billing, Oakwood Clinical Associates

January 2010



**CHANGE**

# Agenda

- Background
- Why adopt?
- Implementation barriers & recommendations
  - Financials
  - Workflows
  - Users
- Conclusion
  - Are you ready?
  - Key success factors



# Your Presenters

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# About NIATx

*“To improve treatment access & retention by teaching simple process improvement methods to behavioral & mental health providers.”*



THE UNIVERSITY  
*of*  
**WISCONSIN**  
MADISON



Dr. David Gustafson

# About Oakwood

- Kenosha, WI (2 facilities)
- 20 employees (15 clinicians)
- Services
  - Substance Abuse (outpatient), Mental Health
  - Individual & Group Counseling
  - Psychiatry
- NextGen EMR/EPM
  - **January 2009**: Started Planning
  - March 2009: Purchased EHR/EPM
  - August 2009: EPM Go-Live
  - **October 2009**: EHR Go-Live

*“To enhance the lives of our clients by delivering exemplary psychotherapy services with lasting solution”*



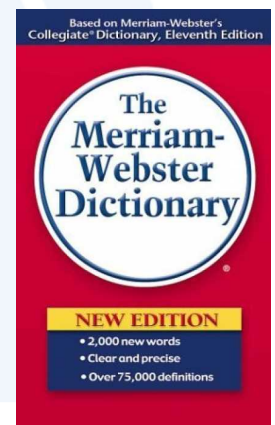


# Background



# The Problem...

## Inconsistent Terminology



# What are we talking about?

## Electronic Health Records (EHR) (**EbmHR**)

- An electronic record of health-related information on an individual that (1) includes patient demographic and clinical health information, such as medical history and problem lists and (2) has the capacity to:
  - » provide clinical decision support
  - » support physician order entry (CPOE)
  - » capture & query information relevant to health care quality
  - » exchange electronic health information with and integrate such information from other sources

*American Recovery & Reinvestment Act, 2009*

# What are we talking about?

## Electronic Practice Management (EPM)

- An electronic system that supports the business and operational processes found within medical practice...
  - Business Intelligence, Billing, Scheduling, Accounts, Reporting, Auditing, Authorization, Claims & Revenue Management, Information management, Facilities Management, Human Resource Management, Referrals, Risk Management, Supply Chain Management, Workflow Management, Quality Management

*National Health Alliance for Health Information Technology, 2009*

# How many have EbmHR?



# Benefits



# Why Adopt?...The Promise

- Better productivity & efficiencies<sup>1</sup> (coordination, ↑ access to data<sup>2</sup>)
  - 38% physician's time spent writing in charts<sup>3</sup>
  - 35% - 39% total hospital costs patient & professional communication<sup>3</sup>
  - 17% - 30% health care dollar "back office" coding & claims<sup>3</sup>
- Better billing accuracy & regulatory compliance (automated coding)
- Better patient safety & reduced errors (legibility<sup>4</sup>, decision<sup>5</sup>, CPOE<sup>5</sup>)
- Better health information security (encryption, access control<sup>3</sup>)
- Better competitive advantage<sup>6</sup>
- Better financials (↑ revenues, ↓ operating costs, ↑ profits)
  - 2.5 year payback period<sup>7</sup>
  - \$86,400 estimated net benefit per PCP over 5-years with savings from...<sup>8</sup>
    - Reduced drug expenditures
    - Improved captured charges
    - Decreased billing errors



See "Additional References" slide.

# Why Adopt?...The Expectation

- External incentives & forces (HIPAA, competitors)
- Internal customers (staff)
- External customers (client/patient)
- Federal mandate (ARRA)?





# Why Adopt?...Parity

*Medical*



*Behavioral  
Mental*

# Behavioral Health Human Services Information Systems Survey

June 2009

26-question on-line survey

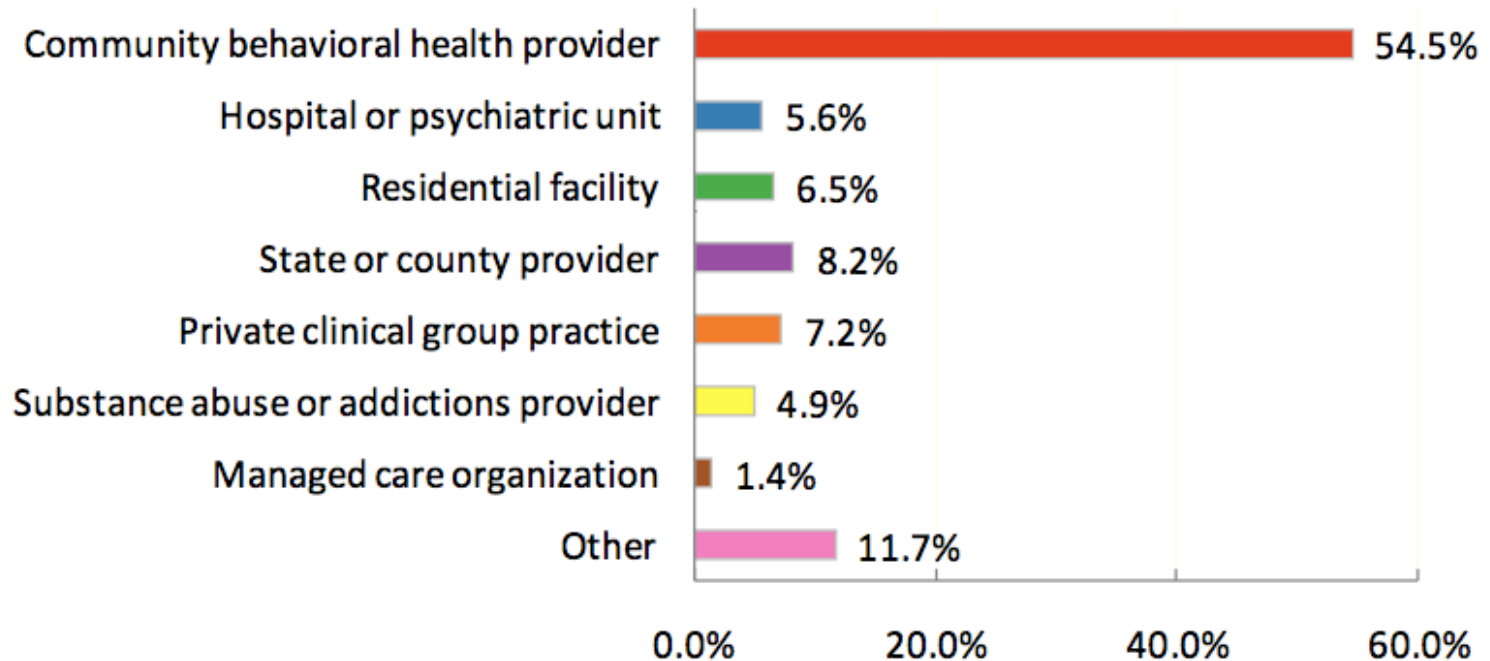
440 respondents

[www.satva.org](http://www.satva.org)



