



What is Your Experience?®

In partnership with

Gates, Moore & Company

RETURN ON INVESTMENT

Pre-Implementation Assessment

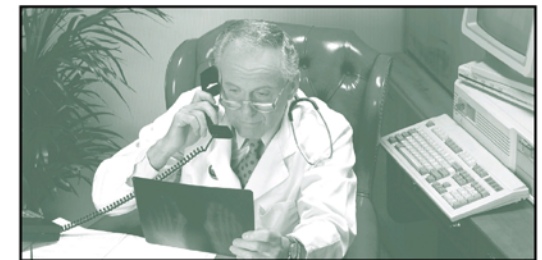
*Prepared for a
Six Doctor OB/GYN Practice*



PRIME Suite™

Delivers Integrated

- Clinical
- Administrative
- Financial
- Processing





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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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Introduction

- **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 Six Doctor OB/GYN Practice are as follows:

Scheduling	\$ 3,906
Registration/Check In Process	\$ 22,159
E&M Coding Dispersion/Chart Audit Analysis	\$ 34,017
Clinical Encounter, Orders Management -- Labs	\$ 27,891
Clinical Encounter, Documentation – Clinical	\$ 17,818
Clinical Encounter, Chart Management	\$ 131,966
Supply and Storage Costs	\$ 1,800
Check Out – Charge Entry Processes	\$ 10,887
Payments & Collections Ratio Analysis	\$ 63,240
Billing Procedures	\$ 816
Statement Production and Process	\$ 1,913
Staffing Considerations	\$ 80,047
TOTAL ESTIMATED ANNUAL OPPORTUNITY COST	\$ 396,459
TOTAL ESTIMATED ANNUAL OPPORTUNITY COST PER DOCTOR	\$ 66,076

Scheduling/Registration/Check-In Process:

The scheduling process at the remote location is unusually tedious due to extremely slow system speed with the legacy system. During the observation period, it took an average of 6 minutes to schedule each appointment. Multiplied by 4,231 appointments scheduled at the remote location, there is an opportunity cost of \$3,906 assuming the process improves by 50%. Similarly, if the process of checking in and registering new and established patients at the Six Doctor OB/GYN Practice is improved by 50%, an opportunity cost \$12,448 can be realized. As part of the check-in process, the practice spends approximately 3 minutes per visit preparing the medical record for clinical documentation. Elimination of this function (totaling 1,514 staff hours annually) will yield opportunity cost of \$9,710. The total opportunity cost for all three areas is \$26,065.

E&M Coding Dispersion/Chart Audit Analysis:

Physicians and other providers must document each patient encounter either by handwriting or dictating their patient encounter notes. This traditional documentation process can either slow the physicians' productivity, or it can cause them to spend additional time in documenting 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 Six 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. 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



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Executive Summary

The analysis revealed that 32% of the billed CPT codes examined were under documented, i.e. the documentation did not support the code billed, 15% of the billed CPT codes examined were over documented, i.e. the documentation supported a higher code than the code billed, and 53% of the encounters were coded properly, i.e. the documentation supported the code billed. The total billed charges examined was \$8,758, and if all of the encounters were billed as documented billed charges would have been \$7,928, a net decrease of \$830 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 each physician E&M code utilization equaled the National Distribution for OB/GYN, assuming the level of documentation supported the level of service and the physicians patients are as sick as the populated treated in the National Distribution. This comparison yielded \$34,017 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 Six Doctor OB/GYN Practice, approximately 593 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 \$27,891.

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.

Extrapolating from the observation period, the nurse spends an average of 90,837 minutes per year handling paper charts and phone calls. This equates to 1,514 nurse hours per year. Assuming implementation of PrimeSuite will allow the nurse to redirect his/her time to other activities, an opportunity cost of \$13,977 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 \$17,818, plus an undetermined increase in revenue associated with an increase in the daily number of patient visits.

Clinical Encounter Chart Management/Pulls:

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, or by allowing providers to finish clinic sessions sooner and potentially decrease staffing costs. Based on on-site observations, nurses spent an average of 3 minutes per visit documenting clinical data and 2 minutes documenting phone calls where documentation was required i.e., pharmacy refill, patient problem, etc. This equates to 1,930 nurse hours per year. Assuming implementation of PrimeSuite will allow the nurse to redirect her time to other activities, an opportunity cost of \$17,818 has been identified.

