

IT Integration and Workflow Redesign for Profit

**Simeon Schwartz, M.D.
President
The Westchester Medical Group**

The Westchester Medical Group

- Formed in 1996 as the merger of 5 practices with 16 physicians
- In 1999 merged with 20 physicians from Kaiser
- Currently, 70 physicians, 8 offices and most specialties
- For profit corporation owned by physician shareholders

The Westchester Medical Group

- 7 member board elected by shareholder
- Board has final authority on all issues except shareholder status
- Productivity based compensation formula with department specific overhead
- President and Medical Director are both practicing physicians and share the responsibilities of CEO
- Installed Centricity EMR 9/02
- Installed Centricity PM 6/03

EMR Myths

- Don't expect an ROI on the purchase
- Quality improvement alone will justify the cost
- You may save some money on transcription but this will be offset by IT costs
- Physicians and staff are resistant to change and are likely to rebel. Go slow!!!

Why is Healthcare Different?

- 1990's Most American industries improved profits with improved productivity
- IT was essential for these successes
- Productivity gains were dependent on both IT integration and workflow redesign
- Healthcare lags behind other industries

Labor Productivity & Profits



Labor Hours/ Car



Staff FTE / Provider

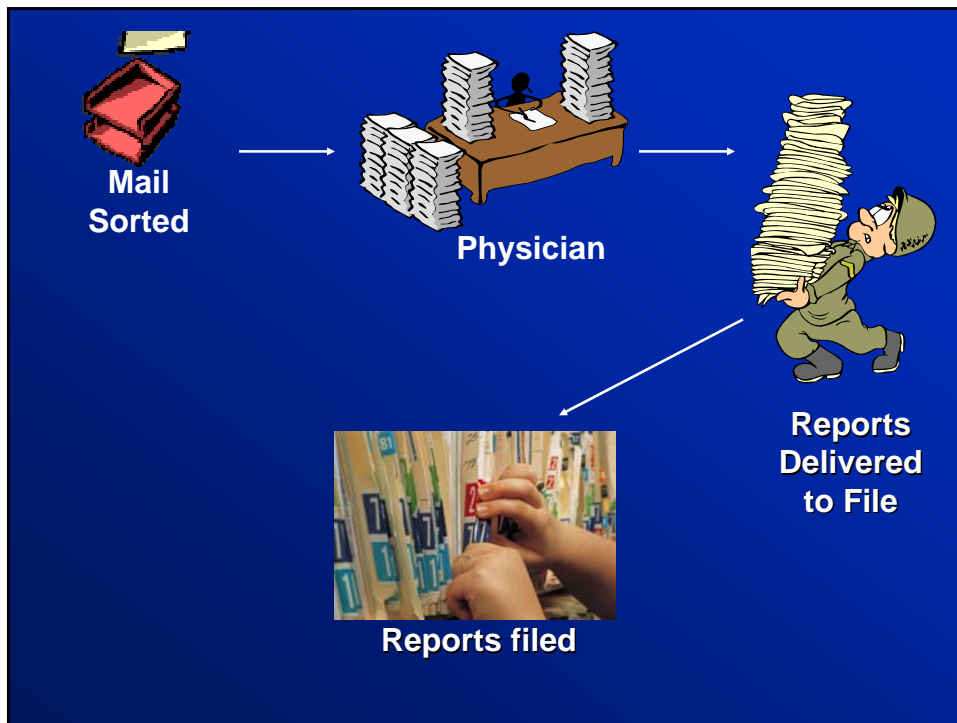
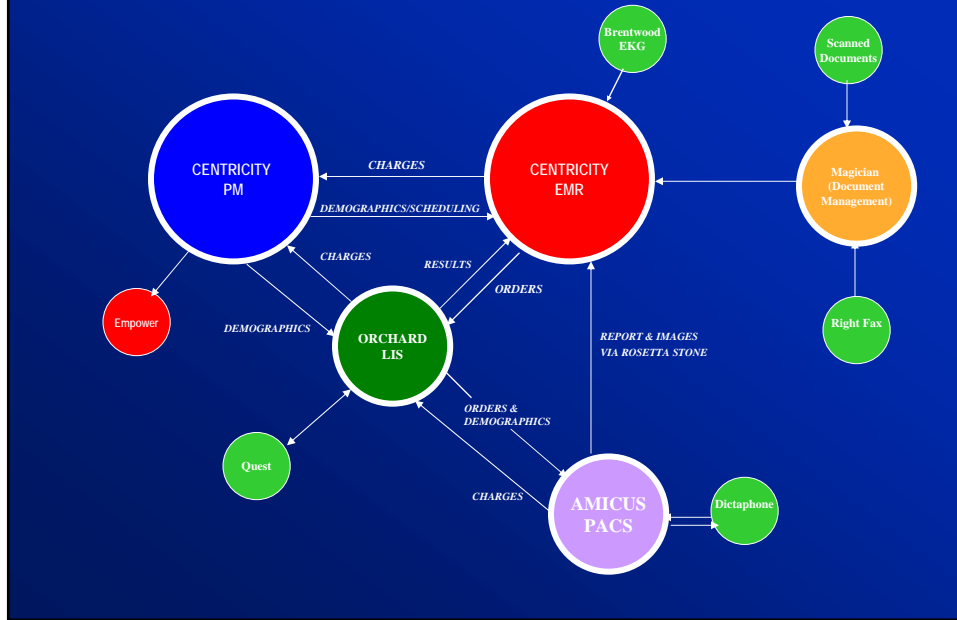
Assumptions for the Design of a “Paperless Office”

