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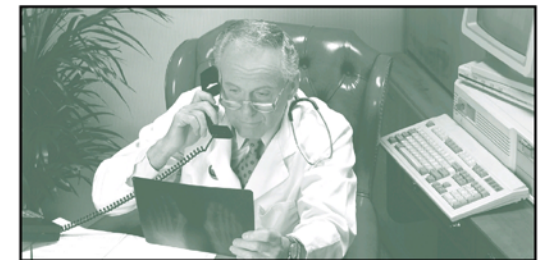
In partnership with

Gates, Moore & Company

RETURN ON INVESTMENT

Pre-Implementation Assessment

*Prepared for a
Nine Doctor OB/GYN Practice*





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Introduction

Background and Introduction

Greenway Medical Technologies (GMT) believes exploration of cost justification is a key element that ensures implementation of a successful Information Technology (IT) initiative. To that end, GMT retained Gates, Moore & Company, a leading healthcare consulting and accounting firm to provide clients with this vendor-funded assessment of Return on Investment (ROI) achievable by using the Greenway software solution, called PrimeSuite. This report provides an objective, third party assessment of the financial benefits attainable based on practice data gathered during workplace visits. Given the controlled scope of the assessment, this report should be used exclusively for measuring the ROI associated with PrimeSuite deployment.

As a result of on-site observation and analysis of your practice's administrative, clinical and financial processes, Greenway and Gates, Moore & Company are pleased to present the findings from the recently conducted "Pre-Implementation Return on Investment Assessment". This analysis is intended as a detailed estimate of the potential Return on Investment (ROI) associated with the implementation of Greenway's PrimeSuite solution, as well as a benchmark for comparison against a "Post-Implementation Return on Investment Assessment" to be conducted approximately one year following the initial Greenway system deployment. From this pre-implementation and post-implementation analysis comparison, a fair and objective assessment of the Greenway system's financial benefits will be concluded. The results of this comparative assessment will also identify areas of implementation success, as well as areas within the implementation that require additional focus and/or resource.

This ROI analysis assists in evaluating current practice indicators to determine how to maximize profitability. Greenway's PrimeSuite is a tool to help reach established goals by automating and integrating practice processes and data. The net result of this assessment will be an objective and accurate analysis of the delivered ROI associated with implementation of the Greenway system. Many vendors talk about ROI, Greenway and Gates, Moore & Company are proud about its commitment to deliver a ROI.

Assessment Methodology

On-site analysis consisted of review of source documents, interviews with key employees and observation of workflow. The data was categorized and analyzed to identify areas in which the practice might experience improved efficiencies through implementation of the software. The recognized opportunity cost of these improvements was then quantified.

It should be recognized that this analysis depicts data based on limited observations and assumptions under the conditions present at the time of the on-site visits. It does not represent affirmation of the presentation or assumptions. Differences between forecasted and actual results will occur where events and circumstances differ from observed situations. GMT has no responsibility to update the ROI statement to account for changes at the practice after the report date and before the post-installation assessment.

This analysis identifies potential areas of improvement for reductions in operating costs, incremental increases in revenue and enhanced patient satisfaction. The ROI analysis includes information pertaining to the following areas:

- Patient Visits - Projections based on patient visits during the review period are used as a basis for calculations in the ROI.
- Statement Production – The processing of statements directly affects revenues and expenses. Timely statement delivery encourages timely payments. Statement production costs impact the practice's overhead expenses. This analysis examines components of the statement function to determine opportunity costs in decreased time for processing statements and direct expenses.
- Billing Procedures - Efficiency and accuracy in entering charges and filing insurance claims directly affects practice cash flow. Time spent by staff processing charges and claims can be more efficiently used in revenue generating activities. Analysis in this area includes time spent crosschecking between systems, correcting errors identified during claims processing and additional revenue potential from missed or incorrectly coded charges. Additionally, this review will also include an analysis of the practice's fee schedules, so as to ensure that the practice is billing at the appropriate allowable charge amounts.



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- Management of Lab/Test Results - It is critical to quality patient care that test results be available in medical records on a timely basis. Manual filing of lab results is labor intensive, inefficient and can lead to errors such as misfiled information. Time spent on these tasks is analyzed as part of this analysis.
- Documenting Patient Encounters (Physician and Staff) - A review of a practice's processes for managing patient encounter documentation, such as dictation and transcription, is used to pinpoint areas where clerical or clinical staff might gain time to be used for revenue generating activities. Additionally, this analysis also identifies current dictation and transcription expenses as a potential area for significant reduction in the practice's operating expense.
- Staffing Considerations - Potential for efficiency and revenue gains due to redirecting staff to more productive activities is quantified as part of this analysis.

- Financial Indicator Analysis - It has become important for practices to monitor key financial indicators and benchmark these against industry standards to evaluate how well the practice is performing. By positively impacting these indicators, a practice's financial performance will improve. Areas of improvement such as collections ratios, coding and filing of claims are evaluated.
- Operating Expense Reduction - As with dictation and statement production, other expense line items can be reduced through the implementation of a computerized patient record. Other office expenses identified as potential contributors to the overall reduction of a practice's operating overhead are reviewed in this section, as well.