# Survey Demographics

## Organization Type



# Perception of Value

## Percentage of Respondents Endorsing Each Category for How Beneficial Electronic Medical Records Would Be to the Quality of Behavioral Healthcare, Overall and by Organization Type

(N = 349)	Not beneficial		Unsure		Beneficial		Very beneficial	
	%	N	%	N	%	N	%	N
Overall	1.4%	(5)	4.3%	(15)	21.8%	(76)	72.5%	(253)
Organization type								
Community behavioral health provider	0.5%	(1)	3.0%	(6)	16.5%	(33)	80.0%	(160)
Hospital or psychiatric unit	0.0%	(0)	5.6%	(1)	33.3%	(6)	61.1%	(11)
Residential facility	0.0%	(0)	4.0%	(1)	32.0%	(8)	64.0%	(16)
State or county provider	0.0%	(0)	3.6%	(1)	21.4%	(6)	75.0%	(21)
Private clinical group practice	11.5%	(3)	23.1%	(6)	34.6%	(9)	30.8%	(8)
Substance abuse or addictions provider	0.0%	(0)	0.0%	(0)	15.4%	(2)	84.6%	(11)
Managed care organization	0.0%	(0)	0.0%	(0)	40.0%	(2)	60.0%	(3)
Other	2.9%	(1)	0.0%	(0)	29.4%	(10)	67.6%	(23)

# Customer Satisfaction

**Percentage of Respondents Endorsing Each Rating Category of Satisfaction with Current Behavioral Health IT Vendors, Overall and by Organization Type**

(N = 295)	Very satisfied		Satisfied		Unsure		Dissatisfied		Very dissatisfied	
	%	N	%	N	%	N	%	N	%	N
Overall	19.3%	(57)	44.4%	(131)	18.0%	(53)	13.6%	(40)	4.7%	(14)
Organization type										
Community behavioral health provider	17.7%	(31)	45.1%	(79)	17.7%	(31)	13.7%	(24)	5.7%	(10)
Hospital or psychiatric unit	0.0%	(0)	23.1%	(3)	46.2%	(6)	23.1%	(3)	7.7%	(1)
Residential facility	20.0%	(4)	40.0%	(8)	15.0%	(3)	20.0%	(4)	5.0%	(1)
State or county provider	13.6%	(3)	45.5%	(10)	27.3%	(6)	13.6%	(3)	0.0%	(0)
Private clinical group practice	36.4%	(8)	54.5%	(12)	0.0%	(0)	4.5%	(1)	4.5%	(1)
Substance abuse or addictions provider	23.1%	(3)	53.8%	(7)	15.4%	(2)	7.7%	(1)	0.0%	(0)
Managed care organization	40.0%	(2)	20.0%	(1)	20.0%	(1)	20.0%	(1)	0.0%	(0)
Other	24.0%	(6)	44.0%	(11)	16.0%	(4)	12.0%	(3)	4.0%	(1)

# Why NOT Adopt?

## Percentage of Respondents Endorsing Each Barrier to the Implementation of Information Technology in Behavioral Healthcare, Overall and by Organization Type

	Barriers to implementation															
	Cost		Insufficient reimbursement for financial outlays		Speed with which systems change		Technology becoming obsolete quickly		Lack of compatibility between systems		Fear of loss of data		Fear of privacy of data being compromised		Other	
	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
(N = 354)																
Overall	89.5%	(317)	50.8%	(180)	23.4%	(83)	22.6%	(80)	47.7%	(169)	8.2%	(29)	16.4%	(58)	19.8%	(70)
Organization type																
Community behavioral health provider	93.1%	(188)	55.9%	(113)	24.3%	(49)	23.8%	(48)	49.5%	(100)	6.4%	(13)	16.3%	(33)	20.3%	(41)
Hospital or psychiatric unit	94.4%	(17)	55.6%	(10)	16.7%	(3)	11.1%	(2)	55.6%	(10)	0.0%	(0)	0.0%	(0)	27.8%	(5)
Residential facility	72.0%	(18)	56.0%	(14)	24.0%	(6)	32.0%	(8)	44.0%	(11)	12.0%	(3)	16.0%	(4)	16.0%	(4)
State or county provider	86.2%	(25)	24.1%	(7)	34.5%	(10)	20.7%	(6)	48.3%	(14)	3.4%	(1)	10.3%	(3)	20.7%	(6)
Private clinical group practice	80.8%	(21)	50.0%	(13)	15.4%	(4)	23.1%	(6)	30.8%	(8)	26.9%	(7)	34.6%	(9)	15.4%	(4)
Substance abuse or addictions provider	85.7%	(12)	42.9%	(6)	7.1%	(1)	21.4%	(3)	14.3%	(2)	0.0%	(0)	14.3%	(2)	14.3%	(2)
Managed care organization	100.0%	(5)	20.0%	(1)	20.0%	(1)	0.0%	(0)	40.0%	(2)	0.0%	(0)	40.0%	(2)	20.0%	(1)
Other	88.6%	(31)	45.7%	(16)	25.7%	(9)	20.0%	(7)	62.9%	(22)	14.3%	(5)	14.3%	(5)	20.0%	(7)

