Pennsylvania Association of Community Health Centers

Understanding and Improving Productivity
October 22, 2010

Presented by: Gil Bernhard, CPA, Managing Director
Session Goals

- Impact of Provider Productivity on Health Center Finances
- Understanding Provider Productivity
- Discuss operational issues that affect efficiencies, with a focus on productivity
- Measuring Provider Productivity using RVUs
Impact of Provider Performance on the Health Center’s Finances

- Provider performance can directly impact 3 of the 6 Operating Measures in the “Delicate Balance”
  - Patient Base
  - Provider Productivity
  - Cost per Visit

- Reduced provider productivity will negatively impact the bottom-line as the salary cost is fixed whereas the revenue is declining
Patient Volume Impact Analysis

**Impact of Change in Patient Volume on Patient Services Revenue:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Year Total Patient Revenue</td>
<td>$14,716,585</td>
</tr>
<tr>
<td>Prior Year Total Visits</td>
<td>100,000</td>
</tr>
<tr>
<td>Prior Year Patient Revenue per Visit</td>
<td>$147.17</td>
</tr>
<tr>
<td>Current Year Drop in Patient Visits</td>
<td>(10,000)</td>
</tr>
<tr>
<td>Impact of Drop in Patient Volume on Patient Revenue</td>
<td>$(1,471,700)</td>
</tr>
</tbody>
</table>

Understand the root cause of the volume drop!

- Has the patient base eroded?
- Are we seeing the same utilization per patient as in the past?
- Do we have less providers or a provider productivity issue?
Analyzing the Patient Base

- Current patients:
  - Is payor mix shifting?
  - Are you losing patients to your competitors? How might this be known?
  - What is the visit utilization of your patients (average number of visits per patient)? Have they changed both in total and by department?
  - Are managed care users retaining the health center as their PCP?

- New patients:
  - What is the source of new patients? Outreach?
  - Does the payor mix of new patients differ from that of current patient mix? Are other demographics changing?
### Analyzing Patient Utilization – Current Year vs. Prior Year:

<table>
<thead>
<tr>
<th></th>
<th>Current Year</th>
<th>Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Visits</td>
<td>70,000</td>
<td>85,000</td>
</tr>
<tr>
<td>Medical Patients</td>
<td>32,407</td>
<td>32,567</td>
</tr>
<tr>
<td>Medical Patient Utilization</td>
<td>2.16</td>
<td>2.61</td>
</tr>
<tr>
<td>Dental Visits</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Dental Patients</td>
<td>6,472</td>
<td>4,274</td>
</tr>
<tr>
<td>Dental Patient Utilization</td>
<td>3.09</td>
<td>3.51</td>
</tr>
</tbody>
</table>

What patient utilization patterns do you see – year over year?
Analyzing Productivity Measures – Current Year vs. Prior Year:

<table>
<thead>
<tr>
<th></th>
<th>Current Year</th>
<th>Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Visits</td>
<td>70,000</td>
<td>85,000</td>
</tr>
<tr>
<td>Medical Providers (FTEs)</td>
<td>25.22</td>
<td>25.00</td>
</tr>
<tr>
<td>Medical Team Productivity</td>
<td>2,775</td>
<td>3,400</td>
</tr>
<tr>
<td>Dental Visits</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Dental Providers (FTEs)</td>
<td>8.00</td>
<td>6.25</td>
</tr>
<tr>
<td>Dental Team Productivity</td>
<td>2,500</td>
<td>2,400</td>
</tr>
</tbody>
</table>

What provider productivity patterns do you see – year over year?
Drivers of Cost per Visit

Key “Drivers” of the Cost per Visit:

- Productivity levels
- Support staff and staffing ratios
- Salary levels
- Overhead cost
- Enabling services and ancillary costs

[Some of this information is available in the UDS Comparison Reports]
Decreasing Costs

- Generate the same revenue with less resources, or generate more revenue with the same resources – lower your cost per unit.