The practice spends approximately 1,046 minutes per day pulling medical records from the files. This equates to 4,533 staff hours per year, with an opportunity cost of \$58,145 if this process is eliminated. In addition, the practice spends approximately 5,755 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 \$73,821, 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 \$131,966.



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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 \$1.00 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 \$1,800 per year through decreased office expenses.

Check Out – Charge Entry Processes:

The checkout and charge entry process consumes approximately 1,351 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 \$10,887 could be saved.

Payments & Collection Ratio Analysis:

Currently the practice's adjusted collection ratio is 0.9% less than the Medical Group Management Association (MGMA) median. Assuming that PrimeSuite will improve the documentation, coding and filing of claims, the practice could feasibly improve their collections percentages. If this improvement were to equal 0.9% (50% of the difference between MGMA median and the practice's current percentage), the practice could experience an increase in annual revenue of \$63,240.

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, 56 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 \$79 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 \$737 is identified.

In total, the Six Doctor OB/GYN's annual opportunity cost associated with streamlining and improving the accuracy of the billing process is estimated to be \$816.

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 \$1,543 in opportunity cost associated with decreased staff time needed to process the tape/reports and an annual statement outsourcing cost of \$3,516 as compared to an estimated annual cost of statement production equal to \$3,146 with the Greenway solution (a decrease in direct expenses of \$370). The net result is reduction in the expense associated with statement production of \$1,913.

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 Six Doctor OB/GYN Practice currently employs 14 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 3.0 FTE can be redirected to other productive tasks or reduced in total, providing an opportunity cost of \$80,047.

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 \$123,048 higher than the MGMA average.

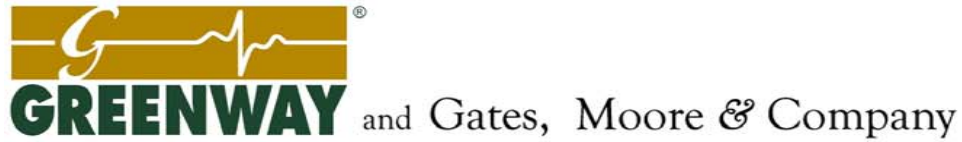


Executive Summary

- The average monthly per physician receipts are \$37,492 lower than the MGMA average.
- The average monthly per physician collection rate is 21.64% lower than the MGMA average.
- The average monthly per physician total A/R is \$194,595 higher than the MGMA average.

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.



Scheduling	\$3,906
Registration/Check-In	\$22,159
E/M Dispersion Analysis	\$34,017
Clinical Encounter, Order Management - Lab	\$27,891
Clinical Encounter, Documentation - Nurse	\$17,818
Clinical Encounter, Chart Management	\$131,966
Hard Costs	\$1,800
Check Out - Charge Entry	\$10,887
Payments	\$63,240
	\$816
Statements	\$1,913
Staffing	<u>\$80,047</u>
Total Return on Investment	<u>\$396,460</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 reports



Desktop: Messaging

On average, how many phone messages are handled daily? 112

Scheduling

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

Main Location - 2-4 minutes

Remote Location - 5-7 minutes due to slow system speed

Analysis:	
# of Remote Office appointments for 2001	4,231
Avg. minutes to schedule appointment	<u>6</u>
Annual minutes	<u>25,386</u>
Annual hours	423
Avg. clinical salary with benefits	<u>\$18.46</u>
Cost to schedule Remote appointments	<u>\$7,810</u>
Opportunity cost associated with 50% process improvement	<u><u>\$3,906</u></u>



Registration/Check-In

Individual Observations

Established pt check in/registration time in min.
New patient registration time in minutes

5.50	3.50	5.75	3.50	3.25	1.25	2.25	3.00	1.00	1.75	3.075	Avg
There were no new patients seen during the observation period											6.15 (assumes new patient takes twice as long as established)

What functions are performed at check-in?