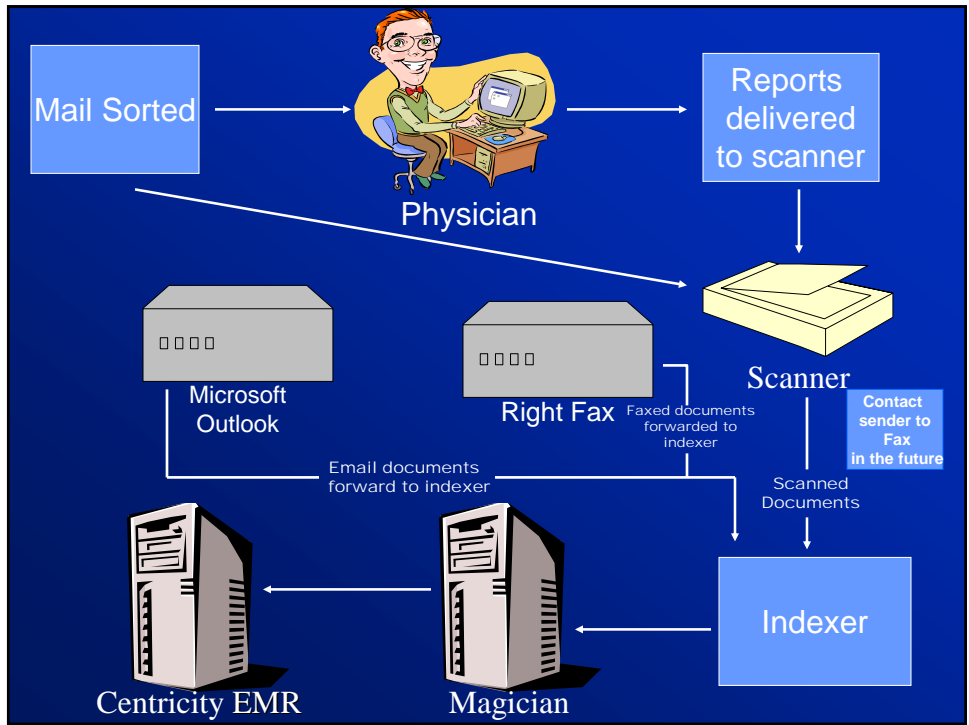
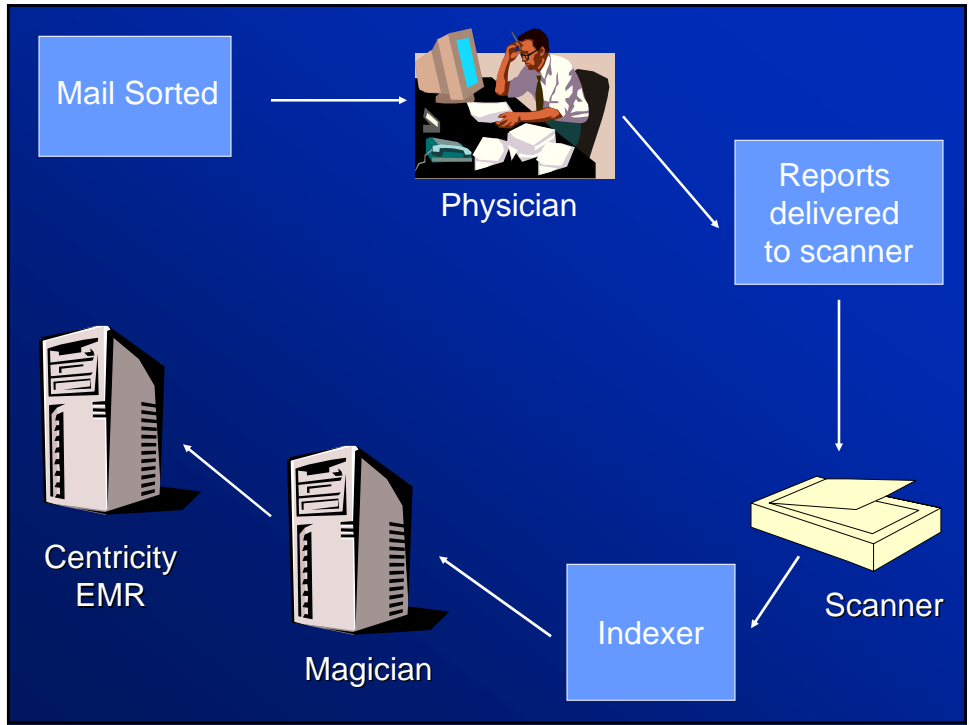
- The IT products necessary for success existed
- Integration of “Best of Breed” vendors was possible
- Physicians would support a clear vision if they were involved in the decision process
- Physicians would only use the EMR
- There would be changes in staff and management personnel