- Identify sites and programs that are losing money

- Right size staffing – must align staffing model with productivity of organization
Impact of Provider Productivity on Health Center Cost

Productivity is the #1 Driver of Cost

<table>
<thead>
<tr>
<th></th>
<th>Physician Salary</th>
<th>Physician Productivity</th>
<th>Physician Salary per Visit</th>
<th>Facility Overhead Cost per Physician</th>
<th>Facility Overhead per Visit</th>
<th>Facility and Physician Salary Cost per Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Center A</td>
<td>$ 141,359</td>
<td>4,700</td>
<td>$ 30.08</td>
<td>32,000</td>
<td>$ 6.81</td>
<td>$ 36.89</td>
</tr>
<tr>
<td>National Median</td>
<td>$ 125,534</td>
<td>3,694</td>
<td>$ 33.98</td>
<td>32,000</td>
<td>$ 8.72</td>
<td>$ 42.70</td>
</tr>
</tbody>
</table>

While Health Center A has higher Physician Salary Costs, thus higher absolute costs than the national average, it also has higher productivity. This ultimately leads to a lower cost per visit.
What factors may contribute to a change in provider productivity?

- Has the health center actively taken steps to increase productivity (i.e., implemented an incentive compensation plan, educational training, individual provider productivity reporting)?

- Are there new providers who are building their panel (Ramp-up)?

- Are exam rooms and support staff at capacity?

- Is productivity driven by supply (internal) or demand (external) issues?
Set productivity projections:

- Consensus between Medical Director and providers on realistic productivity projection
- If the health center is planning a major expansion, is there demand in the community to meet visit targets? - RAMP-up
- Recognize the role of contracted providers – is the data available to impute FTEs (may also be useful for provider dependent expenses)
- Consider folding in providers who only spend a portion of their time doing visits with other providers
Measuring Provider Performance

**Objective Measures**

- Visit Productivity
- RVU Productivity
- Cooperation with Pre-Certification and Authorization Requirements
- Compliance with Using Plan Network
- Office Chart Review
- Adverse Outcome Review

**Subjective Measures**

- Participation with and Result of Quality Management
- Patient Relations and Member Satisfaction
### Physician Productivity – Annual Visits

<table>
<thead>
<tr>
<th>Cost Component</th>
<th>Calculation</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician Productivity</td>
<td>Total Physician Visits/Physician FTEs</td>
<td>Productivity Standards</td>
</tr>
<tr>
<td>(by provider type)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COMPARATIVE DATA BY SPECIALTY:**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Health Center (1)</th>
<th>MGMA (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General and Internal Medicine</td>
<td>3,578</td>
<td>3,651</td>
</tr>
<tr>
<td>Family Practice</td>
<td>3,865</td>
<td>4,367</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>3,619</td>
<td>4,771</td>
</tr>
<tr>
<td>Obstetrics &amp; Gynecology</td>
<td>3,720</td>
<td>2,962</td>
</tr>
<tr>
<td><strong>Median of all Physicians</strong></td>
<td><strong>3,683</strong></td>
<td><strong>4,009</strong></td>
</tr>
</tbody>
</table>

(1) Data is from proprietary Health Center Database maintained by RSM McGladrey Inc.


Represents Ambulatory Encounters only.
# Provider Productivity Levels

**Per 2009 UDS Comparison Report:**

<table>
<thead>
<tr>
<th></th>
<th>PA State-wide Averages</th>
<th>National Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Practice Productivity</td>
<td>3,893</td>
<td>3,768</td>
</tr>
<tr>
<td>General Medicine Productivity</td>
<td>4,328</td>
<td>3,915</td>
</tr>
<tr>
<td>Internal Medicine Productivity</td>
<td>4,021</td>
<td>3,670</td>
</tr>
<tr>
<td>OB/GYN Productivity</td>
<td>3,648</td>
<td>3,535</td>
</tr>
<tr>
<td>Pediatric Productivity</td>
<td>4,549</td>
<td>3,952</td>
</tr>
<tr>
<td>Overall Physician Productivity</td>
<td>3,992</td>
<td>3,752</td>
</tr>
<tr>
<td>NP Productivity</td>
<td>2,706</td>
<td>2,865</td>
</tr>
<tr>
<td>PA Productivity</td>
<td>2,967</td>
<td>3,162</td>
</tr>
<tr>
<td>CNM Productivity</td>
<td>2,635</td>
<td>2,496</td>
</tr>
<tr>
<td>NP/PA/CNM Productivity</td>
<td>2,796</td>
<td>2,931</td>
</tr>
<tr>
<td>Medical Team Productivity</td>
<td>4,363</td>
<td>4,258</td>
</tr>
</tbody>
</table>
DRIVERS OF PROVIDER PRODUCTIVITY:

