

Best Practices for
Implementing an EHR
in Behavioral Healthcare

Part I

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Table of Contents

Introduction	3
Data Gathering Methods.....	3
Limitations	4
Notes on Language.....	4
The Main Reasons EHR Implementation Projects Fail.....	5
Best Practices.....	6
Chapter 1 - Goals	7
Set Goals:	7
Use the Goals to Establish Benchmarks and Measure Progress:.....	9
Create an Evaluation Plan:	9
Pick the Right EMR for You:	10
Appendix A Well Formed Goal Criteria.....	12
End Notes.....	13
References.....	14
Acknowledgments.....	15
About the Author.....	15
Input Welcome.....	15



Introduction

Little has been written about Electronic Health Record (EHR) implementations in behavioral healthcare agencies. EHR systems are one of the most expensive purchases and high impact projects in which a BH provider will engage. There has been almost no research on behavioral health adoption of EHR's. In the most recent study¹, done in 2006, the National Council found that just under 8% of community behavioral health providers had implemented an EHR system. Most agree that this number has steadily been growing. The number of EHR systems specifically for behavioral health providers has increased. Unfortunately, without proper planning, many of these implementation projects fail.

The main risk factors for EHR failure include:

- Poor communication;
- Lack of involvement in the planning by key stake holders; and
- Lack of sustained top level support and poor implementation planning.

Key factors in successful EHR implementations include:

- Establishing well formed goals and setting benchmarks;
- Excellent communication and project management; and
- A thorough work flow analysis and implementation plan.

This paper will report on twenty-three best practices. In this first installment of three, we will explore the role the goals play in a successful implementation.

Data Gathering Methods

The following sources were used in creating this report:

Interviews: In researching this paper the following were interviewed about their implementation processes, best practices, and difficulties they encountered: EHR vendors, agency implementation project managers, senior staff at managed care companies, CIO/MIS directors and staff, and end users.

Literature Search: An extensive literature search was conducted and the contents of over 25 selected articles are incorporated into this report.

Personal Experience: Throughout the report I have interjected ideas based on my experience implementing several EHR systems over the past 14 years.



Limitations

Articles on EHR and PM implementations are plentiful. Unfortunately, very few of these are specific to behavioral healthcare and the majority come from medical EHR implementations. Although the majority of the issues are the same or similar, the research is limited due to a lack of written resources specific to behavioral healthcare.

Notes on Language

Behavioral Health is used to mean both mental health and substance abuse providers. The terms "agency" and "BH provider" are used interchangeably.

The terms EHR – Electronic Health Record, and EMR – Electronic Medical Record, are used interchangeably in this report.

The terms client, patient, consumer and person served are used interchangeably in this report.

The term CIO refers to the Chief Information Officer, a position found more and more among BH providers.

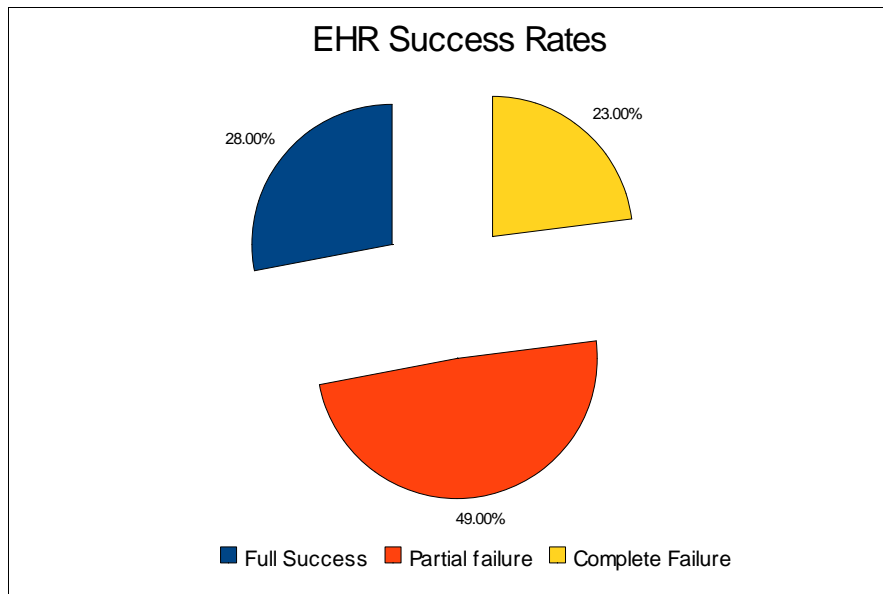


The Main Reasons EHR Implementation Projects Fail

The literature, interviews and experience revealed a variety of reasons EMR implementations can fail^{2,3,4,5,6,7,8}. These include:

- Lack of end user involvement - particularly in planning
- Poor communication
- Lack of attention to people and organizational issues
- Poor project planning
- Computer technical issues (slow computers, lack of training, poor clinician computer skills)
- Clinical issues (loss of productivity, privacy concerns)
- Lack of technical support
- Concerns over loss of autonomy
- Scope creep (inevitably results in implementation delays, increased costs and rework)
- The project supports the values of management and not staff and consumers
- Not the right members on the implementation team

The odds are not good. According to one source, “28% of projects meet full success. 49% of projects are fully completed, but over budget, over schedule and lack full scope of planned functionality. 23% of projects experience complete failure or are canceled.”³ Other sources list the failure rate between 50% and 70%. Failure can mean not getting the EHR to work, not having it work as you planned, and/or once implemented, not meeting your goals. Given the time, money and resources dedicated to your implementation, failure is not an option, but almost a quarter of all projects fail completely!



Best Practices

The vast majority of the literature and interviews yielded very consistent information concerning the best practices for implementing an EHR. Each of the above “reasons for failure” will be addressed. The best practices fall into one of four categories that are represented here as chapters. These are:

1. EHR Goals, Evaluation, and Selection
2. Planning
3. People
4. Process



Chapter 1 - Goals

"A goal is a dream with a deadline"
~ Napoleon Hill

Set Goals:

The basis of every implementation is knowing where you want to get to, before you start out. The majority of the sources emphasized the importance of establishing the goals of the new EHR from the very start^{2,3,4,6,7,9,10}. This should be easy in a clinical setting; the work we do relies on helping the people we serve to set goals. Staff, at least on a conceptual level, will understand the importance of setting goals. Some staff may be unfamiliar with some or all of the functionality of EHR systems – what is possible – therefore some education on basic and more advanced functionality may need to be done prior to setting goals.

Goals may include:

- Wide scale or universal usage of the EHR system
- Improving charting of work done, from a compliance perspective
- Creating more complete and legible charting
- Providing better access to data across providers and programs
- Creating a more integrated system
- Improving reporting at the senior management level
- Reducing in house desk top support to users

Common goals can also be used to motivate staff². For example, implementing this new EHR will make us more efficient; we will then be able to serve more people.

In setting goals, it is helpful to ask, "What is expected of the new system?" This question should be addressed at as many levels as possible in the organization, not just from an end user or CEO or CIO perspective. One resource, the Health Information Technology Evaluation Toolkit¹², offers a worksheet that can be used to facilitate discussions around goals. The questions raised include:

- What does your agency hope to gain from implementing this EHR?
- What are the goals of:
 - The leadership (CEO, CFO, COO, CIO, CMO, etc)
 - The Board
 - Front line staff
 - Consumers



- What needs to happen for the implementation to be considered a success¹²?

Other Questions to ask about goals:

- Are the goals realistic and well-formed (doable, written in the positive, etc)? See Appendix A for Well-formed goal criteria.
- Are they truly related to the EHR implementation? Implementing an EHR can solve lots of issues and make lots of improvements to your work flow - but it can't solve all of your agency's issues.

Once clearly established, it is vital to the successful implementation that the goals are articulated by the senior management, including the CEO, to the entire organization⁹. The goals should conclusively demonstrate why your agency is adopting a new EHR, the benefits to the organization, staff, and consumers, and outline the implementation plan. This script should be well known and followed by everyone; the senior management team, the implementation team, the vendor, etc. As will be stated several times in this report, clear and consistent communication is vital to the project. The goals should not be written down at the start and then filed away for the remainder of the implementation. Remind staff of the overall goals often; post them in meeting rooms. One CIO¹³ stressed the importance of staying on message and not allowing a small minority of staff “off the hook.” For example, if one or two psychiatrists decide not to use the EHR, it is important that the team, from the CEO down, hold firm to the goals. Accommodations are encouraged (e.g. voice activated software, dictation, basic computer classes, etc), but the bottom line has to remain true to the agency's goals.

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Dr. McGowan⁴ suggests using “formative evaluation, defined here as an iterative assessment of a project's viability through meeting defined benchmarks.” She stresses three areas that require goals, and continual assessment: the effectiveness of the implementation of the technology, personal and organizational issues (e.g. managing emotions) and the financial impact.

Horn¹¹ highly recommends breaking your goals down into at least two large categories:

- Overall goals such as increased productivity. Be sure these are in line with your agency's mission.
- “Specific tasks, goals, driven by the people who actually do each task.”¹¹ Be sure that these improve a current process and avoid, where you can, making completion of the task take longer than it does now, using the current system.