Financial Summary WMG

	Actual	Actual	Actual	Annualized	% Change
	2001	2002	2003	2004	
Staff FTE's Each Year	188	197	211	214	14%
Total Provider FTE's	50	58	63	67	36%
Staff FTE to Provider Ratio	3.77	3.38	3.35	3.17	-16%
Accrued Revenue	29,690,000	32,505,000	39,782,000	45,527,000	53%
Admin Overhead	4,733,758	4,827,908	5,344,217	5,254,000	11%
Admin Overhead vs. Accrued Revenue	15.94%	14.85%	13.43%	11.54%	-28%
Revenue per Staff FTE	158,279	164,716	188,728	212,952	35%
Revenue per Provider	596,784	556,879	631,761	674,974	13%

WMG IT INTEGRATION





Robotic Automation



Integration and Workflow Design Process

- Senior physician management involvement in all phases
- All managers had project responsibilities
- Deadline oriented team culture
- Internal structure for training and support
- Frequent short meetings with key team members

Current projects

- Reduce staff by an additional 10%
- Front end automation and Kiosks
- Phone redesign ?IVR
- Electronic prescriptions
- Web portal for appointments, secure email, test results and CRM

Billing Workflow Improvements

- Physician charge entry using EMR
- Approved/Failed process in the departments
- Scanning and OCR all EOBs
- Maximize the use of ERA and EDI
- Front End redesign

Front End Process

- Verify name and demographics-avoid duplicates
- Verify Insurance and Eligibility
- Scan copies of Insurance cards, HIPPA and Medicare release of records
- Check for referrals when necessary
- Pay co-pay prior to visit
- Review overdue balance

Automated Front End

- The patient arrives at the Clinic, they approach one of the kiosks:
 - The patient can then update any of the relevant information
 - Patient is then presented with forms that are necessary for the encounter
 - Patient can complete the automated check-in process and provide consent for any medical process to be performed
 - Finally, any insurance co-pays can be collected and posted to their account.

The image displays two screenshots of a patient self-service kiosk interface. The top screenshot shows a 'Check In' screen with the following questions: 'Are you a patient of Galvanon Medical Group?', 'Do you have insurance?', and 'Do you have a referral?'. The bottom screenshot shows a 'Personal Information' form with the following fields: First Name, Last Name, Address, City, State, Zip, Date of Birth, Social Security Number, and Insurance Information. A keyboard is visible at the bottom of the kiosk.

Patient Encounter Monitoring

The screenshot shows the GALVANON CVM Enterprise Server interface. At the top, there is a navigation bar with icons for Home, Members Manager, Program Manager, Patient ID Manager, Activity Monitoring, Integration Manager, Workflow Manager, Reports Manager, and Unfitted Button. Below this is a table titled 'Member Check-In List' for Wednesday, July 02, 2003. The table has columns for Name, Appointment Time, Physicians Name, Service, Status, Location, and STAT. Below the table, there is a 'Patient Information' section for a patient named Mathew Cielak, including birth date, sex, marital status, address, emergency contact, phone number, insurance company, and group number.

Name	Appointment Time	Physicians Name	Service	Status	Location	STAT
Mathew Cielak	8:00 am	Dr. M.Kelley	General	<In Progress>	Physicians Room	●
Jeff Fleischmann	8:45 am	Dr. J. Dieselwieners	colonoscopy	<In Progress>	Acute Care	●
Ed Gross	9:15 am	Dr. J. Dieselwieners	Enema	<In Progress>	Physicians Room	●
Mike Jones	10:30	Dr. M.Kelley	General	<Waiting>	Physicians Room	●

Patient Information (Updated)

Name: Mathew Cielak **Birth Date:** 08.22.1980 **Sex:** M **Marital Status:** Single
Address: 3575 W. LakeMary Blvd. suite 107 Lake Mary, FL 32746

Emergency Contact: Dawn Kelley **Ph:** 407.332.5998 **Insurance Comapny:** Met Life **Group No:** 2304567

Appointment Time: 8:00am **Physician Name:** Dr. M.Kelley **Service:** General

- Staff can see a concise view of all patients that have checked-in
- Color coded Stat indicator prioritizes cases based on data updates
- Indicators for fields to show what data the patient updated.