- **Provider Mix** (Number of Physicians, Nurse Practitioners, etc.)
- Percent of Time spent in Patient Care
- Adequate Infrastructure to Support Providers
Drivers of Provider Productivity-Percent of Time Spent in Patient Care

ISSUES FOR CONSIDERATION:

- What is the standard workweek? 35 Hours? 40 Hours?
- How many sessions is a full-time provider responsible for? Weekly average is 7-8, average hours in clinic are 28 - 32.
- How is inpatient/on-call time handled?
- When are meetings scheduled? During lunch? On weekends? At night?
- How is Quality Assurance Peer Review coordinated?
- How is travel time taken into account?
What is it about the way Health Centers provide care to children that is different from private practice?

<table>
<thead>
<tr>
<th></th>
<th>Family Practice</th>
<th>Pediatrics</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Centers</td>
<td>3,865</td>
<td>3,619</td>
<td>1.07</td>
</tr>
<tr>
<td>Private Practice</td>
<td>4,367</td>
<td>4,771</td>
<td>0.92</td>
</tr>
</tbody>
</table>
## Midlevel Productivity – Annual Visits

<table>
<thead>
<tr>
<th>Cost Component</th>
<th>Calculation</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midlevel Productivity</td>
<td>Total Midlevel Visits / Midlevel FTEs</td>
<td>Productivity Standards</td>
</tr>
</tbody>
</table>

**COMPARATIVE DATA BY MIDLEVEL TYPE:**

<table>
<thead>
<tr>
<th>Midlevel Type</th>
<th>Health Center (1)</th>
<th>MGMA (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Practitioners</td>
<td>2,448</td>
<td>2,351</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>2,947</td>
<td>3,106</td>
</tr>
<tr>
<td>Nurse Midwives</td>
<td>2,417</td>
<td>1,876</td>
</tr>
<tr>
<td><strong>Median of all Midlevels</strong></td>
<td><strong>2,596</strong></td>
<td><strong>2,351</strong></td>
</tr>
</tbody>
</table>

(1) Data is from proprietary Health Center Database maintained by RSM McGladrey Inc.
Factors Affecting Productivity

- Sufficient service/patient demand
- Provider supply and availability that reasonably match demand
- Operating infrastructure (e.g., staff, practice management system) and processes that facilitate moving patients efficiently through the system
- Volume – Revenues – Expenses…they’re related AND it’s so simple!!
Executive management must be “in charge” of health center operations

Health center management must perform detailed, systematic analyses to understand operations and how they affect productivity and performance. Anecdotal information, assumptions, or “the way we’ve always done things,” will give a misleading picture of how a health center functions and what needs to change to improve performance.

Various tools are available to measure operational performance in each health center department.

Once management understands its operations, it can begin to develop effective solutions for improvement.
What can happen if we do nothing?
Relationship of Revenues to Expenses

- **Increases in Revenue/Reimbursement**
  - FQHC Medicare – Medicare Economic Increase = 1-3%
  - FQHC Medicaid – Medicare Economic Increase = 1-3%
  - Private Insurance Payers = 0% (maybe a decrease)
  - Self Pay patients = Increase fee schedule – Impact?
    = Increasing SFFS eligible's?
  - Federal Grant Funds?

