OPTIMIZING

YOUR PATIENT FLOW IN THE CLINIC

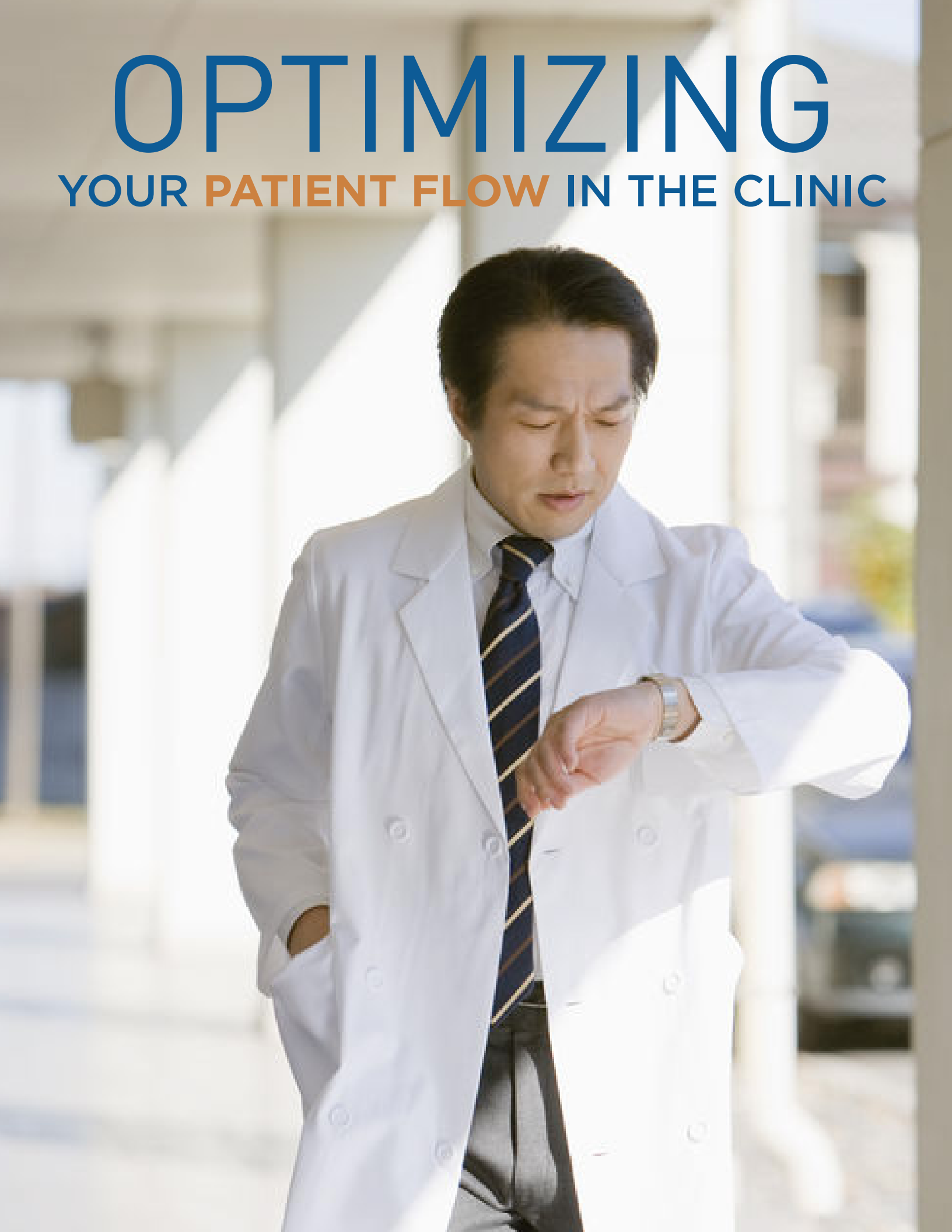


TABLE OF CONTENTS

Learn about Optimizing Your Patient Flow in the Clinic

IS YOUR PRACTICE USING AN EFFECTIVE CLINICAL FLOW SYSTEM FOR YOUR PATIENTS?

Does customer service decrease as patient volume increases in your practice?

Are patient waiting times erratic and sometimes out of control?

Are your costs per patient encounter too high?

Does the current status of your customer service keep you up at night?