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Executive Summary

The following information includes a summary analysis of each practice process that was observed as part of the ROI Assessment.

Return on Investment (ROI) Assessment Total Summary:

The total annual opportunity costs estimated for a Nine Doctor OB/GYN Practice are as follows:

Scheduling/Registration Process	\$ 2,691
E/M Coding Dispersion/Chart Audit Analysis	\$ 122,714
Clinical Encounter, Orders Management -- Labs	\$ 1,989
Clinical Encounter, Documentation – Dictation/Transcription	\$ 63,897
Clinical Encounter, Documentation – Nurse	\$ 30,705
Clinical Encounter, Chart Management	\$ 66,666
Supply and Storage Costs	\$ 27,919
Check Out – Charge Entry Processes	\$ 39,881
Payments & Collections Ratio Analysis	N/A
Billing Procedures	\$ 1,100
Statement Production and Process	\$ (704)
Staffing Considerations	<u>\$ 21,216</u>
TOTAL ESTIMATED ANNUAL OPPORTUNITY COST	<u>\$ 396,459</u>
TOTAL ESTIMATED ANNUAL OPPORTUNITY COST PER DOCTOR	<u>\$ 44,051</u>

Scheduling Process:

During the observation period, it took an average of 2 minutes to schedule each appointment. Similarly, if the process of checking in and registering new patients at the Nine Doctor OB/GYN Practice is improved by 50%, an opportunity cost \$861 can be realized. Additionally, if the process of checking in and registering established patients is improved by 50%, an opportunity cost of \$1,830 can be realized. The total opportunity cost for all the areas is \$2,691.

E/M Coding Dispersion/Chart Audit Analysis:

Physicians and other providers must document each patient encounter either by handwriting or dictating their office notes. This process can either slow the physicians' productivity, or it can cause them to spend additional time in addition to the clinical encounter. In most cases, there is an opportunity cost associated with minimizing the time it takes the physicians to complete this task. At the Nine Doctor OB/GYN Practice with the physicians handwriting their notes during the office visit, the chart audit is considered a better predictor of improved financial efficiency. As such, we examined 105 patient records and performed a coding assessment. An equal number of records for each physician were examined when possible. Each record was assessed and placed into one of eight categories:

1. Coding was accurate and complete
2. ICD-9 billed was different from diagnosis code documented
3. CPT codes billed are different than visit/procedure documented
4. Both ICD-9 and CPT billed different than services/diagnosis documented
5. No CPT code recorded on the Encounter Form
6. No diagnosis marked on the Encounter Form
7. Documentation illegible
8. Do not bill-insufficient documentation

The analysis revealed that 19% of the billed CPT codes examined were under documented, i.e. the documentation did not support the code billed, 8% of the billed CPT codes examined were over documented, i.e. the documentation supported a higher code than the code billed, and 73% of the encounters



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Executive Summary

were coded properly, i.e. the documentation supported the code billed. The total billed charges examined was \$12,559, and if all of the encounters were billed as documented billed charges would have been \$11,980, a net decrease of \$579 or 9.5%. We did not extrapolate the 9.5% decrease to all billed charges as the sample of patient encounters was not statistically valid; however, it is important to note that 32% of the records were under documented and if this rate held for the entire encounter population, a potential 9.5% overall reduction in practice billings would result, if current documentation and coding patterns continue. The implementation of PrimeChart will substantially reduce the possibility of under documentation.

In addition, as a part of our chart audit procedures, we also performed an analysis of the Financial Impact if the Nine Doctor OB/GYN Practice's physician E&M code utilization equaled the National Distribution for OB/GYNs, assuming the level of documentation supported the level of service and the physician's patients are as sick as the populated treated in the National Distribution. This comparison yielded \$122,714 in potentially missed revenue.

Lab/Test Results:

It is critical to quality patient care that test results be available in the medical record on a timely basis. This requires the practice to track the ordering of tests and receipt of expected test results, as well as manually file them into the Medical record. The manual filing of lab results may be inefficient, leading to errors, such as mis-filed information. Additionally, manual filing is a labor-intensive task.

Given the volume of tests ordered at the OB/GYN practice, approximately 195 staff hours per year are spent logging test orders and results, pulling charts and filing test results. The associated opportunity cost of this time is \$1,989.

Dictation/Transcription:

Physicians and other providers must document each patient encounter either by handwriting or dictating their office notes. This process can either slow the physicians' productivity, or it can cause them to spend additional time in addition to the clinical encounter. In most cases, there is an opportunity cost associated with minimizing the time it takes the physicians to complete this task. At the OB/GYN practice with the physicians dictating their notes during the office visit and outsourcing the transcription, we have identified an associated opportunity cost of \$63,897.

Documenting Patient Encounters – Clinical:

Typically both the nurses and the physicians handle paper records during a significant portion of the clinical session. The time spent in these activities can more efficiently be used to generate revenue by seeing more patients.