In developing goals, Morton⁸ recommends stressing those that benefit the end user. How will it make the front desk staff's job easier, better, more efficient? The front desk staff may care that the EHR will make your agency more productive, in better compliance and reduce



medication errors, however, his or her more immediate concern is how it impacts the front desk job.

Establishing goals, getting input from lots of stakeholders, can be time consuming; it is worth the effort.

Use the Goals to Establish Benchmarks and Measure Progress:

Allison states, “Each goal for the EMR system has an expected improvement – whether in efficiency, revenue, reduced cost, ease of data access, etc. Before moving too far ahead, establish clear measurements of where the practice is 'pre-EMR' within each of these goal categories so that increments of success can be clearly recognized and celebrated.”³ In order to measure the improvement, you will need to decide on benchmarks and gather data on the current state of these benchmarks such as productivity level, medication errors, and clean claim rates.

It is also important to establish benchmarks and milestones during the implementation itself to measure progress and improve upon the implementation as it progresses. These could include EHR use adoption rates, percent of notes in a unit written using the EHR, or sites implemented (see the next section for additional benchmarks and milestones).

Create an Evaluation Plan:

The Agency for Healthcare Research and Quality's (AHRQ - part of the U.S. Department of Health and Human Services) National Resource Center's Health IT Evaluation Toolkit¹² is an excellent tool and should be consulted by your EHR project manager. The AHRQ recommends establishing an Evaluation Plan with goals, benchmarks and measures in the following areas:

- Clinical Outcomes Measure (e.g. number of preventable drug to drug interactions)
- Clinical Processes Measures (e.g. time to complete comprehensive assessment, time to complete progress notes, % of progress notes completed within 24 hours of appointment).
- Provider Adoption and Attitudes Measures (e.g. % of medication orders entered, % of notes done on line, number of sites that are paperless, provider satisfaction, staff turnover rates).
- Patient Knowledge and Attitudes Measures (e.g. consumer satisfaction)
- Work flow Impact Measures (e.g. time spent per intake, per progress note); and
- Financial Impact Measures (e.g. denied claims rate).

The AHRQ report stresses the importance of measuring both qualitative and quantitative aspects of the implementation. This is particularly relevant in a Behavioral Health setting – how the staff and consumers feel about the system may prove to be just as important as the



percentage of progress notes written. Another key measure is the importance of evaluating barriers and facilitators to your agency's implementation. Most project managers key in on the barriers and never tap into the potential benefits of examining and amplifying those actions that facilitate a project such as excellent communication and leadership.

Pick the Right EMR for You:

Many authors stress the importance of picking the EMR that will meet your agency's goals and objectives, and is affordable^{6,11,14}. One CIO identified this as one of the most challenging aspects of any implementation¹³. There are many choices of systems and the range in cost and complexity is tremendous. Some practical steps you can take:

1. Start by looking on line at systems and their functions - it is important to know what the possibilities are. Do you need a system with a central intake module? Internal and secure email? A Consumer portal? The ability to customize your forms or adhere to state standards? The list is extensive.
2. Match the software to your goals, not the other way around. Make a clear list of your needs and priorities, then see how the software lines up.
3. Go and visit references – really. Don't just call and ask if an agency is happy with the software and customer service. Go visit a site, take the project manager out to lunch and find out how the implementation went. Ask her what would she do the same and what she would do differently in the implementation.
4. Control the demonstrations. Many of the systems you look at will have the functionality you need; so find out how the system aligns with your work flow. Give the vendor some scenarios – intake a new client, add an authorization, rebill a claim to Medicare and then cross it to a secondary insurance. Transfer a client from one level of care to another. Then evaluate the interface – how intuitive is it?
5. Ask about the relationship the vendor creates with its customers, and its customer service philosophy. How long have other agencies been with the vendor?
6. Ask about upgrades and enhancements. Today's focus is meaningful use. What are the vendor's plans and time tables to meet this new requirement? The next? What is on the "to do" list. This will let you know whether the vendor is on top of the market changes occurring.

The more you can find out about the relationship the EHR vendor has with its customers the better.

Evaluating each system is a monumental task. Knowing the functionality you require (read: mission critical business functions), that are required by regulation, law, contract, license, desire, or those you would like to explore, is critical.

(NOTE: Solutions in Behavioral Healthcare has developed a proprietary selection guide to assist agencies and vendors in the selection process).