Update patient file, register new patient, copayment collection

Analysis:								
Total new patient visits	1,800		Total estab patient visits	22,709		Total visits	30,279	
Average check in time/minutes	6.15		Average check in time/minutes	3.08		Average time to prep chart	3.00	
Annual minutes check-in new pts	11,070		Annual minutes checking in new pts	69,831		Annual minutes to prep chart	90,837	
Annual hours checking pts in	185		Annual hours checking pts in	1,164		Annual hours prepping charts	1,514	
Avg. clerical salary with benefits	<u>\$18.46</u>		Avg. clerical salary with benefits	<u>\$18.46</u>		Avg. Med. Rec. salary with benefits	<u>\$12.83</u>	
Cost associated with check-in	\$ 3,407		Cost associated with check-in	\$ 21,490		Cost associated front desk chart prep	\$ 19,421	
Opportunity cost associated			Opportunity cost associated			Opportunity cost associated		
with 50% decrease in check-in time	<u>\$ 1,704</u>		with 50% decrease in check-in time	<u>\$ 10,745</u>		with 100% decrease in chart prep	<u>\$ 9,711</u>	



PATIENT VISITS

Visits/Day of Week	Thurs	Mon	Wed	Thurs	Fri		Thurs	Mon	Wed	Thurs	Fri				
	27-Dec	31-Dec	2-Jan	3-Jan	4-Jan		27-Dec	31-Dec	2-Jan	3-Jan	4-Jan				
Provider #1 New	1			0	7	Provider #7 New	1								
Established	6			5	11	Established	23								
Provider #2 New			0	1		Provider #8 New				1	2				
Established			26	21		Established				7	19				
Provider #3 New	0	0				Provider #9 New				1					
Established	15	18				Established				13					
Provider #4 New		4				Provider #10 New	0		3		0				
Established		5				Established	28		24		23				
Provider #5 New				3	0	Provider #11 New			0	0	0				
Established				17	19	Established			4	6	6				
Provider #6 New		1		0	0	Provider #12 New			0						
Established		32		22	19	Established			19						

Data Sources:

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

*NOTE: Visit volume is atypical because of the holiday season and physician vacations.



**CLINICAL ENCOUNTER: CODING
CHART AUDIT RESULTS**

Provider	Billed Charge	Chart Charge	Impact
Provider #1	\$871	\$769	(\$101)
Provider #2	\$762	\$568	(\$194)
Provider #3	\$690	\$626	(\$64)
Provider #4	\$795	\$783	(\$12)
Provider #5	\$1,216	\$1,070	(\$146)
Provider #6	\$1,205	\$1,153	(\$52)
Provider #7	\$624	\$650	\$26
Provider #8	\$671	\$539	(\$132)
Provider #9	\$641	\$550	(\$91)
Provider #10	\$651	\$651	\$0
Provider #11	\$107	\$59	(\$48)
Provider #12	\$524	\$510	(\$15)
Provider #13	\$0	\$0	\$0
Totals	\$8,758	\$7,928	(\$830)

Analysis:	
Billed CPT codes under documented (documentation did not support code billed)	51 (32%)
Billed CPT codes over documented (documentation supported a higher code than the one billed)	24 (15%)
Encounters coded appropriately (documentation supported code billed)	84 (53%)
Monetary impact if all encounters were billed as documented	
	(\$830.02)



CLINICAL ENCOUNTER: CODING

E/M Dispersion Results: Office Visits

Total New Patient Visits =			340		Total Estab Patient Visits =			3,361	
<u>% of visits</u>			<u>Financial Impact</u>		<u>% of visits</u>			<u>Financial Impact</u>	
	Practice	Nat'l Disp.	Practice	Nat'l Disp.		Practice	Nat'l Disp.	Practice	Nat'l Disp.
99201	0.59%	2.56%	\$72	\$315	99211	1.87%	4.10%	\$1,388	\$3,036
99202	15.88%	10.10%	\$3,513	\$2,234	99212	5.92%	18.90%	\$7,697	\$24,571
99203	42.65%	32.36%	\$14,071	\$10,677	99213	77.89%	35.45%	\$140,194	\$63,803
99204	34.12%	38.13%	\$15,970	\$17,848	99214	13.86%	32.06%	\$39,079	\$90,362
99205	6.76%	16.85%	\$4,016	\$10,002	99215	0.45%	9.49%	\$1,834	\$39,002
Total	<u>100.00%</u>	<u>100.00%</u>	<u>\$37,642</u>	<u>\$41,076</u>	Total	<u>100.00%</u>	<u>100.00%</u>	<u>\$190,192</u>	<u>\$220,774</u>
			Difference:	\$3,434				Difference:	\$30,582

Total Difference: \$34,017

Analysis:

Financial impact would be approximately \$34,000 **IF** the **physician'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.
(Note: Mid-level providers are excluded from this analysis.)