During the observation period, the nurse spent an average of 115,200 minutes per year handling paper charts and phone calls. This equates to 1,920 nurse hours per year. Assuming implementation of PrimeSuite will allow the nurse to redirect his/her time to other activities, an opportunity cost of \$12,626 has been identified. Additionally, if the physicians each spent 30 minutes less per day handling paper records, they would be free to see up to 8 more patients per week or 384 patients per year. The opportunity cost for the physicians time spent handling paper charts varies, depending on the type of office visit and whether or not the visit yields a new procedure or treatment. This incremental patient load will net a variable increase in annual revenue. Assuming an average collection amount of \$158.20 per visit and an increase of 384 visits per year, the net estimated increase in practice revenue is \$60,749.

In total, the opportunity cost associated with the practice's clinical staff handling of patient charts as part of the encounter documentation process totals \$30,705, plus an undetermined increase in revenue associated with an increase in the daily number of patient visits.

Clinical Encounter Chart Management/Pulls:

Based on on-site observations, nurses spent an average of 3 minutes per visit pulling and filing charts. The practice spends approximately 1,175 minutes per day pulling medical records from the files. This equates to 5,090 staff hours per year, with an opportunity cost of \$51,913 if this process is eliminated. In addition, the practice spends approximately 1,274 staff hours per year seeking charts that are out of file, e.g., temporarily located elsewhere within the practice, yielding a potential reduction in operating costs of \$14,753, assuming the need for the task is eliminated. In total, the opportunity cost associated with the practice's handling of patient charts as part of the clinical encounter documentation process totals \$66,666.



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Supply and Storage Costs:

As with dictation and statement production, other expense line items can be reduced through the implementation of a computerized patient record. The practice spends \$1.44 every time a new chart is created. If the need for these charts is eliminated, the practice is projected to experience an opportunity cost of \$27,919 per year through decreased office expenses.

Check Out – Charge Entry Processes:

The checkout and charge entry process consumes approximately 6,225 staff hours per year. If the average time taken to check each patient out and enter charges is reduced by 50%, and the need to follow-up on coding questions eliminated, an opportunity cost of \$39,881 could be saved.

Billing Procedures:

The practice's efficiency and accuracy in entering charges and filing insurance claims directly affects the practice's cash flow. Time spent by staff processing charges and claims can be more efficiently used in revenue generating activities.

Currently, 65 staff hours per year are spent reviewing daily batches to ensure charges are correctly transferred from the charge ticket to the billing system. Additional staff hours are spent correcting errors identified during claims filing with an additional \$213 spent on hardcopying claims rejected. Because it is anticipated that the utilization of an Electronic Medical Record will minimize or eliminate the need for these tasks, an opportunity cost of \$887 is identified.

In total, the Nine Doctor OB/GYN Practice's annual opportunity cost associated with streamlining and improving the accuracy of the billing process is estimated to be \$1,100. This Analysis excludes the potential increased revenue associated with updating the practice's charge tables to reflect the current allowable charge amount within each fee schedule. As part of this analysis, a Fee Schedule review is outstanding.

Statements:

The processing of patient statements directly impacts both the revenues and expenses of a practice. Timely statements to patients encourage timely payment of balances due, whereas the cost of producing these statements impacts the practice's overhead expense. By examining the individual components of this function, we identified a current \$843 in opportunity cost associated with decreased

staff time needed to process the tape/reports and an annual statement outsourcing cost of \$9,720 as compared to an estimated annual cost of statement production equal to \$11,267 with the Greenway solution. The net result is reduction in the expense associated with statement production of \$(704).

Staffing Considerations:

In today's market of declining or static reimbursement, all medical practices are challenged to control staffing costs and utilize their employees as efficiently as possible.

The OB/GYN practice currently employs 40 Full-Time Equivalents (FTEs) in a clerical/administrative capacity. Assuming that PrimeSuite eliminates some of the non-revenue generating tasks currently performed by these individuals, it is estimated that 1.0 FTE can be redirected to other productive tasks or reduced in total, providing an opportunity cost of \$21,216.

Financial Indicators:

It has become increasingly important for practices to monitor key financial indicators, and benchmark these indicators against an industry standard to evaluate how well the practice is performing. By positively impacting these indicators, a practice's financial performance will improve. Our analysis revealed the following variances as they relate to other MGMA Financial Indicator Averages:

- The average monthly per physician charges are \$77,121 higher than the MGMA average.
- The average monthly per physician receipts are \$106,635 lower than the MGMA average.
- The average monthly per physician collection rate is 5.03% higher than the MGMA average.
- The average monthly per physician total A/R is \$37,937 lower than the MGMA average.



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IMPROVEMENTS FOR WHICH OPPORTUNITY COST IS NOT READILY AVAILABLE:

- Recovered physician time allowing more patients to be seen.
- Improved compliance with Fraud and Abuse statutes.
- Improved compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA).
- Physician time required to review and sign lab results.
- Coding efficiency and accuracy.