# NIATx Behavioral & Mental Health Community Electronic Health Records Survey

July 2009

18-question on-line survey

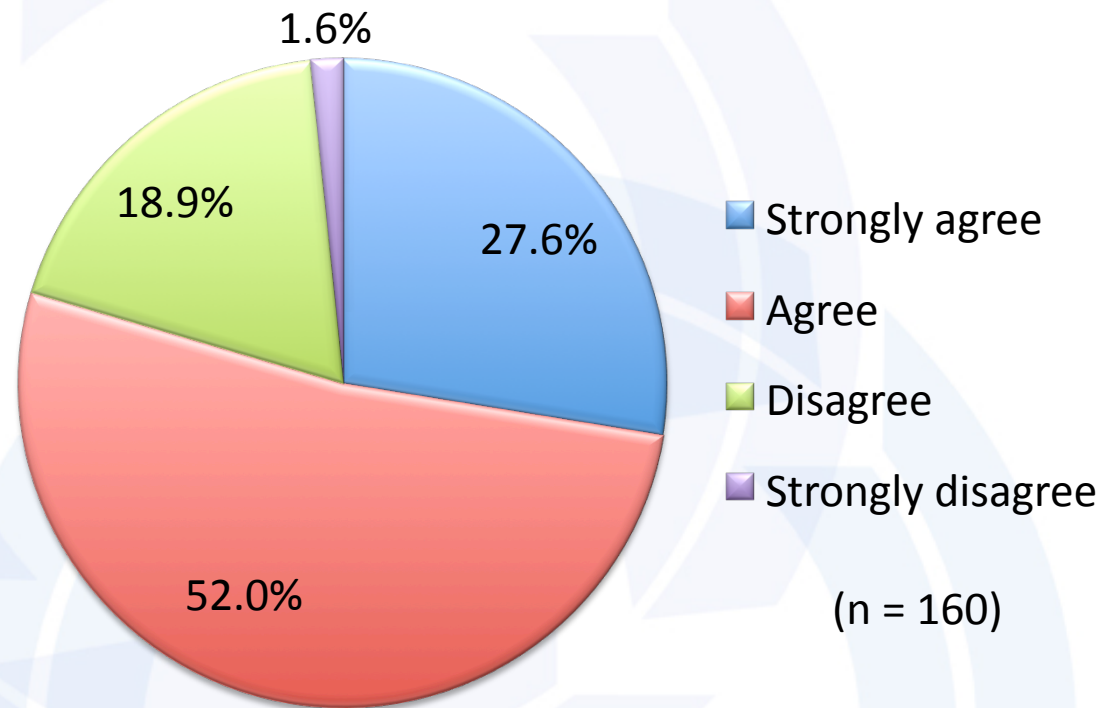
160 respondents





# Impact of Technology

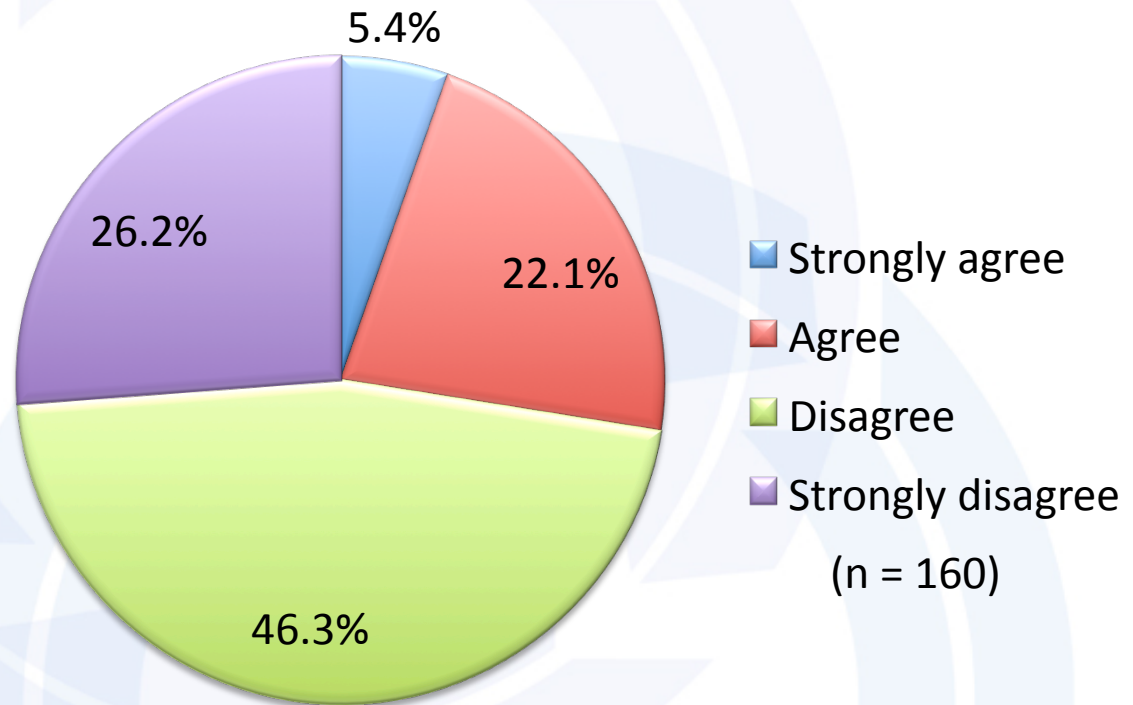
*“Use of EbmHR to administer care improves treatment outcomes.”*