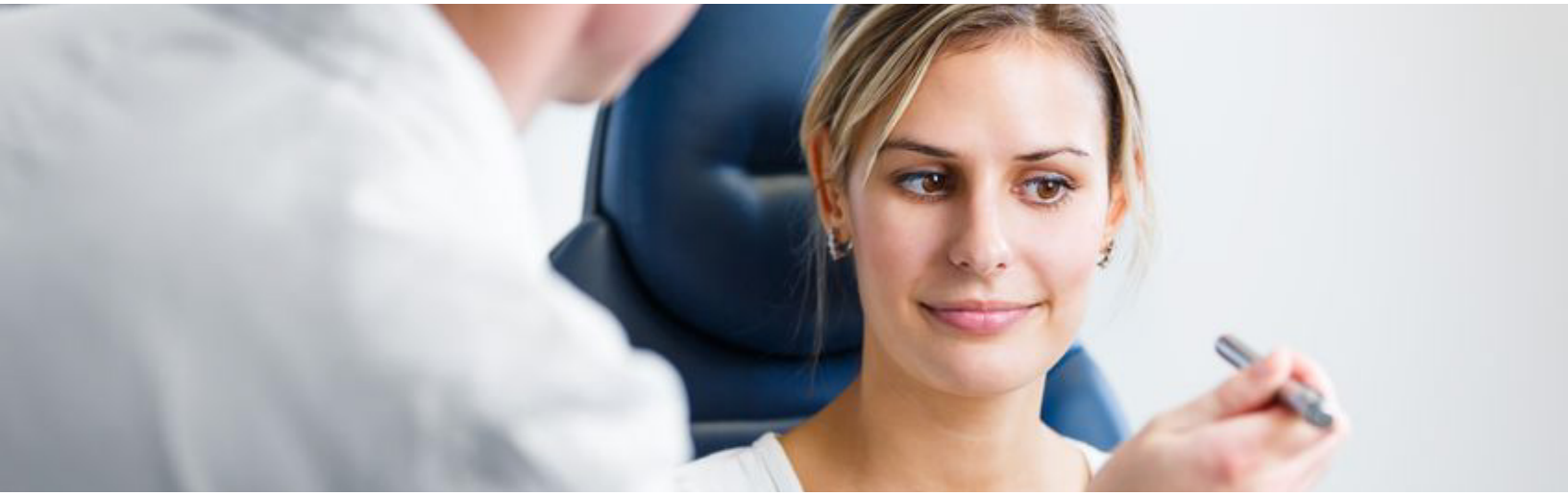
If you answered "Yes" to any of these questions, the reason might just be in the way your practice handles clinical flow – the ease and pace of the movement of patients through your clinic. Having assessed hundreds of ophthalmology clinics all over the country, Advantage Administration, Inc., has seen it all and describes a wide spectrum of descriptions as ranging from "well-orchestrated and graceful" to nothing more than "completely out of control."

HOW WOULD YOU DESCRIBE THE CLINICAL FLOW IN YOUR PRACTICE AND WHERE WOULD IT FALL ON THIS SPECTRUM?

well-orchestrated and graceful	methodical but bumpy	Jeckyl and Hyde one day calm the next day pure chaos	consistent chaotic drama	completely out of control

SO YOU KNOW THAT YOU HAVE A PROBLEM OR ISSUE WITH YOUR CLINICAL FLOW. We will show you how to fix it with our proprietary "Ready Time" System. But before you can fix it, you first need to assess the following:

- **COSTS** – we are all trying to control costs. Do you know what your cost per patient encounter is for your practice?
- **PRODUCTIVITY** – we are all trying to maximize both technician and physician productivity. Is your clinical staff working at their highest legal level allowed?
- **CUSTOMER SERVICE** – are you doing everything possible to enhance the patient experience?



WHAT DOES IT REALLY COST TO SEE A PATIENT?

This formula is not as easy to calculate as you would think.
The simple formula is:

$$\text{COST PER ENCOUNTER} = \frac{\text{TOTAL OPERATING COSTS}}{\text{\# OF PATIENT ENCOUNTERS}}$$

The problem with this simple formula is that it only allows you to either decrease costs or increase patient encounters to get an improved cost per encounter. This approach does not tell you how to reduce your cost and/or how to increase your efficiency!

You must analyze and understand where your costs are before you can control your costs. Does your practice know where their largest costs are incurred?

WHAT ARE YOUR DIRECT AND INDIRECT COSTS?