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Registration/Check-In	\$2,691
E/M Distribution Analysis	\$122,714
Clinical Encounter, Order Management - Lab	\$1,989
Clinical Encounter, Documentation - Physician	\$63,897
Clinical Encounter, Documentation - Nurse	\$30,705
Clinical Encounter, Chart Management	\$66,666
Hard Costs	\$27,919
Check Out - Charge Entry	\$39,881
Payments	\$0
Claims	\$1,100
Statements	(\$704)
Staffing	<u>\$21,216</u>
Total Return on Investment	<u>\$378,075</u>
Total Estimated Annual Opportunity Cost Per Doctor	<u>\$44,051</u>

Intangibles:

Avoid/minimize potential litigation through:

- accurate coding
- management of prescription drugs (drug-drug, drug-food, allergy interactions)

Improved compliance with Fraud and Abuse statutes.

Improved compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA)

Accurate and easily obtainable management reports

Redirection of physician time to either see more patients or improve personal quality of life





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Desktop Management

On average, how many phone messages are handled daily? 0

Scheduling

How long does it take to schedule an appointment in the computer system? 2 minutes





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Registration/Check-In

Individual Observations

Established pt registration time in min.
Additional check in times
New patient registration time in minutes

										Avg
0:01:02	0:01:46	0:01:36	0:02:22	0:00:52	0:06:45	0:01:41	0:03:22	0:00:15	0:00:43	0:02:05
02:28.0	02:40.0	01:32.0								
0:06:45										0:06:45

What functions are performed at check-in?
- Update insurance
- Update demographic information

Analysis:			
Total new patient visits	1,348	Total estab patient visits	8,601
Average check in time/minutes	6	Average check in time/minutes	2
Annual minutes check-in new pts	8088	Annual minutes checking in established pts	17,202
Annual hours checking pts in	135	Annual hours checking pts in	287
Avg. bus. ofc. salary with benefits	<u>\$12.77</u>	Avg. bus. ofc. salary with benefits	<u>\$12.77</u>
Cost associated with check-in	<u>\$ 1,721</u>	Cost associated with check-in	<u>\$ 3,661</u>
Opportunity cost associated with 50% decrease in check-in time	<u>\$ 861</u>	Opportunity cost associated with 50% decrease in check-in time	<u>\$ 1,830</u>





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PATIENT VISITS

	17-Apr	16-Apr	15-Apr	12-Apr	11-Apr	10-Apr	9-Apr	8-Apr	5-Apr	4-Apr
Visits/Day of Week										
Physician #1 New									2	
Established		20	16	24				16	12	
Physician #2 New	1	3			3	7	3			
Established	19	20			19	14	22			
Physician #3 New	1	2	3	2	1					
Established	8	8	21	13	8					
CNM #1 New	2	0		1			1			
Established	10	9		7		8	7			
Physician #4 New	2	2	1	1						
Established	15	10	15	5	10					
Physician #5 New	2	1		0	3	2				
Established	16	25		11	17	15				
Physician #6 New	1	1	1	3	3					
Established	22	14	14	15	14					
Physician #7 New		2	2				4			
Established		17	9	10			16	13		
Physician #8 New		1		3		1	3			6
Established		14		10		7	5			6
Physician #9 New					0	3	2	3	2	
Established					18	19	13	22	16	

Data Sources:

- Appointment Books _____
- Sign-in sheets _____ **X** _____
- Other _____





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CLINICAL ENCOUNTER: CODING CHART AUDIT RESULTS

Provider	Billed Charge	Chart Charge	Impact
Physician #1	\$1,069	\$915	(\$155)
Physician #2	\$915	\$1,006	\$91
Physician #3	\$1,684	\$1,156	(\$528)
Physician #4	\$1,113	\$1,090	(\$23)
Physician #5	\$1,204	\$1,190	(\$14)
Physician #6	\$882	\$821	(\$60)
Physician #7	\$1,057	\$1,142	\$85
Physician #8	\$1,053	\$1,106	\$53
Physician #9	\$893	\$884	(\$9)
Physician #10	\$979	\$1,081	\$101
CNM, MN #1	\$818	\$746	(\$72)
CNM #2	\$893	\$844	(\$49)
Totals	\$12,559	\$11,980	(\$579)

Analysis:

Billed CPT codes under documented (documentation did not support code billed)	39 (19%)
Billed CPT codes over documented (documentation supported a higher code than the one billed)	17 (8%)
Encounters coded appropriately (documentation supported code billed)	152 (73%)
Monetary impact if all encounters were billed as documented	(\$578.57)





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CLINICAL ENCOUNTER: CODING
E/M Distribution Results: Office Visits

Total New Patient Visits =				1,348	Total Estab Patient Visits =				8,601		
		% of visits		Financial Impact				% of visits		Financial Impact	
	Practice	Nat'l Disp.*		Practice	Nat'l Disp.		Practice	Nat'l Disp.*		Practice	Nat'l Disp.
99201	0.37%	2.55%		\$181	\$1,245		99211	6.42%	4.03%	\$37,713	\$7,636
99202	16.25%	10.50%		\$14,248	\$9,209		99212	43.81%	19.79%	\$145,746	\$65,839
99203	46.51%	33.60%		\$60,844	\$43,952		99213	36.46%	37.26%	\$167,933	\$171,613
99204	35.76%	38.32%		\$66,357	\$71,114		99214	13.13%	30.36%	\$94,678	\$218,981
99205	1.11%	15.03%		<u>\$2,619</u>	<u>\$35,373</u>		99215	0.19%	8.56%	<u>\$1,956</u>	<u>\$90,028</u>
Total	<u>100.00%</u>	<u>100.00%</u>		<u>\$144,249</u>	<u>\$160,893</u>		Total	<u>100.00%</u>	<u>100.00%</u>	<u>\$448,026</u>	<u>\$554,097</u>
				Difference:	\$16,644					Difference:	\$106,071
				Total Difference:	\$122,714						