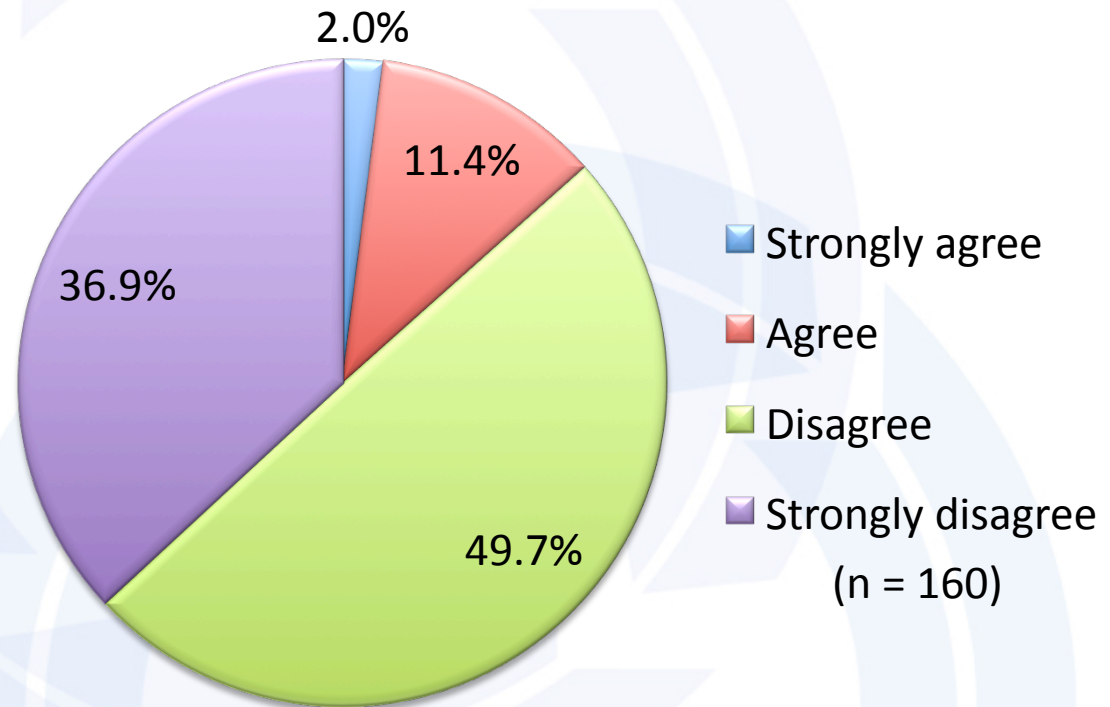
# Impact of Technology

*“EbmHR increased the time required to administer care.”*



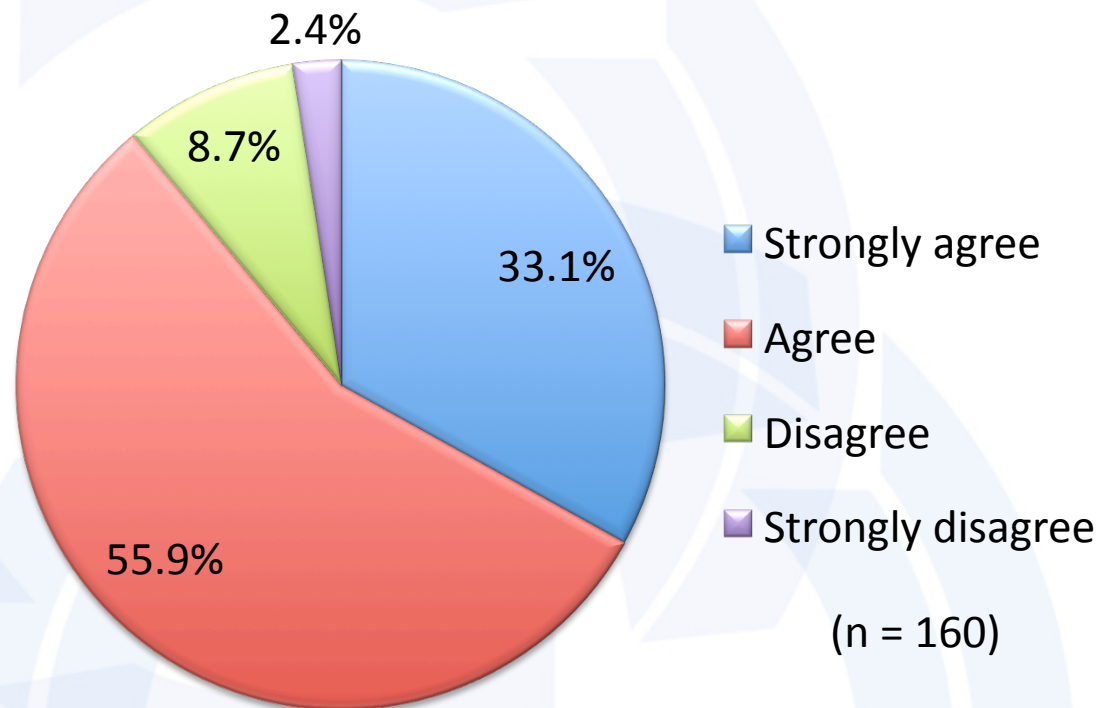
# Impact of Technology

*“EbmHR requires providers to negatively change their normal care tasks and routines.”*



# Impact of Technology

*“Use of EbmHR makes administering care easier.”*



# Oakwood's Thoughts...

- Benefits of adoption
  - Better data generation, management, accessibility
  - Fewer workflow errors (standardization)
  - Improved efficiency (billing, communication)
- Challenges of adoption
  - User resistance & acceptance (employee exodus)
  - Tunnel vision (customization)
  - Implementation schedule



# Adopt or Not? Your thoughts...



BACKGROUND

WHY?

**IMPLEMENTATION**

CONCLUSION

# Implementation: Overview & Barriers



# Things to consider...

- Does EbmHR...
  - Deliver our vision?
  - Appease our investment criteria?
  - Align with workflows?
  - Meet user needs, behaviors, preferences?
  - Impact our clients (customers)?
  - \*Require resources beyond our capacity?
  - \*Satisfy federal, state, insurance regulations?

BACKGROUND

WHY?

**IMPLEMENTATION**

CONCLUSION

# What is tomorrow?





# Financial Analysis

- Investment criteria
  - Cost-Benefit Analysis (cash-in minus cash-out)
  - Payback Period
- Cash-In
  - Revenues (old & new business)
  - Savings (time, staff, taxes)
- Cash-Out
  - Initial costs averaged \$44,000 per physician FTE<sup>7</sup>
  - Annual costs averaged \$8,500 per provider per year<sup>7</sup>
    - Software (programs, integration)
    - Hardware (computers, servers, integration)
    - Facility (furniture, electrical, space)
    - Labor (planning, selecting, installing, training, maintaining)
    - Lost opportunity



# Workflow Analysis...What?

BACKGROUND

WHY?

IMPLEMENTATION

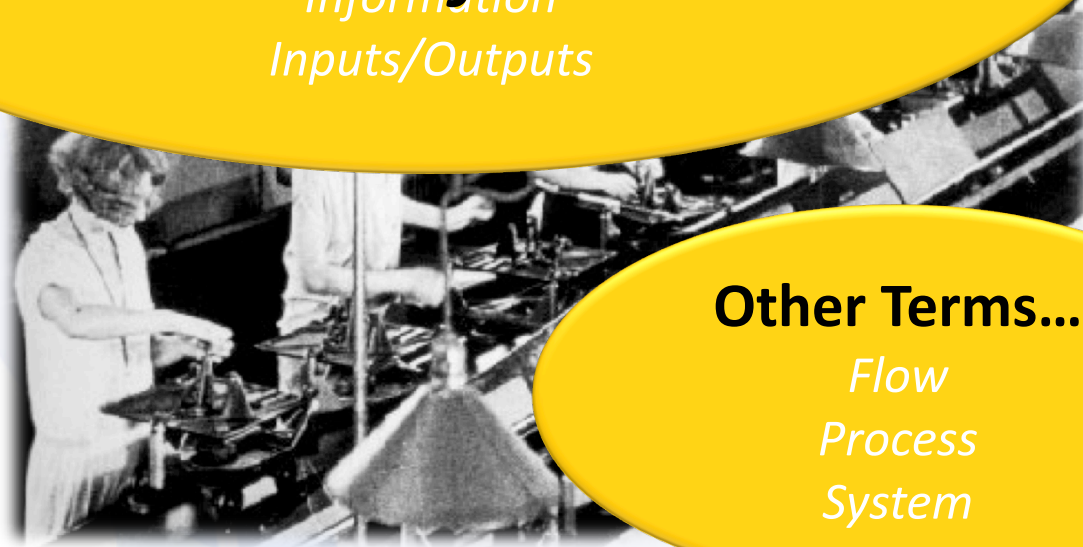
CONCLUSION

“...  
...ne by a  
...rson.”