- **Increases In Expenses/Expenditures**
  - Personnel annual increases – usually around 3%
  - Personnel Fringe Benefits – Health insurance? – 3%
  - Facilities – 1.5%
  - Other expenses – 1.5%
1. Provider productivity includes 3 visits per hour
2. Provider works 2 sessions per day, totaling 8 hours clinical time
3. 8 hours per day time 3 visits per hour = 24 patient visits/per day
4. 260 Work days per year with reductions for:
   a) 15 days vacation
   b) 10 holidays
   c) 10 sick days
   d) 5 CME days
   e) 10 ……just because

Results in 210 working days per year

Therefore: 210 working days X 24 patient visits/day = 5,040 visits per FTE
### Provider Productivity - Daily

<table>
<thead>
<tr>
<th></th>
<th>40 hour work week</th>
<th>35 hour work week</th>
</tr>
</thead>
<tbody>
<tr>
<td># of hours compensated</td>
<td>2,080</td>
<td>1,820</td>
</tr>
<tr>
<td>Less: 8 weeks of paid time off (vacation, holidays, sick, CME)</td>
<td>(320)</td>
<td>(280)</td>
</tr>
<tr>
<td># of hours worked</td>
<td>1,760</td>
<td>1,540</td>
</tr>
<tr>
<td>Less: Administrative hours (e.g. 10%)</td>
<td>(176)</td>
<td>(154)</td>
</tr>
<tr>
<td># of hours of clinical time</td>
<td>1,584</td>
<td>1,386</td>
</tr>
<tr>
<td>Targeted Productivity Level</td>
<td>4,200</td>
<td>4,200</td>
</tr>
<tr>
<td># of visits per clinical hour</td>
<td>2.65</td>
<td>3.03</td>
</tr>
</tbody>
</table>
## Encounter Analysis

### 2010 Provider Visits

<table>
<thead>
<tr>
<th>Provider</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider 1</td>
<td>3,430</td>
</tr>
<tr>
<td>Provider 2</td>
<td>3,650</td>
</tr>
<tr>
<td>Provider 3</td>
<td>2,530</td>
</tr>
<tr>
<td>Provider 4</td>
<td>4,037</td>
</tr>
<tr>
<td>Provider 5</td>
<td>4,375</td>
</tr>
<tr>
<td>Provider 6</td>
<td>2,820</td>
</tr>
<tr>
<td>Provider 7</td>
<td>3,156</td>
</tr>
</tbody>
</table>

**Totals**  
23,998  
X $122.04 = $2,928,701
## Encounter Analysis

### 2011 Provider Visits

<table>
<thead>
<tr>
<th>Provider</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider 1</td>
<td>4,788**</td>
</tr>
<tr>
<td>Provider 2</td>
<td>4,788</td>
</tr>
<tr>
<td>Provider 3</td>
<td>3,024</td>
</tr>
<tr>
<td>Provider 4</td>
<td>5,040</td>
</tr>
<tr>
<td>Provider 5</td>
<td>5,040</td>
</tr>
<tr>
<td>Provider 6</td>
<td>5,040</td>
</tr>
<tr>
<td>Provider 7</td>
<td>5,040</td>
</tr>
</tbody>
</table>

** Totals: 32,760 ** 122.04 = $3,998,030

** Difference from last year: 8,762 $1,069,329

** Includes 24 patients/day × 210 work days/year
WHAT’S GOING ON IN THE HEALTH CENTER?

PATIENT CYCLE TIME
What is Patient Cycle Time?

- Patient cycle time is the amount of time in minutes that a patient spends at an office visit.

- The cycle time is calculated by recording when a patient arrives for the visit, and recording the time when the patient leaves the health center.

- When measuring cycle time, you may want to distinguish between the time the patient spends with the provider or other members of the care team ("value-added" time) and the time spent waiting.

- Patient Cycle Time Goal – Institute for Healthcare Improvement (IHI) has determined a worthwhile goal to be 30 minutes or 1.5 times the actual time spent with the provider.
Why Measure Patient Cycle Time?