*Source: 2002 E/M Bell Curve Data Book based on Medicare claims filed during 2000, the most recent statistics available from HCFA

Analysis:
Financial impact would be approximately \$122,714 **IF** provider's E/M code utilization equaled the national dispersion for OB/GYN, assuming 1) documentation supported the level of service provided and 2) the physician's patients are as sick as the population treated in the national dispersion.





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CLINICAL ENCOUNTER: ORDER MANAGEMENT

LAB

Number of lab tests ordered	38,850
Number of lab reports received (~120 reports per day times 260 days)	31,200
Number of other reports received - op notes, H&Ps, etc (~75 reports per week times 52 weeks)	3,900
Does the practice bill for tests sent to a reference lab?	Occasionally for self-pay & commercial only
If YES, then compare a procedure frequency report with the lab log.	n/a
Are all tests listed in the lab log accounted for (in total) on the frequency report?	n/a
Does the practice transmit lab requests electronically?	Yes
Does the practice download lab reports electronically?	Yes
What is the cost per lab transaction/transmittal?	Lease \$741/mth, no per transaction fee
What is the average time spent preparing a lab specimen?	<1 minute
How much time does the staff spend maintaining tracking mechanisms and following up with the lab about missing test results each week?	Maintained in Labtek Nominal because computerized - reports come in to Labtek and pending list updated
How many tests are ordered that are not reimbursed?	Most billed to pt ins by lab
How much in charges is written off for non-covered tests?	Not tracked
Does the practice obtain signatures on Advanced Beneficiary Notices (ABNs)?	Yes
What level lab does the practice have per CLIA?	Waived, PMP

Data Sources:

Lab log	<u> X </u>
Invoices from Reference Labs	<u> </u>
Lab order forms	<u> </u>
Conversation with lab tech	<u> </u>
Conversation with file clerk	<u> X </u>
Other: CPT Frequency Report	<u> X </u>
Other: Review of returned reports	<u> X </u>





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Pre-Implementation Return on Investment Analysis
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Analysis:	
# of results received annually requiring distinct chart pull*	3,900
# of chart pulls associated with test/year	3,900
Average # of minutes to file test results**	<u>3</u>
Annual # of minutes to file test results	<u>11,700</u>
Annual # of hours to file test results	195
Hourly rate of file clerk including benefits	\$10.20
Opportunity cost of filing test results	<u>\$1,989</u>
# of results requiring provider review	3,900
Average # of minutes spent reviewing each result	1
Annual minutes spent reviewing results	<u>3,900</u>
Annual provider hours spent reviewing results	65
Increase in provider time if assume 25% process improvement	<u>16</u>
*When labs are ordered, the chart is kept at the nurse's station until results are received. The initial chart pull is accounted for in the "Chart Management" section.	
**excludes looking for lost charts which is accounted for elsewhere	





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**CLINICAL ENCOUNTER - DOCUMENTATION
PHYSICIAN**

Do the physicians dictate or handwrite their notes? Dictate

If DICTATED, is transcription done in house or outsourced? Outsourced

What are the practice's hard costs associated with transcription? (tapes, paper, batteries, dictaphones, etc.) 1 dictaphone/mth \$60(incl tapes)

If TRANSCRIBED IN-HOUSE, how many employees do the transcription? n/a

 How many hours per day does this person spend transcribing? n/a

If TRANSCRIPTION is OUTSOURCED:

 How does the transcriptionist bill the practice? per line

 How much is charged per the unit of measure identified? \$0.12

 What is the average monthly cost for transcription? \$5,209/mth

 Does the physician review and sign dictation for accuracy? Yes - most do

If notes are HANDWRITTEN, does the physician do this during the exam or after? n/a

If AFTER the exam, how much time does the physician believe s/he spends on charting each day at the office? At home? see grid below

 How much time does the nurse estimate the physician spends on charting/dictation each day at the office? At home? 2-3 min/visit

 How much time does the office manager estimate the physician spends on charting/dictation each day at the office? At home?