CLINICAL ENCOUNTER: ORDER MANAGEMENT

LAB

Number of lab tests ordered	989 Nov '01 pap log	
Number of abnormal results received	383 Nov '01 pap log	
Number of normal results received	606	
Number of other reports received - op notes, H&Ps, etc	247 estimate	(Practice estimates 100 miscellaneous reports/day (2,167/month) plus approximately 833 (10,000 divided by 12 mths) pap reports monthly.)
Does the practice bill for tests sent to a reference lab?	No	
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?	No
Does the practice download lab reports electronically?	No
What is the cost per lab transaction/transmittal?	n/a
What is the average time spent preparing a lab specimen?	2 minutes using preprinted labels
How much time does the staff spend maintaining tracking mechanisms and following up with the lab about missing test results each week?	10 hours/week
How many tests are ordered that are not reimbursed?	n/a because not billed
How much in charges is written off for non-covered tests?	n/a because not billed
Does the practice obtain signatures on Advanced Beneficiary Notices (ABNs)?	yes
What level lab does the practice have per CLIA?	Waived, PPMP

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>

Analysis:	
# of results received monthly requiring a chart	3,000
# of months/year	<u>12</u>
# of chart pulls associated with test/year	36,000
Average # of minutes to file test results*	<u>3</u>
Annual # of minutes to file test results	<u>108,000</u>
Annual # of hours to file test results	1,800
Hourly rate of file clerk including benefits	<u>\$12.83</u>
Opportunity cost of filing test results	<u>\$23,094</u>
*excludes looking for lost charts which is accounted for elsewhere	
# of hours per week tracking lab results	10
Average number of weeks/year	<u>52</u>
Annual minutes spent tracking results	520
Avg. clinical salary with benefits	\$18.46
Cost associated with tracking results	\$ 9,599
Opportunity cost associated with 50% process improvement	<u>\$4,800</u>



**CLINICAL ENCOUNTER - DOCUMENTATION
PHYSICIAN**

Do the physicians dictate or handwrite their notes?	Handwrite
If DICTATED, is transcription done in house or outsourced?	n/a
What are the practice's hard costs associated with transcription? (tapes, paper, batteries, dictaphones, etc.)	n/a
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?	n/a
How much is charged per the unit of measure identified?	n/a
What is the average monthly cost for transcription?	\$50 for letters/correspondence only
Does the physician review and sign dictation for accuracy?	n/a
If notes are HANDWRITTEN, does the physician do this during the exam or after?	During the exam with some after.
If AFTER the exam, how much time does the physician believe s/he spends on charting each day at the office? At home?	At least two hours, especially with phone calls. Seldom at home.
How much time does the nurse estimate the physician spends on charting/dictation each day at the office? At home?	3-5 minutes per visit, usually all done within the same day.
How much time does the office manager estimate the physician spends on charting/dictation each day at the office? At home?	1 1/2 to 2 hours/day; seldom at home, they may come in on day off
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)?	For most providers documentation is done immediately after the visit, others at the end of the clinic session. Almost always same day.
Do the physicians take charts home to finish their documentation?	occasionally
Are charts transported from one office location to another?	Yes via hospital courier





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Charting Observations in Minutes - does not include charting done during patient exam

Provider 1	1.00		
Provider 2	2.50	1.00	
Provider 3	3	0.75	3.5
Provider 4	1		
Provider 5	1		
Provider 6	1		
Provider 7			

Avg provider hours per day spent charting (per provider estimate)	2
Providers	13
Avg days worked per year assuming 4-day week	208
Total provider hours spent charting patient visits annually	<u>5,408</u>
Total hours spent per provider charting patient visits annually	<u>416</u>

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>

Analysis: Assuming a 30 minute decrease in provider time spent handling paper records, 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.