## Ingredients...

*Events (tasks, decisions, phases)*  
*Resources (labor, documents, technology)*  
*Relationships (transferring, sequencing)*  
*Responsibilities (ownership)*  
*Information*  
*Inputs/Outputs*

## Definition



## Other Terms...

*Flow*  
*Process*  
*System*

# What workflows are important?



BACKGROUND

WHY?

IMPLEMENTATION

CONCLUSION



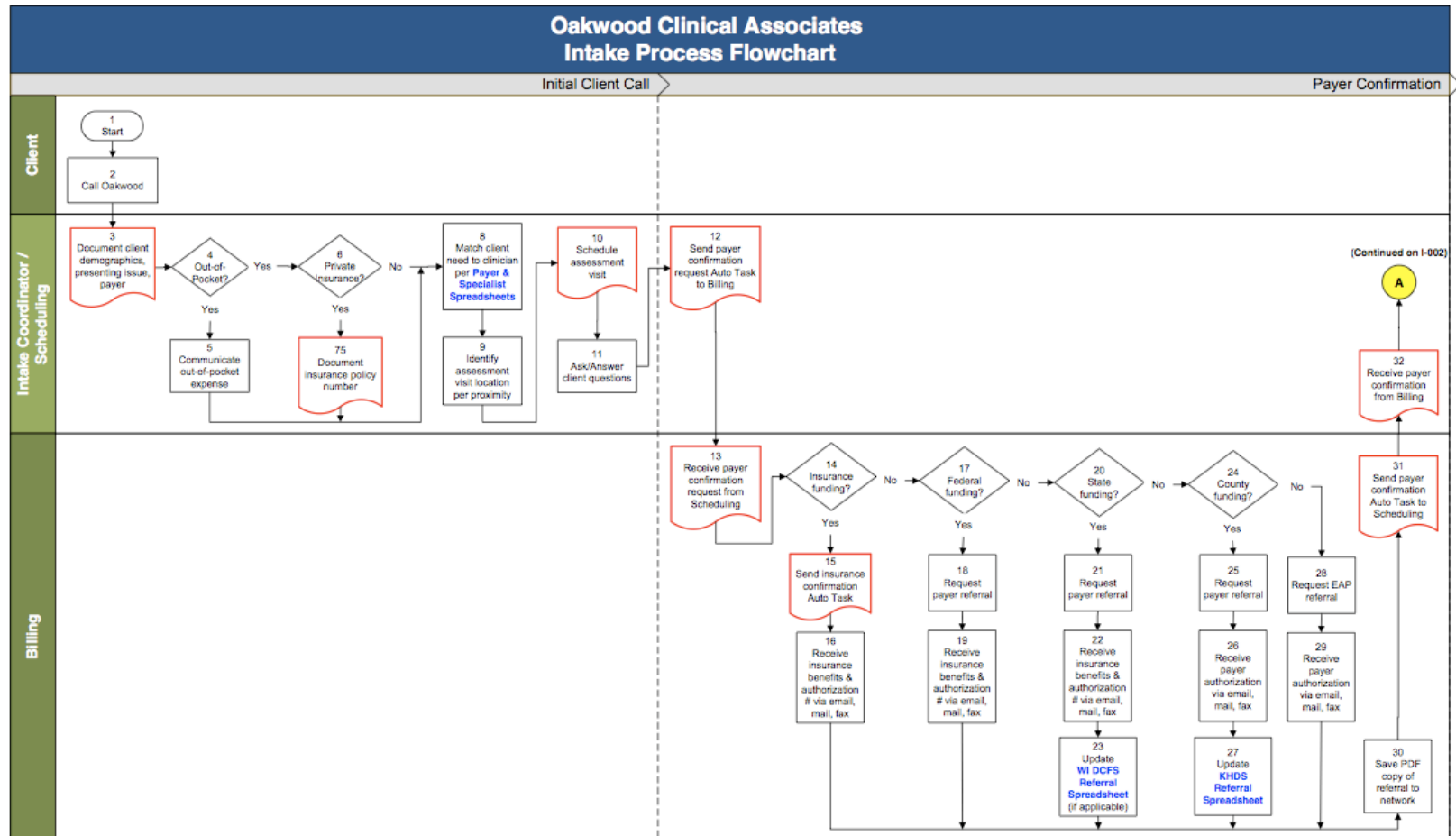
# How do you analyze workflow?

BACKGROUND

WHY?