How much time elapses between when the patient is seen and the visit is documented in the chart (e.g. notes handwritten or transcription received and filed in chart)? 42-78 hours

Do the physicians take charts home to finish their documentation? Yes

Are charts transported from one office location to another? Yes

Provider Estimates	Lab Review	Dictation-New	Dictation-Old	Dictation-Review
Provider 1	30 sec/patient	2 min/patient	1 min/patient	
Provider 2	1.5 hours/day	1.5 hours/day		10 min/day
Provider 3		5 min/patient	2 min/patient	
Provider 4	1 hour/day	3 min/patient	3 min/patient	1 hour/day
Provider 5		2 min/patient	1 min/patient	
Provider 6		2 hour/day		5 min/day

Data Sources:

Transcriptionist invoices	_____
Conversation with transcriptionist	_____
Other: <u>Conversation w/ Manager</u>	<u> X</u>
Other: <u>Conversation w/ RN</u>	<u> X</u>
Other: <u>Observation of physician</u>	<u> X</u>





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Analysis:	
Annual transcription costs before internal preparation to transition to PrimeSuite	\$ 62,514
Hard costs associated with transcription equipment/tapes	<u>720</u>
Total hard cost savings associated with discontinuance of dictation	<u>\$ 63,234</u>
Employee minutes spent sorting dictation for review	15
Annual minutes spent sorting dictation for review	3900
Annual hours spent sorting dictation for review	65
Hourly rate of file clerk including benefits	<u>\$10.20</u>
Opportunity cost of sorting dictation	<u>\$663</u>
Avg provider hours per day spent charting	0.75
Providers	12
Avg days worked per year assuming 4-day week & 4 weeks vacation	<u>192</u>
Total provider hours spent charting patient visits annually (all providers)	<u>1,728</u>
Total provider hours spent charting patient visits annually (per provider)	<u>133</u>
If assume a 30 minute decrease in provider time spent handling paper records per clinic session, then provider may be free to see additional patients in the clinical session or leave the practice early. Opportunity cost will vary depending on the type of visit: problem visit, new patient, annual exam, etc. and whether or not the visit will yield a new ob or surgical case.	





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NURSE

What is the average nurse time to prepare chart for provider? 15 min/day 10 min/week to find missing charts 10-15 min/day to review labs
 What is the average nurse time to process & document phone call? 10.78 min/call

Analysis:			
# of visits requiring documentation	38,400	# of nurse minutes spent per day review labs	15
Avg. # of minutes documenting visit	<u>3</u>	# of nurses reviewing labs for physicians	<u>11</u>
# of minutes per year	<u>115,200</u>	daily minutes reviewing labs	<u>165</u>
Avg. # of hours documenting in charts/year	1,920	Annual minutes reviewing labs	<u>42,900</u>
Avg. clinical salary with benefits	<u>\$13.15</u>	Annual hours reviewing labs	715
Cost associated with documenting patient encounter	<u>25,252</u>	Avg. clinical salary with benefits	<u>\$13.15</u>
Opportunity cost associated with 50% process improvement	<u>\$12,626</u>	Cost associated with documenting phone calls	<u>9,404</u>
		Opportunity cost associated with 50% process improvement	<u>\$4,702</u>
# of phone calls requiring documentation/2 day sample	<u>357</u>		
Avg. # of phone calls/day requiring documentation	179		
Avg. # of minutes documenting phone calls	2.63		
Avg. number of days worked	<u>260</u>		
Annual minutes documenting phone calls	<u>122,058</u>		
Annual hours documenting phone calls	2,034		
Avg. clinical salary with benefits	<u>\$13.15</u>		
Cost associated with documenting phone calls	<u>26,755</u>		
Opportunity cost associated with 50% process improvement	<u>\$13,378</u>		

Data Sources:

Observation	<u> </u>
Discussion w/ nurses	<u> X </u>
Other: Chart Pull Tracking	<u> X </u>





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CLINICAL ENCOUNTER - CHART MANAGEMENT
CHARTS NOT IN FILE

	Tuesday	Wednesday	
Eventually found elsewhere	56	28	avg = 42
Not found within search time/same day	9	4	avg = 7

CHART PULLS

	1/2 day - 4/30	1 day - 5/1
Appointment – patient is to see the physician	182	87
Phone call – pharm calling re:patient or refill	6	23
Phone call – patient has a problem	18	32
Phone call – patient wants a refill	15	21
Physician requested chart	1	1
Result reg	5	10
Filing – dictation		
Filing – lab reports		
Filing – other		55
Copy records – written request	9	12
Copy records – office waiting to see patient		
Other- Phone call-patient w/questions	2	
Phone call-patient _____	1	
Pulling for doctor	18	25
Call backs		2
Charts pulled for triage		1
Questions for nurse/fyi		24
N/P/ER reff		6
TOTALS	257	299

1/2 day - 4/30

1 day - 5/1





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Analysis:			
Average minutes to pull chart	1	Avg. minutes seeking chart in file	1
Average minutes to refile chart	<u>2</u>	Avg. minutes seeking chart in office	<u>6</u>
Total average minutes to pull/refile	3	Total average minutes to find chart	7
Average # of daily pulls*	<u>392</u>	Avg. daily charts out of file*	<u>42</u>
Average total minutes to pull chart	1175	Minutes spent per day	294
Average days worked	260	Average days / year	260
Annual minutes pulling/refiling	<u>305,370</u>	Annual # of minutes	<u>76,440</u>
Annual hours pulling/refiling	5090	Annual # of hours	1,274
Avg. clerical salary with benefits	<u>\$10.20</u>	Avg. hourly rate w/benefits**	<u>\$11.58</u>
Opportunity cost associated with pulling and refiling charts	<u>\$51,913</u>	Opportunity cost associated with charts out of file	<u>\$14,753</u>
*Excludes pulls for test results accounted for elsewhere and adjusts for 1/2 day results on 4/30.		**"Out of file" refers to charts not found in the main file room at the time of attempted pulling. **Employee rate is weighted to account for the fact that medical records clerks (50%), clinical staff (25%) and business office staff (25%) look for records throughout the practice.	