- Identify bottlenecks in health center operations
- Determine where opportunities exist to move patients through the health center more efficiently, thus improving the patient experience and satisfaction
- Identifies where there are potentials for changing health center operations to increase volume of patients served and possibly revenue streams
- May be opportunity to see if staff is over or under-utilized, which could result in staff savings or better utilization of staff
Goals for Patient Cycle Time

- Health centers should certainly look for opportunities to make processes more efficient and thus improve work flow and remove waste.

- There is not such thing as an ideal patient cycle time. The "answer" for each health center depends upon the nature of its patient population, the practice style of the providers and the goals and priorities of the health center.

- However, in looking at overall cycle time, it is essential that CHCs focus on reducing wait time.
  - Wait time is a large driver of patient satisfaction, health center productivity, and resource utilization.
Components of Cycle Time

- **Process time** - is the amount of time spent performing processes. In a patient visit, process time is roughly equivalent to the amount of time spent interacting with health center staff - registering, having vitals checked, being seen by the provider, scheduling follow up visits, etc.

- **Delay time** - is the amount of time spent waiting to move to the next step in the process. In the health center setting this is equivalent to patient wait time.
Most importantly, measures should distinguish waiting time from the rest of the visit.

Four measures that are essential data points are:

- When the patient arrives
- When they see the provider
- When the interaction with the provider ends
- When the patient leaves the health center

At a minimum, these measures are a good indication of value-added time with the provider (face-to-face time) and all other time associated with the visit.
Patient Service
There are various issues relating to patient flow and access. All issues are inter-related and the management of each affects a provider’s time, and thus patient access.

**ISSUES**

- Extended Hours
- Waiting Time
- Walk Ins
- Provider Scheduling Booking Policy
- Referral/Ancillary Referral Process
- Phone Triage
- Prescription Refill Process
Patient Arrives in Clinical Area From Registration

Medical Record Available?*

Call for Medical Chart

Have Exam Room Cleaned and Prepped for Next Visit

Exam Room Prepared?

Provider Ready?

Patient Waits

Patient Exam

Ancillary Service Needed?

Patient Routed to Ancillary Department

Patient Checkout/ Billing Office

*Health Centers with Electronic Medical Records eliminate this question.
Through analyzing patient flow it may be possible to identify the causes of “bottlenecks” along the pathway.

Potential bottlenecks include:

- Wait time
- Exam room utilization
- Provider schedule
- Medical records
- Staffing
- Training and education of staff

Controls should be in place every step along the patient flow pathway.
Potential Bottlenecks in Patient Service

- Charts not available or incorrect chart delivered to clinical area
- Exam rooms not “turned over” timely
- Provider running behind – not ready for the patient
- High number of patients found ineligible for their coverage

What are the root causes and impacts of these bottlenecks?

What is the impact in number of visits that could have been completed if bottlenecks were eliminated?
Role of Clinical Support Staff in Causing/Reducing Bottlenecks

- **Objective** - To prepare facilities and patients for a productive visit with a provider as quickly as possible

- Clinical support staff (e.g. nurses, medical assistants) impact patient flow and provider productivity. They should:
  - Understand and perform their job functions (e.g., retrieve and prepare patients in a timely manner, prepare exam rooms, maintain exam room supply inventory);
  - Have supervision who monitors performance and resolves issues that negatively influence performance;
  - Be organized in a workable staffing model (i.e., nurses versus MAs) that has a sufficient complement.
    - There is not a “right” staffing model – instead health centers tend to equalize the cost of these staff by the skill level mix (i.e. CHCs with a nurse staffing model tend to have less clinical support staff per provider).
Role of Providers in Increasing Their Productivity

- **Objective** - To provide the highest possible quality of care to the maximum number of patients

- Providers should:
  - Direct questions/comments/requests regarding appointment scheduling to the appropriate manager, *not* the staff person who performs the function.
  - Discuss schedule changes with the Chief Medical Officer as soon as possible (and secure approval, as appropriate).
  - Arrive at work at least 15 minutes before their first appointment each day (everyone needs prep time).
  - Avoid working in walk-in patients *when* it causes unreasonable delays for those with an appointment.
  - Resist the natural tendency to treat all the conditions of medically complex patients who have been noncompliant (e.g., repeat no-shows) during a single visit.
  - Establish a protocol to identify and then reschedule noncompliant patients.
Role of Providers in Increasing Their Productivity

Providers should:

- Minimize time devoted to non-patient care activities
  - Occasions requiring long travel times (e.g., between care sites) during the middle of the day
  - Administrative time
  - Time off during peak volume cycles

- Organize records so that basic patient facts (e.g., diagnoses, medications, treatment plans) can be easily identified.