NURSE

What is the average nurse time to prepare chart for provider? 3 minutes including documentation of vitals
 What is the average nurse time to document phone call? 2 minutes of actual documentation time, excluding "hold" time on phone

Data Sources:

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

Analysis:	
# of annual visits	30,279
Avg. # of minutes documenting visit	<u> 3 </u>
# of minutes per year	<u>90,837</u>
Avg. # of hours documenting in charts/year	1,514
Avg. clinical salary with benefits	<u>\$18.46</u>
Cost associated with documenting patient encounter	<u>27,948</u>
Opportunity cost associated with 50% process improvement	<u>\$13,974</u>
# of phone calls requiring documentation/2 day sample	<u> 96 </u>
Avg. # of phone calls/day requiring documentation	48
Avg. # of minutes documenting phone calls	2
Avg. number of days worked	<u> 260 </u>
Annual minutes documenting phone calls	<u>24,960</u>
Annual hours documenting phone calls	416
Avg. clinical salary with benefits	<u>\$18.46</u>
Cost associated with documenting phone calls	<u>7,679</u>
Opportunity cost associated with 50% process improvement	<u>\$3,840</u>





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Pre-Implementation Return on Investment Analysis
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CLINICAL ENCOUNTER - CHART MANAGEMENT

CHARTS NOT IN FILE

	Tues	Wed	Thurs							
Eventually found elsewhere	76	39	38							avg = 51
Not found within search time/same day	56	26	13							avg = 32

CHART PULLS - January 8 & 9, 2002

Appointment - same day	10
Appointment - next day(s)	279
Phone call - pharmacy calling	4
Phone call - patient about refill	26
Phone call - patient problem	66
Physician/Nurse requested chart	12
Lab follow-up	14
Filing dictation	n/a
Filing test results	109
Filing - other	1
Copy records - written request	2
Total	<u>523</u> (2 days)

Analysis:			
Average minutes to pull chart	1	Avg. minutes seeking chart in file	1
Average minutes to refile chart	<u>3</u>	Avg. minutes seeking chart in office	<u>15</u>
Total average minutes to pull/refile	4	Total average minutes to find chart	16
Average # of daily pulls*	<u>262</u>	Avg. daily charts out of file*	<u>83</u>
Average total minutes to pull chart	1046	Minutes spent per day	1,328
Average days worked	<u>260</u>	Average days / year	<u>260</u>
Annual minutes pulling/refiling	<u>271,960</u>	Annual # of minutes	<u>345,280</u>
Annual hours pulling/refiling	4533	Annual # of hours	5,755
Avg. clerical salary with benefits	<u>\$12.83</u>	Avg. clerk rate w/benefits	<u>\$12.83</u>
Opportunity cost associated with pulling and refile charts	<u>\$58,154</u>	Opportunity cost associated with charts out of file	<u>\$73,832</u>
*Excludes pulls for test results accounted for elsewhere		**"Out of file" refers to charts not found in the main file room at the time of attempted pulling.	





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Costs

What is the supply cost per medical record? \$1.00
 Are out-guides used? YES
 What is the estimated dimension of on-site filing space? 500 sqft
 What is the cost per square foot? \$ 19.00

Does the practice use off-site storage? YES
 If YES, what is the monthly cost of this storage? Paid one-time fee up front, retrieval fee occasionally. No fees in last six months.
 Who is responsible for retrieving files from storage? Storage Company
 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? less than \$3
 How many times per month are charts retrieved? Records are only needed sporadically; there have not been any retrievals or costs since June, 2001.

Data Sources:

Measurement of space - estimate X
 Review of Income Statement
 Conversation with Manager X
 Conversation with physician

Analysis:	
Cost per chart	\$1.00
# of new patients/year	<u>1,800</u>
Expense reduction opportunity	<u>\$1,800</u>





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CHECK OUT - CHARGES

Check out time in minutes	4.25	1.00	3.50	1.75	0.25	0.50	0.50	0.25	avg = 1.11
What functions are performed at checkout?	Scheduling follow-up appointments, gathering charge tickets								
Are charges manually reviewed for accuracy?	Not formally; batch reports are scanned for reasonableness.								
Time spent researching codes	2-3 minutes per questionable code								
# of codes requiring research	2-3 per month								
How much time is spent per day keying charges including research, reviewing dictation, conferring with physician, etc.?									3 hours/day
Are charges entered as the patient checks out or held and entered later?	Held								
When are charges entered compared to the date of service?	Next day								
Who codes the charges?	Providers code office visits and surgeries; surgeries are reviewed by non-certified coder								
How often/when are charges filed?	Twice weekly								
Review batch reports and compare dates of service with batch date.	Review of batch reports show charges consistently filed at least two times per week, for dates of service since the previous transmittal. Only outliers are surgeries which are billed upon receipt of the operative report. Surgeries are usually billed within a week of being performed.								