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Costs

What is the supply cost per medical record?	\$1.44
Are out-guides used?	Yes
What is the estimated dimension of on-site filing space?	1,176
What is the cost per square foot?	\$22.09
Does the practice use off-site storage?	NO
If YES, what is the monthly cost of this storage?	n/a
Who is responsible for retrieving files from storage?	Storage now on-site
If an EMPLOYEE, who is responsible for going?	n/a
How often do they go?	n/a
How long does it take them?	n/a
If the STORAGE COMPANY, how much does it cost per retrieval?	n/a
How many times per month are charts retrieved?	n/a

Data Sources:

Measurement of space - estimate	<u> X </u>
Review of Income Statement	<u> </u>
Conversation with Manager	<u> X </u>
Conversation with physician	<u> </u>

Analysis:	
Cost per chart	\$1.44
# of new patients/year	1,348
Expense reduction opportunity	<u>\$1,941</u>
Space consumed by files	1176 sqft
Calculated cost per sqft	<u>\$22.09</u>
Annual savings/cost of file space	<u>\$25,978</u>





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CHECK OUT - CHARGES

Check out time in minutes	00:40.0	00:45.0	01:19.0	00:34.0	00:34.0	03:55.0	00:35.0	03:40.0	0:00:49	0:00:23	avg = 1:19:00
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What functions are performed at checkout? Patient collections, appointment scheduling
 Are charges manually reviewed for accuracy? No
 Time spent researching codes 3-5 min/day
 # of codes requiring research 3-5 codes/day

How much time is spent per day keying charges including research, reviewing dictation, conferring with physician, etc.? 56 hours/week
 Are charges entered as the patient checks out or held and entered later? held and entered later
 When are charges entered compared to the date of service? 2-3 days later
 Who codes the charges? Physicians
 How often/when are charges filed? Daily

Review batch reports and compare dates of service with batch date. Dates fall within the 2-3 day lag specified by employees

Analysis of Encounters

Encounter	1	2	3	4	5	6	7	8	9	10
Number of CPT codes billed	1	7	1	1	3	1	4	1	1	2
Number of ICD-9 codes billed	2	1	1	1	1	1	1	1	1	1

Encounter	11	12	13	14	15	16	17	18
Number of CPT codes billed	2	4	2	1	2	1	1	4
Number of ICD-9 codes billed	2	2	2	1	2	2	1	4





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Analysis:			
Avg. hours/day keying charges	<u>11</u>	Total annual patient visits (20 pts/day per provider, 4 days/wk, 206 days/yr)	197,760
Avg. hours/year keying charges	2,912	Average check out time/minutes	1
Avg. billing salary with benefits	<u>\$12.77</u>	Annual minutes checking pts out	<u>197,760</u>
Cost associated with chg entry	<u>\$37,180</u>	Annual hours checking pts out	3,296
Opportunity cost associated with 50% decrease in process time	<u>\$18,590</u>	Avg. clerical salary with benefits	<u>\$12.77</u>
		Cost associated with check out	<u>\$42,090</u>
		Opportunity cost associated with 50% decrease in check-out time	<u>\$21,042</u>
Avg. minutes/day addressing coding ?s	<u>4</u>		
Avg minutes year addressing coding ?s	<u>1,040</u>		
Avg. hours/year addressing coding ?s	17		
Avg. billing salary with benefits*	<u>\$14.36</u>		
Estimated cost of coding questions (office billing only)	<u>\$249</u>		
*Represents only charge entry employees			





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CHECK OUT - EXPECTED REIMBURSEMENT

Reimbursement Review

	CIGNA	Aetna	UHC
99212	38.91	53.06	36.92
36415	7.00	7.00	6.50
76092	100.00	52.98	62.50
99213	53.11	75.00*	51.87
99396	120.00	120.00	112.63

EOB Review

Are any codes in the EOB review being reimbursed at 100%?

In the sample, Aetna reimbursed 99213 at 100%





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PAYMENTS

Total # of Providers FTEs Full time 12 All MDs (10) are working 4 days/wk for 3 month trial period.