- Consistently document care, at least sufficiently to support selected diagnostic and procedure codes, before each patient is discharged.

- Maintain an ongoing dialogue with support staff regarding ways to increase the team’s collective productivity.

- Share impediments to increased productivity with management and jointly conclude ways to eliminate them.
Management
Role of Management in Increasing Provider Productivity

- Management will be most effective when they enable, not dictate, increased productivity.

- Incentive compensation
  - Will encourage increased provider productivity
  - Will not remove operational impediments that suppress it
  - Start the conversation about, or make the providers stakeholders in, removing obstacles to productivity

- Operating processes that are clearly defined, thoroughly understood and consistently carried out are key.
Role of Management in Increasing Clinical Productivity

- Monitoring staff conformity with defined processes is required to ensure continued compliance.
  - Measure process time
  - Measure cycle time
  - Identify bottlenecks
  - Review exam room utilization
  - Review patient satisfaction surveys
  - Directly observe patient flow
  - Identify space needs of operations
  - Review health center space layout
  - Review provider schedules and appointment scheduling

- Create a continuous feedback loop that informs ALL parties.
  - Oftentimes the best forum for communication is facilitated peer-to-peer interaction.
A. Review fill rate of appointment slots. If more than 10% of appointment slots are unfilled, become more aggressive in scheduling (such as moving from double to triple booking, or allowing more same day/walk in patients)

B. Correlate third next available appointment to provider productivity. If 3rd next available appointment time is long (> 2 weeks) and provider productivity is low (< 4,000 visits/FTE), schedule more aggressively

C. Improve efficiency – if standard appointment slot is 20 minutes or longer, identify steps necessary to reduce it to 15.

D. Make your providers work harder. If time spent in clinic seeing patients is less than 32 hours per week, replace provider administrative time with clinical time

E. Put a portion of provider compensation at risk
Impact of Appointment Scheduling on Provider Productivity

Management should:

- Ensure a steady flow of patients for providers
  – *Providers see the patients who are presented to them*

- Consider provider-specific no-show and walk-in rates to estimate the number of daily appointment slots that should be double or triple-booked for each provider

- Conclude provider schedules (i.e., availability) and scheduling templates (i.e., standard time slots by clinical specialty for each appointment type) as policy
  – *Deviation from this policy should require the Chief Medical Officer’s approval*
  – *Don’t put Schedulers in the unenviable position of debating scheduling issues with providers*
Select Measures for Appointment Scheduling

- Average Number of Rings Before Calls Are Answered/Call Drop Rate/Rate of Calls Placed on Hold/Average Hold Time - Measured at Peak and Non-Peak Times
- Percentage of Reminder Phone Calls (where contact is made and where language precluded communication)/Postcards Completed (mailed versus returned)
- No-Show Rates By Provider (for new and established patients)
- Waiting Time from Registration to Provider Visit (scheduled appointments and walk-ins separately)
- Percentage of Walk-Ins and Same-Day Appointments
- Average Appointment Wait Times (Urgent, Routine/Well and Non-Urgent Sick Visits)
- Percentage of Unfilled Appointment Slots
Measuring Provider Productivity Using RVUs – What is an RVU?

- An RVU or a *Relative Value Unit* measures the intensity of the service provided.