Analysis of Encounters

Encounter
Number of CPT codes billed
Number of CPT codes billed

1	2	3	4	5	6	7	8	9	10
1	2	2	2	2	2	1	2	3	3
1	1	1	1	2	1	1	2	5	2

Encounter
Number of CPT codes billed
Number of CPT codes billed

11	12	13	14	15	16	17	18	19	20
2	2	1	1	1	2	1	2	2	1
1	1	1	1	2	2	1	1	2	3

Analysis:			
Avg. hours/day keying charges	<u>3</u>	Total annual patient visits	30,729
Avg. hours/year keying charges	780	Average check out time/minutes	<u>1.11</u>
Avg. billing salary with benefits	<u>\$16.08</u>	Annual minutes checking pts out	<u>34,109</u>
Cost associated with chg entry	<u>\$12,542</u>	Annual hours checking pts out	568
Opportunity cost associated		Avg. clerical salary with benefits	<u>\$16.08</u>
with 50% decrease in process	<u>\$6,271</u>	Cost associated with check out	<u>\$9,141</u>
time		Opportunity cost associated	
		with 50% decrease in check-out	<u>\$4,571</u>
		time	
		Avg. minutes/month addressing coding ?s	<u>15</u>
		Avg minutes/year	<u>180</u>
		Avg. hours/year addressing coding ?s	3
		Avg. billing salary with benefits	<u>\$16.08</u>
		Estimated cost of coding questions	<u>\$48</u>
		(office billing only)	



CHECK OUT - EXPECTED REIMBURSEMENT

Reimbursement Review

	BC/BS	Tufts	GIC
99213	45.65	54.06	43.67
82270	2.84	3.75	4.95
99396	115.58	121.41	134.68
58100	107.13	80.62	68.94
99203	99.92	84.85	83.83

EOB Review

Are any codes in the EOB review being reimbursed at 100%? No





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PAYMENTS

Total # of Providers FTEs

Full time 6 (6 physicians)
Part time 4.8 (7 mid-levels: 3 NP, 4 midwives)

	<u>TOTAL</u>	<u>MGMA MEDIAN</u>
Time period: Jan - Dec. 2001		
Average monthly charges	\$585,558	\$462,510
Average monthly receipts	\$260,870	\$298,362
Average monthly adjustments	\$304,858	
Gross collection rate	44.55%	66.19%
Adjusted collection rate	95.95%	97.75%
A/R Ratio	1.80	1.78
Total A/R	\$1,055,547	\$860,952
Insurance	\$947,140	
Patient	\$108,407	

Data Sources:

Accounts Receivable Reports	<u> X </u>
Monthly Billing Reports	<u> </u>
YTD Billing Reports	<u> X </u>

Analysis:

If PrimePractice allows the practice to experience a 0.9% increase in collections (equivalent to 50% of the difference between the practice and the MGMA median) through improved coding and claims filing efficiency, then:

Average monthly charges	\$585,558
Difference between MGMA and practice - adj collection rate	<u> 0.90% </u>
Potential for monthly improvement	<u> \$5,270 </u>
Potential for annual improvement	<u> \$63,240 </u>



CLAIMS

	4-Jan	2-Jan	28-Dec	26-Dec	21-Dec	18-Dec	17-Dec	14-Dec	12-Dec	10-Dec	7-Dec	5-Dec	3-Dec
How many are printed and mailed hardcopy?	109	47	63	42	55	75	25	85	80	30	61	120	85
How many are filed electronically?	181	96	76	85	133	144	52	158	167	38	144	190	188
Rejections: Hardcopy	0	0	1	4	1	2	0	3	1	1	3	2	0
Electronically	6	2	0	1	3	0	0	2	3	0	2	0	5
Total rejects per batch	6	2	1	5	4	2	0	5	4	1	5	2	5

How long does it usually take to correct rejected claims? 15 minutes per batch

What are the common causes for claim rejections? policy # incorrect, claim submitted that cannot go electronically

What is done with these claims after they are corrected? refile immediately if will accept electronically, otherwise hardcopy

What is the average length of time between the date of service and when a claim is filed? 1-2 days - claims submitted 3 times per week

How much time is spent creating a transmittal and monitoring the sending process? 5 minutes to process, 3 minutes to monitor connection

Is the practice incurring any costs for electronic transmission? none specifically delineated