Take Away Points:

- Establish well-formed goals
- Create benchmarks for the EHR and the implementation process itself
- Measure your progress
- Carefully evaluate EHR systems

The second installment of this paper will be published at Solutionsinbh.com in late-February.



Appendix A Well Formed Goal Criteria

Well formed Goals³² are defined as those that are:

Salient to your agency, the staff and consumers: Important, Within your/their control.

Example: Increase productivity.

Smaller rather than larger: Break it down as far as you can

Questions: What would be the first step in doing that?

Example: Measure productivity in the outpatient clinic.

Realistic, Doable and Achievable:

Question: How will this be helpful? (Don't assume to know).

Example: Move from 56% productivity to 60%.

The start of something and the presence of something: Very hard to measure not doing something.

Example: Increase show rate (not, decrease no shows).

Concrete and Specific: The more specific the goal, the easier it is to measure your successes.

Interactional: Goals interact with each other and the system as a whole.

Contextual: Where and when will this goal happen.

Measurable: Numbers are better than percentages.

Source: Tohn, S., & Oshlag, J. (1995, 1997, 2000, 2005). *Crossing the Bridge: Integrating Solution Focused Therapy into Clinical Practice*. Sudbury: Solutions Press. Used with permission from the authors.



End Notes

- 1 Rosenberg, Linda. Electronic Health Records - How they Effect Mental Health and Behavioral Healthcare Organizations. May, 2009. www.articlesbase.com.
- 2 Lorenzi, Nancy M., PhD. Crossing the Implementation Chasm: A Proposal for Bold Action, Journal of the American Medical Informatics Association. 2008;15:290 –296.
- 3 Allison, Adele. The Six Keys to Successful EHR Implementation. EHRScope.com, EHS, Inc. Spring 2009.
- 4 McGowan, Julie, PhD. Formative Evaluation: A Critical Component in EHR Implementation. Journal of the American Medical Informatics Association. 2008;15:297–301.
- 5 Schumacher, Robert M., PhD. Commentary: Electronic Health Records and Human Performance. American Society of Clinical Oncology, May 2010.
- 6 Hoyt, Robert, MD, FACP, and Ann Yoshihashi, MD, FACE. Lessons Learned from Implementation of Voice Recognition for Documentation in the Military Electronic Health Record System. Perspectives in Health Information Management, Winter 2010.
- 7 Adler, Kenneth G., MD, MMM. How to Successfully Navigate Your EHR Implementation. 2007 American Academy of Family Physicians.
- 8 Morton, Mary E., PhD, RHIA, and Susan Wiedenbeck, PhD. A Framework for Predicting EHR Adoption Attitudes: A Physician Survey Perspectives. Health Information Management 6, Fall 2009.
- 9 HIMSS White paper - Making IT Happen: Strategies for Implementing the EMR-EHR. 2006.
- 10 Pennell, Ursula and Eric Fishman, M.D. Known Pitfalls and Proven Methods for a Successful EMR Implementation. <http://www.emrconsultant.com/education/pitfalls>, 2010.
- 11 Horn, Jr., Audie. EMR Success—What Makes a Truly Successful EMR Implementation? HealthPort, 2009.
- 12 Cusack CM, Poon EG. Health Information Technology Evaluation Toolkit. Prepared for the AHRQ National Resource Center for Health Information Technology under contract No. 290-04-0016. AHRQ Publication No. 08-0005-EF. Rockville, MD: Agency for Healthcare Research and Quality. October 2007.
- 13 Barritt, Karen. Director of Information Systems and Technology, Mental Health Center of Denver. Interview, 10/2010.
- 14 Goroll, Allan H. Community-wide Implementation of Health Information Technology: The Massachusetts eHealth Collaborative Experience. Journal of the American Medical Informatics Association. 2009;16:132–139.



References

CIO's Guide to Implementing EHRs in the HITECH Era, CHIME, 2010.

Goldstein, Jacob. Can Technology Cure Health Care? How hospitals can make sure digital records live up to their promise. Because so far, they haven't. Wall Street Journal, April 13, 2010.

McDonnell C, Werner K, Wendel L. Electronic Health Record Usability: Vendor Practices and Perspectives. AHRQ Publication No. 09(10)-0091-3-EF. Rockville, MD: Agency for Healthcare Research and Quality. May 2010.

MSDP Training Manual, Section 1. ABH, 2009. <http://www.abhmass.org/site/msdp/forms-and-manuals/27-form-reference-manuals.html>.

Pizziferri L. Primary care physician time utilization before and after implementation of an electronic health record: a time-motion study. Journal of Biomed Information, 2005 Jun;38(3):176-88.



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Input Welcome

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