IMPLEMENTATION

CONCLUSION



# “Swim Lane Diagram”

BACKGROUND

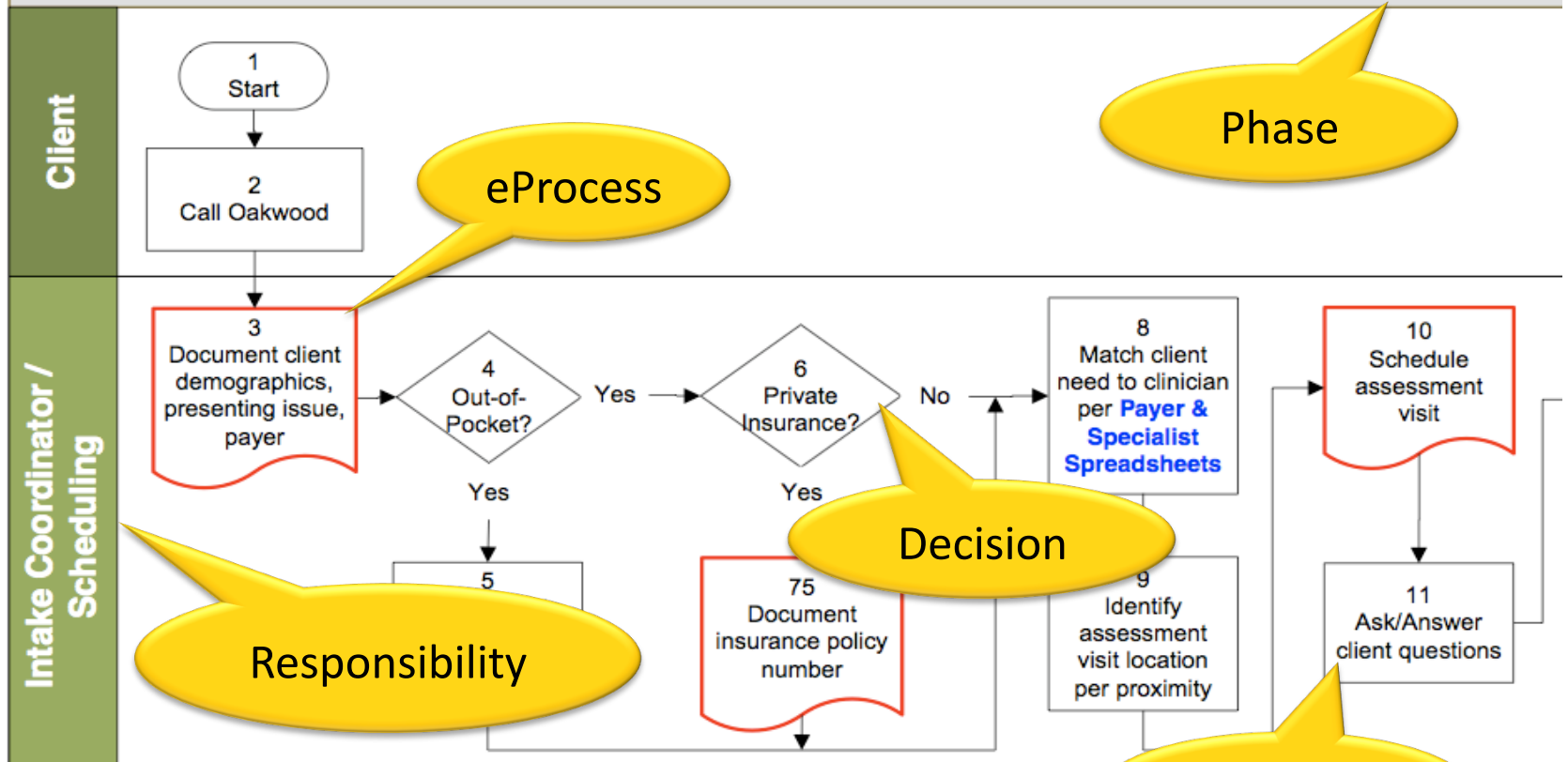
WHY?

IMPLEMENTATION

CONCLUSION

## Oakwood Intake Process

Initial Client Call

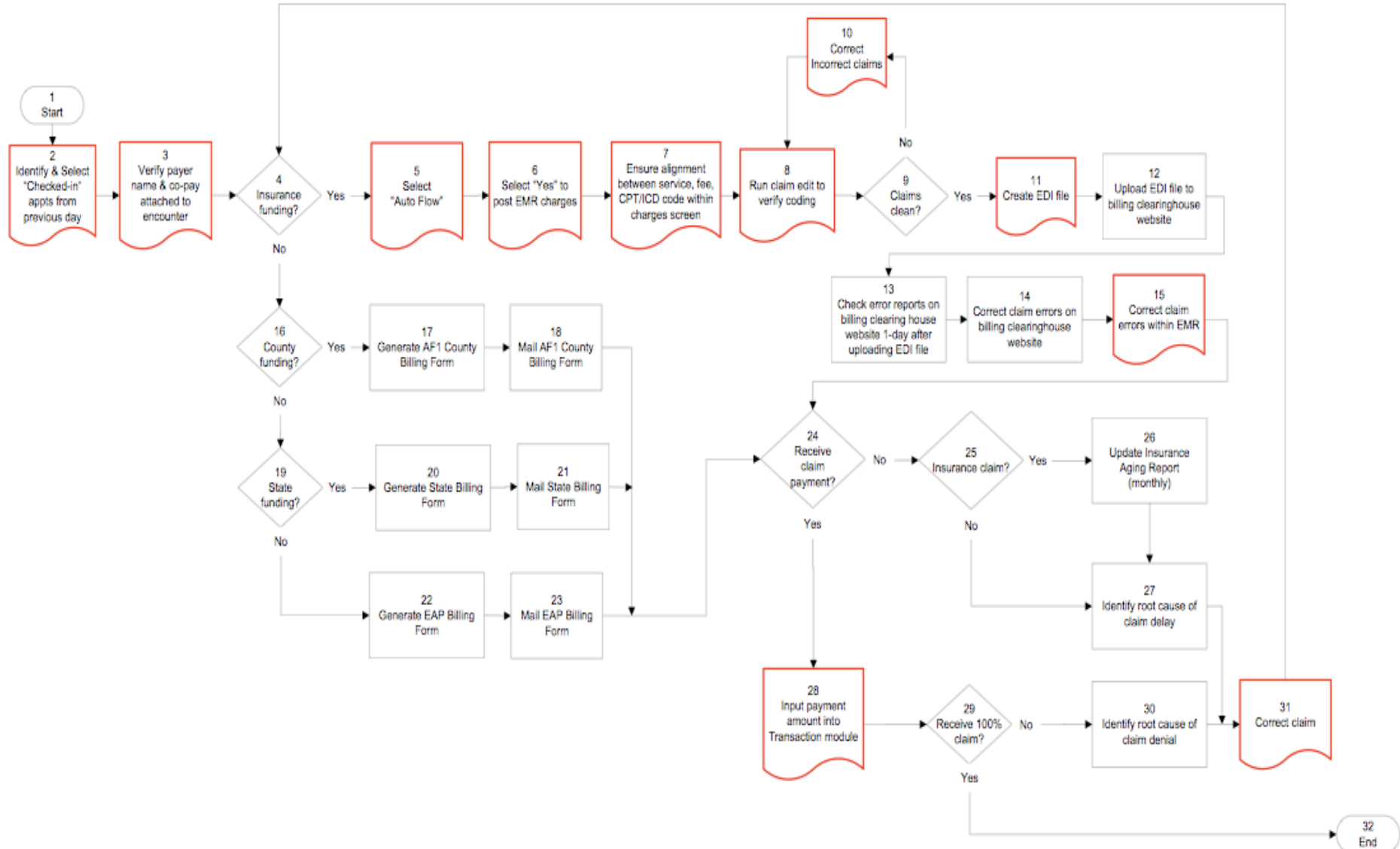


# Oakwood's Thoughts...

- What workflows were standardized?
  - Communication
  - Billing
  - Intake
  - Charting
- Did you customize?
  - When necessary, where permitted (behavioral health)
  - Vendor customization cost?
  - Use it first!!!
- Did you adapt?
  - Some processes cannot be changed!!!