Analysis:			
Average minutes/day processing claims	12.89	Avg # rejections per batch requiring hardcopy	1
Average # of work days/year	<u>260</u>	Average # of batches submittals/year	<u>104</u>
Total number of minutes	<u>3,351</u>	Avg # hardcopy claims/year due to rejections	146
Total number of hours	55.86	Estimated cost per hardcopy	<u>\$0.54</u>
Avg salary + benefits involved w/ process	<u>\$13.20</u>	Opportunity cost of eliminating unnecessary hardcopies	<u>\$79</u>
Opportunity cost associated with 95% process improvement	<u>\$737</u>		
TVM - shortening time between DOS and filing			
TVM - shortening payment cycle by increasing filing frequency			





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STATEMENTS

Does the practice cycle bill?

Yes

Are statements produced in-house?

Most are outsourced, although some are handled in-house as a collection tool.

IF PRODUCED IN-HOUSE:

How many employees are involved in preparing them for mailing?

1

How many TOTAL hours does it take each month?

8 (Practice does not anticipate this function going away as a collection tool.)

IF OUTSOURCED:

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

\$302.64 average; \$0.57 per first page, \$0.57 per additional page

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

Bulk rate, no return postage

How many statements are mailed each month?

514 average

How many pages does the average statement have?

one page; only 2.1% have additional pages

How is the billing information communicated to the outsourcing company?

Modem

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

A/R clerk

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

Approximately 15 minutes per week with statements going out weekly

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

Within two-three days

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

mailing envelope (\$0.10), return envelope (\$0.15), paper (\$0.02), postage (\$0.32)

Data Sources: Review of billing invoices from outsourcing company

X

Conversation w/ manager

X

Conversation w/ person performing task

X

Other _____





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Analysis:	Employee time required to review statements/coll ltrrs	8
	Number of months prepared	12
	Total hours consumed	96
	Salary of employee performing task w/ benefits	<u>\$16.08</u>
	Opportunity cost attributable to decreased time	<u>\$1,544</u>
	Cost per current out-sourced statement	\$0.57
	Number of statements generated each month	<u>514</u>
	Monthly cost of statements	<u>\$293</u>
	Annual cost of statements	<u>\$3,516</u>
	Cost per Greenway statement	\$0.51
	Number of statements generated each month	<u>514</u>
	Monthly cost of statements	<u>\$262</u>
	Annual cost of statements	<u>\$3,146</u>
	Opportunity cost of outsourced billing	<u>\$1,914</u>
	Intangible benefit includes faster mailing of statements due to Greenway's use of first class postage.	



REPORTING

Does the practice do any age/diagnosis/targeted marketing?	The practice did once when deciding to open Amherst office but not on an on-going basis.
Does the practice track no-shows/know its no-show rate?	It is noted in the computer and medical chart; accessible but not readily known.
Does the physician use panels for disease management?	Occasionally but not often as it is difficult for the system to generate the data.
How much time is spent maintaining tickler/patient recall systems?	Significant in conjunction with maintaining pap log.
Is this done through the billing system or manually tracked?	Both

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)

OTHER

How many total employees does the practice utilize? 33
 How many of the total # of employees are full time? 14
 How many of the total # of employees are part time? 19

On average, how many hours does each part time employee work? Hours

1. Clinical/Phones	25.86
2. Billing/Reception	25.75
3. Medical Records	30
4. Sonographers	22.67

STAFFING COMPARISON

	Practice	MGMA
Total	25.86	28.14
Clinical*	11.33	17.28
Billing	6.58	4.02
Med Recs	5.25	1.98
Administration	1.00	1.26
Sonography	1.70	1.2
Lab	0.00	1.74

*Because the practice uses clinical staff to answer phones & schedule appointments, the MGMA figure includes both clinical and medical receptionist FTE counts.

	Clinical	Billing	Medical Records
On average, how many total employee hours are worked?	24,957	13,442	11,619
How many overtime hours are currently being worked?	441	484	273
What percent is overtime of total hours worked?	1.77%	3.60%	2.35%
Average hourly rate for each classification excluding manager	\$15.39	\$13.40	\$10.69
Average hourly rate for each classification with benefits at 20%	\$18.46	\$16.08	\$12.83

Payroll report X
 Conversation with Manager _____
 Other _____

Analysis:	Potential redirection of medical records staff	3.0
	Average hourly rate with benefits	\$12.83
	Opportunity cost (annual) of staffing change	\$80,047