- An RVU scale assigns numerical values to the intensity of procedures. For example, a basic office visit for an existing patient (CPT code 99211) has an RVU of .50*, which indicates a low intensity of the procedure. A surgical procedure such as a laparoscopic cholecystectomy (CPT code 47562) has an RVU of 18.51*, indicating the high intensity of the service. This suggests that the laparoscopy requires approximately 37 times more effort in terms of time, skill and resources than a basic office visit.

* 2009 Resource Based Relative Value Scale (RBRVS)
### Examples of RVUs

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
<th>RVU</th>
</tr>
</thead>
<tbody>
<tr>
<td>99211</td>
<td>Est. Pt. Office Visit -Minimal</td>
<td>0.50</td>
</tr>
<tr>
<td>99212</td>
<td>Est. Pt. Office Visit -Brief</td>
<td>1.03</td>
</tr>
<tr>
<td>99213</td>
<td>Est. Pt. Office Visit -Average</td>
<td>1.72</td>
</tr>
<tr>
<td>99214</td>
<td>Est. Pt. Office Visit -Extended</td>
<td>2.57</td>
</tr>
<tr>
<td>99215</td>
<td>Est. Pt. Office Visit -Comprehensive</td>
<td>3.48</td>
</tr>
</tbody>
</table>

- The RVU represents the skill level, time & effort, and malpractice risk necessary for a procedure.
- The more complex the procedure, the higher the RVU value.
Components of RVUs

The National Physician Fee Schedule Relative Value File has columns for the individual components of RVUs, as well as for the total RVU.

Work RVU - measures the provider skill and effort required to complete the service;
Work RVU for a 99213 = .92

Practice Expense ("PE") RVU - measures the practice expense/overhead resources required to complete the service; Overhead RVU for a 99213 = .77

Malpractice ("MP") RVU - measures the malpractice risk associated with the particular procedure. Malpractice RVU for a 99213 = .03

Total RVU for a 99213 = .92+.77+.03 = 1.72
Compared to Total RVUs, the Work portion of the RVU is a more accurate representation of the true provider work effort entailed in providing a service. The Work RVU *excludes* the overhead and malpractice components that have no relationship to provider productivity.

To do a proper provider productivity analysis using Work RVUs, the total Work RVUs by provider should be determined on an annual basis.
1. Apply Work RVU to each procedure performed during the period.

2. Multiply the Work RVU by the number of procedures to arrive at the total weighted Work RVU for each procedure.

3. Sum the weighted Work RVUs to arrive at the provider’s total Work RVUs.

*Note:* Services such as laboratory and radiology which are ordered but not directly performed by the provider, should not be included in the productivity analysis. Otherwise providers would be credited for productivity generated by support staff, i.e., overutilization of support services.
## Provider Productivity Utilizing Work RVUs

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Work RVU</th>
<th>Procedures</th>
<th>Total Work RVUs</th>
<th>Procedures</th>
<th>Total Work RVUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>99203</td>
<td>1.34</td>
<td>159</td>
<td>213.06</td>
<td>885</td>
<td>1185.90</td>
</tr>
<tr>
<td>99212</td>
<td>0.45</td>
<td>1,142</td>
<td>513.90</td>
<td>401</td>
<td>180.45</td>
</tr>
<tr>
<td>99213</td>
<td>0.92</td>
<td>1,749</td>
<td>1609.08</td>
<td>904</td>
<td>831.68</td>
</tr>
<tr>
<td>99214</td>
<td>1.42</td>
<td>1,163</td>
<td>1651.46</td>
<td>1,722</td>
<td>2445.24</td>
</tr>
<tr>
<td><strong>SUBTOTAL VISITS</strong></td>
<td>4,213</td>
<td><strong>3,912</strong></td>
<td><strong>TOTAL PROCEDURES/RVUS</strong></td>
<td>4,332</td>
<td><strong>4,152</strong></td>
</tr>
</tbody>
</table>
Provider B performed fewer procedures (3,952 vs. 4,332) and less visits (3,912 vs. 4,213) than Provider A. However, Provider B is more productive than Provider A when measured on a Work RVU-basis (4,694 vs. 4,152). This means that Provider B performed fewer, but more complex procedures.
Questions???