# Oakwood's eBilling Process





# Socio-technical & Cultural

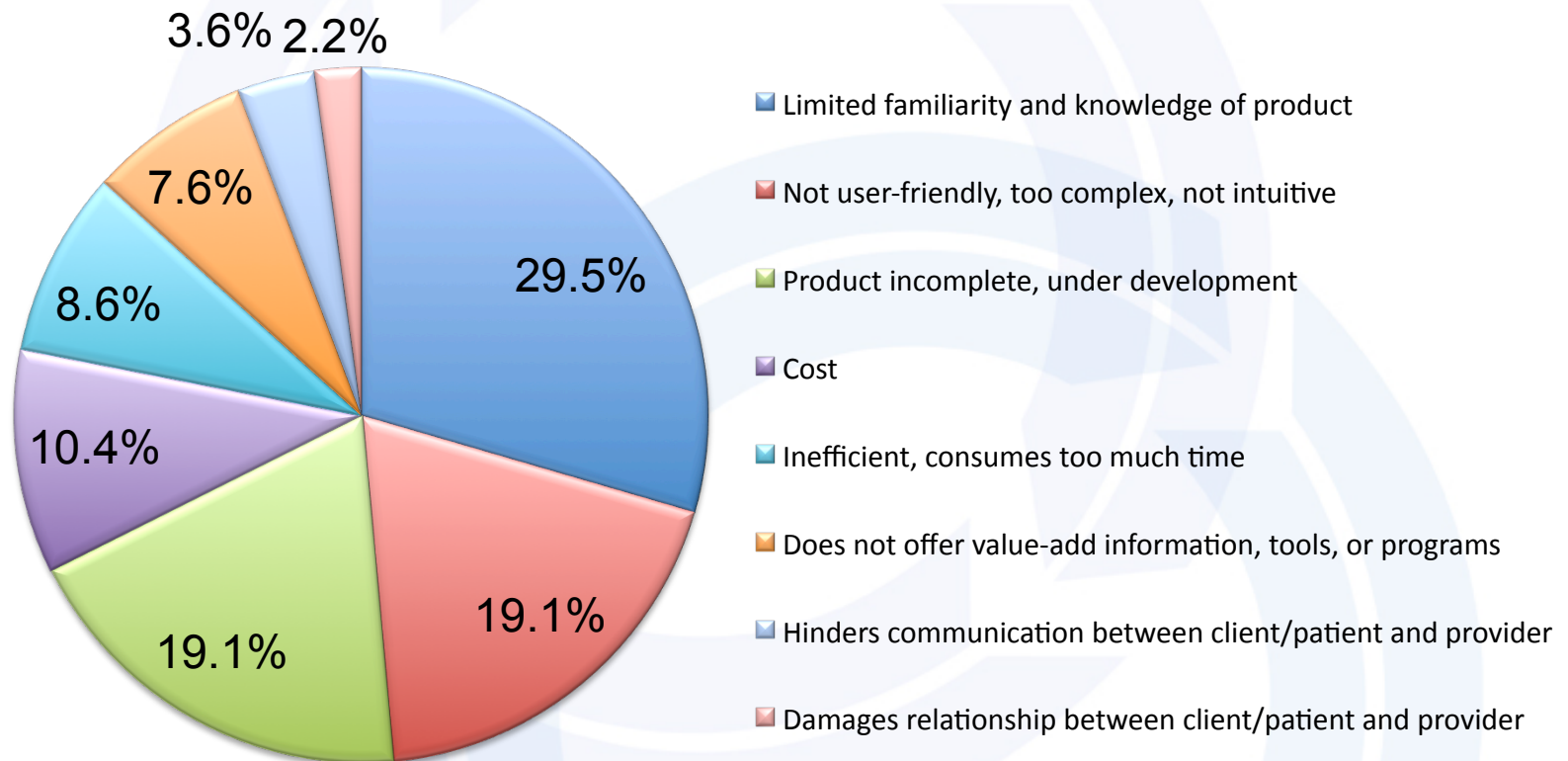
- Users
- Needs
- Behaviors
- Preferences
- Capabilities





# Adoption Barriers

*“Why do providers not use EbmHR to administer care?”*



# Staff Resistance

- Disinterest: “I don’t care”
- Role clarification: “that’s not my job!”
- Bad Design: “This doesn’t even work”
- Limited participation/partial compliance
- Perception: “The decision to adopt is flawed”
- Distrust: “I do not trust you – no matter what”
- Self-interest: “Forget what we gain, what do I lose?”
- Misunderstanding: “The costs outweigh the gains”
- Drop in Productivity: “it doesn’t work right now?! ...this was a bad idea”



# Oakwood's Thoughts...

- Who are your users of EbmHR?
  - Administrators
  - Clinicians
  - Support staff
  - Clients (!!!)
- How did you identify socio-technical needs?
  - Vendor project manager
  - Core groups
  - General staff meetings
  - e-learning
- How did you appease these needs?
  - Vendor advice
  - Obtain staff buy-in



# Are we ready?

BACKGROUND

WHY?