Phone Redesign

- Most common patient complaints
- New VOIP with advanced Call Center software from Siemens
- Permits telecommuters for phone and billing functions
- Improves balancing of personnel with call volume
- We need to reduce call volume

Electronic Prescriptions

- Approximately 25 % of call volume are RX refills
- Sure scripts, a pharmacy industry clearing house, will be available nationally this year
- Kryptiq, in partnership with GE, is developing a Sure script interface
- EMR fax workflow has been acceptable to the providers and the electronic workflow will be the same

Prescriptions: Happy W Test Smith

Prescriptions

	Previous Rx			Refill?	New Rx		Pt Info
	Quantity	#Refills	Date		Quantity	#Refills	
GLUCOPHAGE 500 MG TABS (METFORMIN HCL) bid	30	3	09/14/2004	<input checked="" type="checkbox"/>	<input type="text" value="30"/>	<input type="text" value="3"/>	<input type="checkbox"/>
RITALIN LA 10 MG CP24 (METHYLPHENIDATE HCL)				<input type="checkbox"/>			

Pharmacy:

CVS - Knollwood Road

101 Knollwood Road

White Plains, NY 10607

Ph: (914) 682-7523

Fax: (914) 683-8816

Authorized By:

Prescribing Method:

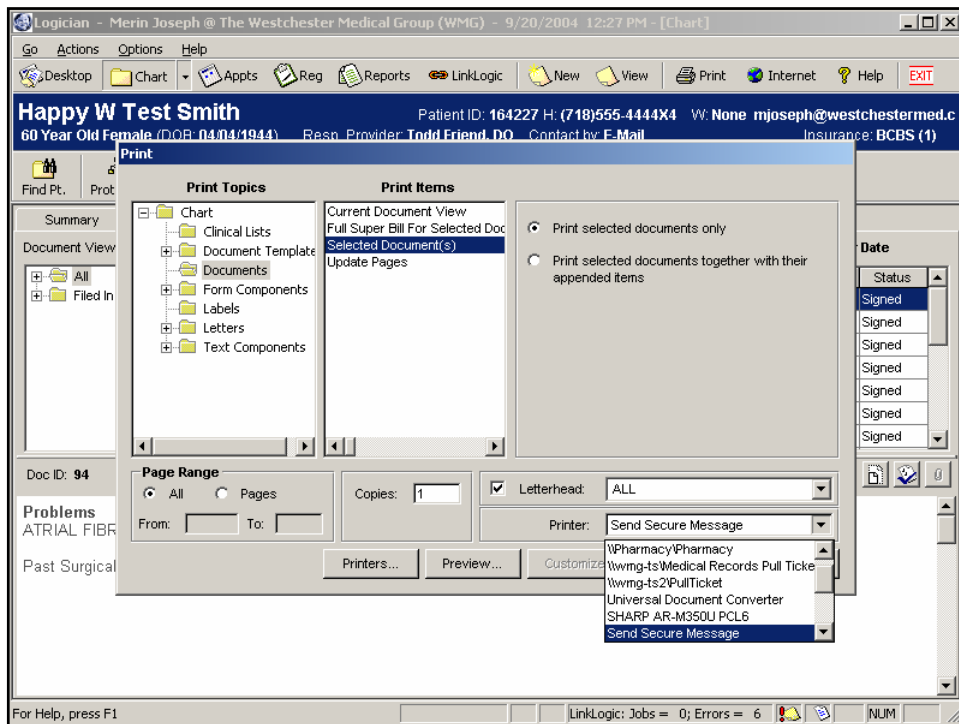
State:

Web based scheduling

- Potential to reduce call volume
- Allows patients to schedule appointments when the office is not open
- Pilot program is up and running
- Limited to primary care
- More physician resistance than expected

Kryptiq's Web Portal

- Current functionality
 - Web registration with EMR authentication
 - HIPPA compliant secure e mail
 - New e mail appears as external document in Centricity EMR
 - EMR document and letters can be sent using a print driver (Lab and test results with comments)



Kryptiq's Web Portal

- Future functionality
 - Registration
 - Bill payment
 - Pre-pay co pay
 - Pre visit form completion
 - Preventative Health
 - Disease management
 - E Visits

E Visits

- Payment remains a challenge
- 1st generation products limited to structured e mail
- Expedia has created a “Virtual Travel Agent” with added value
- Can we create a “Virtual Encounter” that patient will view as added value?

Team Members @ Westchester Medical Group

- Dr. Barney Newman
- Vicki McKinney
- Merin Joseph
- Kerry Triano
- Christine VanAsselt
- Nancy Levesque
- Clark Yoder
- Mary Ellen Feller
- Nilda Malave
- Corey Bell