	<u>TOTAL PER PHYSICIAN</u>	<u>MGMA MEDIAN PER PHYSICIAN</u>
Time period: Jan - Dec. 2001		
Avg. monthly charges	\$847,971	\$770,850
Avg. monthly receipts	\$603,908	\$497,270
Avg. monthly adjust.	\$273,860	
Gross collection rate	71.22%	66.19%
Adj. collection rate	105.19%	97.75%
A/R Ratio	0.12	1.78
Total A/R	\$105,555	\$143,492

Date Sources:

- Accounts Receivable Reports X
- Monthly Billing Reports
- YTD Billing Reports X





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CLAIMS

	26-Apr	24-Apr	22-Apr	23-Apr
How many are printed and mailed hardcopy?	18	24	17	44
How many are filed electronically?	89	100	66	148
Rejections: Hardcopy				
Electronically				
Total rejects per batch	1	2	0	5

How long does it usually take to correct rejected claims? 30-45 min /day
 What are the common causes for claim rejections? internal errors - SSN, etc.
 What is done with these claims after they are corrected? resubmitted that day
 What is the average length of time between the date of service and when a claim is filed? 2-3 days
 How much time is spent creating a transmittal and monitoring the sending process? 15 min/day to transmit, 1 hour day total to do entire process
 Is the practice incurring any costs for electronic transmission? Yes

Analysis:			
Average minutes/day processing claims	15	Avg # rejections per batch requiring hardcopy	2
Average # of work days/year	<u>260</u>	Average # of batches submittals/year	<u>260</u>
Total number of minutes	<u>3,900</u>	Avg # hardcopy claims/year due to rejections	520
Total number of hours	65	Estimated cost per hardcopy	<u>\$0.41</u>
Avg salary + benefits involved w/ process*	<u>\$14.36</u>	Opportunity cost of eliminating unnecessary hardcopies	<u>\$213</u>
Cost associated with claim processing	<u>\$934</u>		
Opportunity cost associated with 95% process improvement	<u>\$887</u>		
TVM - shortening time between DOS and filing			
TVM - shortening payment cycle by increasing filing frequency			
*Reflects actual employee performing function			





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STATEMENTS

Does the practice cycle bill?

Yes

Are statements produced in-house?

No

IF PRODUCED IN-HOUSE:

How many employees are involved in preparing them for mailing?

n/a

How many TOTAL hours does it take each month?

n/a

IF OUTSOURCED:

If not, how much do you pay to have them processed and mailed for you per month?

\$0.48

What are you getting for this - bulk vs first class, return postage, etc.?

First class, no return postage

How many statements are mailed each month?

1,826 first pages, 392 additional pages

How many pages does the average statement have?

1

How is the billing information communicated to the outsourcing company?

Electronic download

Who in the office is responsible for preparing this information for the outsourcing company?

Billing Mgr.

How long does it take this person to prepare this information?

3 hrs/wk to gather info

How soon are statements mailed once the outsourcing company receives the billing information?

Usually within a day

What are the hard costs associated with doing the statements inhouse?

n/a





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Analysis:	
Employee time required to prepare data for statement processing	3 hours
Number of months prepared	12
Total hours consumed	36
Salary of employee performing task w/ benefits*	<u>\$23.41</u>
Opportunity cost attributable to decreased time	<u>\$843</u>
*Actual employee performing task	
Cost per current out-sourced statement	\$0.44
Number of statements generated each month	<u>1841</u>
Monthly cost of statements	<u>\$810</u>
Annual cost of statements	<u>\$9,720</u>
Cost per Greenway statement	\$0.51
Number of statements generated each month	<u>1841</u>
Monthly cost of statements	<u>\$939</u>
Annual cost of statements	<u>\$11,267</u>
Opportunity cost of outsourced billing	<u>(\$704)</u>

Data Sources: Review of billing invoices from outsourcing company	<u>X</u>
Conversation w/ manager	<u>X</u>
Conversation w/ person performing task	<u>X</u>
Other _____	_____





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REPORTING

Does the practice do any age/diagnosis/targeted marketing?	Just starting in the last 6 months but can't get information from billing system
Does the practice track no-shows/know its no-show rate?	No
Does the physician use panels for disease management?	No
How much time is spent maintaining tickler/patient recall systems?	Nomimal thru LabTrack-Medic
Is this done through the billing system or manually tracked?	Medic Fast Reminder

RISK MANAGEMENT

Avoid/minimize potential litigation through:

- accurate coding
- management of prescription drugs (drug-drug, drug-food, allergy interactions)

Improved compliance with Fraud and Abuse statutes.

Improved compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA)





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OTHER

How many total employees does the practice utilize? 52
 How many of the total # of employees are full time? 40
 How many of the total # of employees are part time? 12
 On average, how many hours does each part time employee work? 8 to 36 Hours

STAFFING COMPARISON

	Practice	MGMA
Total FTEs	46.5	46.9
Clinical	18.6	28.8
Billing	18.7	6.7
Med Recs	4.8	3.3
Administration	1.80	2.1
Sonography	1.60	2
Lab	1.00	2.90

	Clinical	Med Recs	Bus. Office
On average, how many total employee hours are worked?	39,456	8,763	39,101
How many overtime hours are currently being worked?	276	57	243.66
What percent is overtime of total hours worked?	1%	0.65%	0.62%
Average hourly rate for each classification excluding manager	\$10.96	\$8.50	\$10.64
Average hourly rate for each classification with benefits at 20%	\$13.15	\$10.20	\$12.77

Payroll report X
 Conversation with Manager
 Other

Analysis:	
Potential redirection of medical records staff	1.0
Average hourly rate with benefits	\$10.20
Opportunity cost (annual) of staffing change	\$21,216