IMPLEMENTATION

CONCLUSION



NIATx™

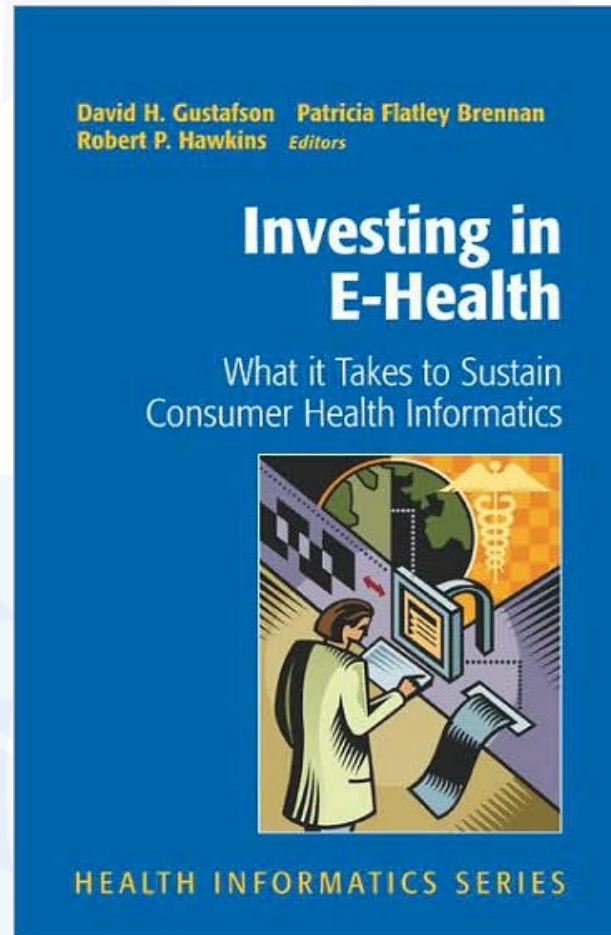
# Readiness for Implementation Scale

BACKGROUND

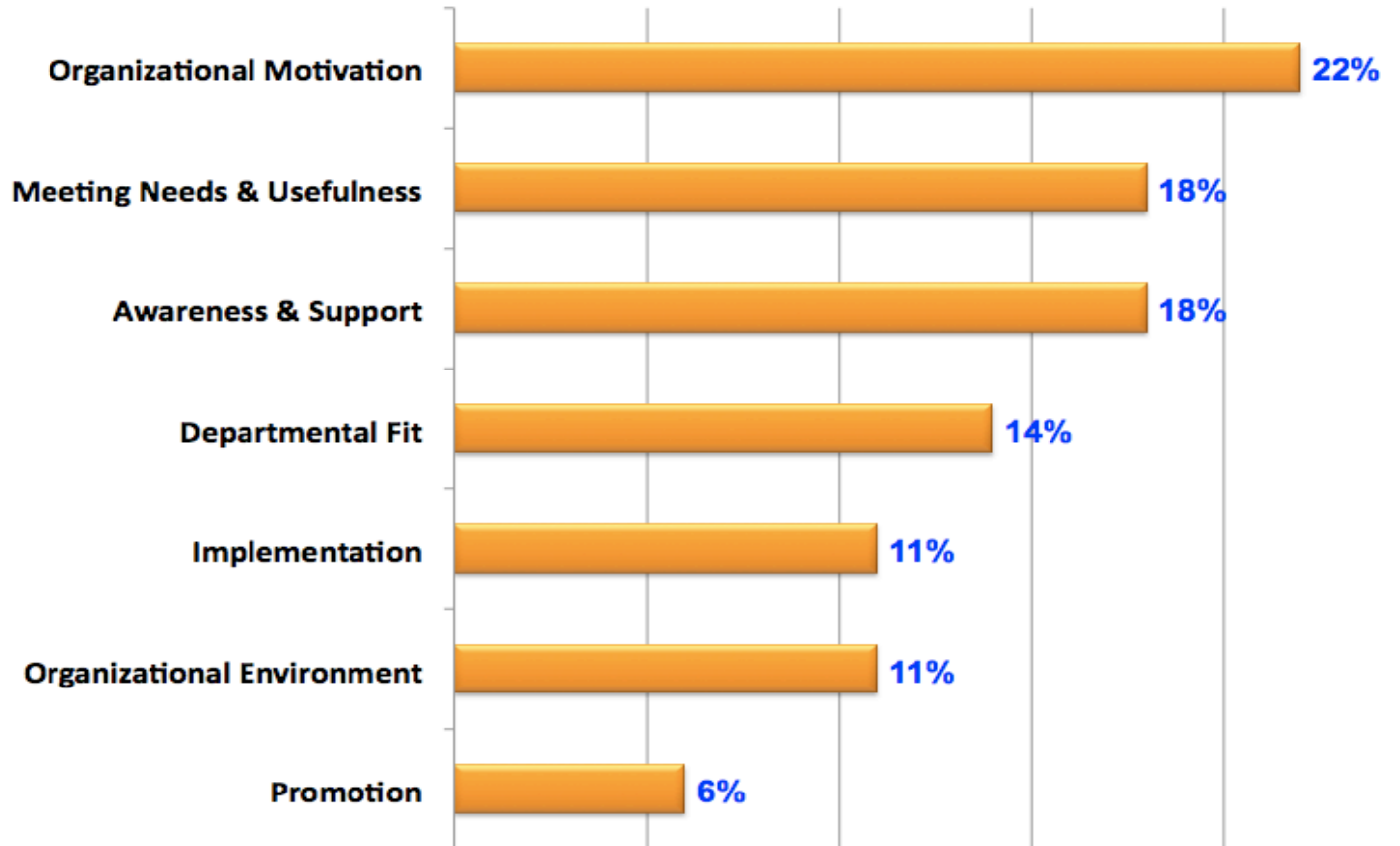
WHY?

IMPLEMENTATION

CONCLUSION



# Readiness for Implementation Scale



# Key Success Factors

- Align technology with organizational goals
- Analyze workflows, benchmark performance
- Measure cultural support & resistance
- Market the benefits & challenges
- Dedicate sufficient resources
- Choose the “right” teams
- Select realistic time lines
- Lead change – gain support from champions (administrators, clinical)
- “Be” the credible, informed expert
- Exude ENTHUSIASM!!!







*“Culture eats strategy for breakfast”*

Peter Drucker

# Why does transformation fail?

1. Allowed too much complacency
2. Avoided creating a sufficiently powerful guiding coalition
3. Under-estimated power of vision
4. Under-communicated vision by factor of 10, 100, or 1000
5. Neglected to anchor changes firmly in culture
6. Permitted obstacles to block new vision
7. Failed to create short-term wins
8. Declared victory too soon

AN ACTION PLAN FROM THE WORLD'S  
FOREMOST EXPERT ON BUSINESS LEADERSHIP

## Leading Change



John P. Kotter

HARVARD BUSINESS SCHOOL PRESS

CONCLUSION

IMPLEMENTATION

WHY?

BACKGROUND



# LEADERSHIP

# Thank You

BACKGROUND

WHY?

IMPLEMENTATION

CONCLUSION



# Additional References

1. U.S. Government Accountability Office HHS National Health IT Strategy. Publication No. GAO-05-628.
2. Katikireddi SV. HINARI: bridging the global information divide. *British Medical Journal* 2004;328:1190–3.
3. Lusk R. Update on the electronic medical record. *Otolaryngologic Clinics of North America*. 35 (2002) 1223-1236.
4. Fraser HSF, Biodich P, Moodley D, Choi S, Mamlin BW and Szolovits P. Implementing electronic medical records systems in developing countries. *Informatics in Primary Care* 2005; 14:83-95.
5. Bates DW, Cohen M, Leape LL, Overhage JM, Shabot MM and Sheridan T. Reducing the frequency of errors in medicine using information technology. *Journal of the American Medical Informatics Association* 2001;8:299– 308.
6. McAfee A, Brynjolfsson E. Investing in the IT that makes a competitive difference. *Harvard Business Review*. July-August 2008.
7. Miller, R. H., West, C., Brown, T. M., Sim, I., & Ganchoff, C. (2005). The value of electronic health records in solo or small group practices. *Health Affairs*, 24(5), 1127-1137.
8. Wang, S. J., Middleton, B., Prosser, L. A., Bardon, C. G., Spurr, C. D., Carchidi, P. J., et al. (2003). A cost-benefit analysis of electronic medical records in primary care. [Article]. *American Journal of Medicine*, 114(5), 397-403.