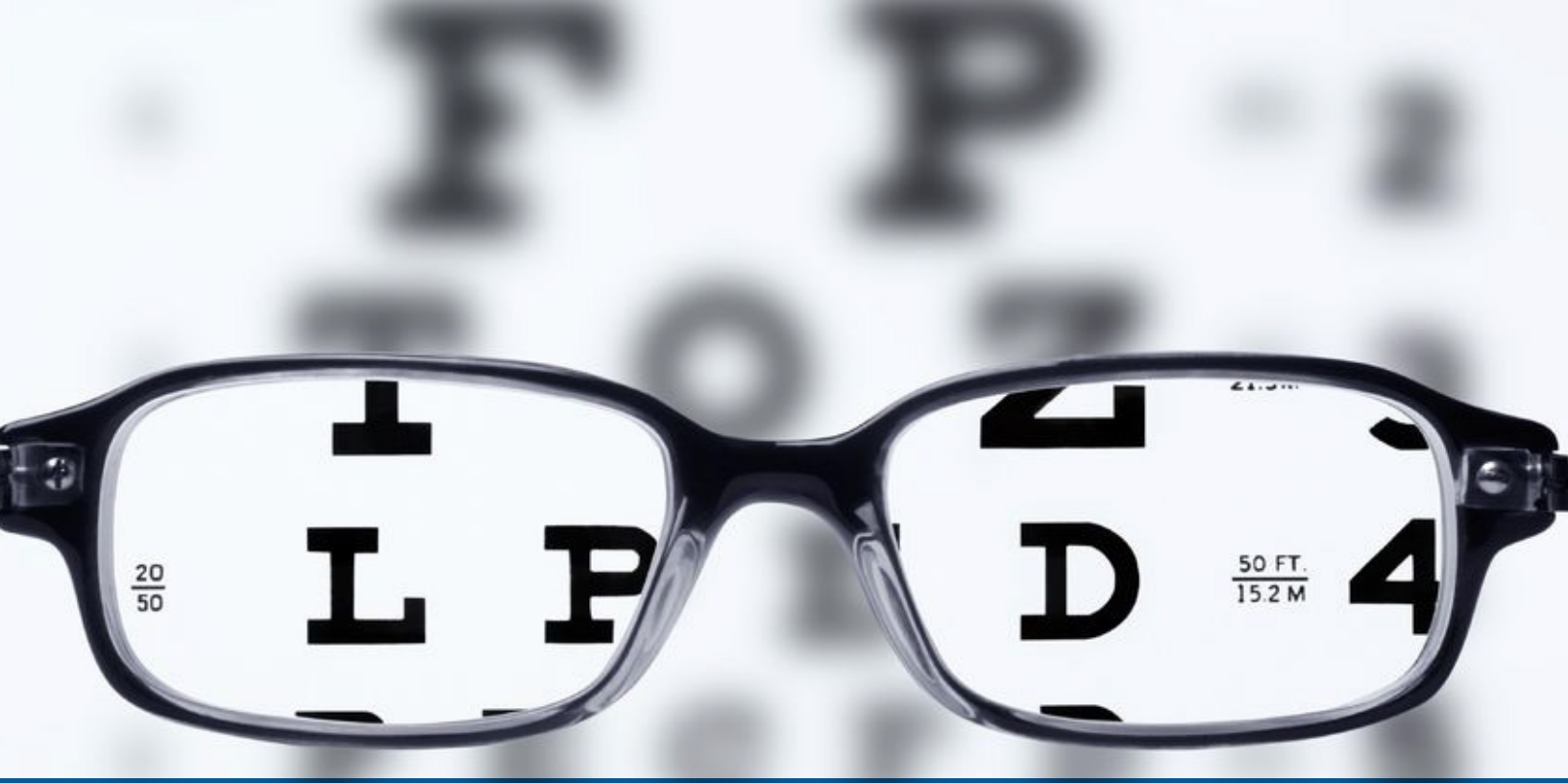
Direct medical costs are those costs directly associated with the patient encounter = physician time, clinical support staff time, drugs and medical supplies

Indirect operating costs = administrative and billing personnel costs, occupancy and use costs, general administrative costs (including insurance and malpractice premiums), marketing costs, administrative supplies, outside professional services, and IT

PATIENT ENCOUNTER REVENUE	**1.00**
DIRECT MEDICAL COSTS	
Drugs and Supplies	(0.05)
Clinical Support Personnel	**(0.20)**
Owner/Physician Salary	**(0.40)**
INDIRECT OPERATING COSTS	
Admin and Billing Personnel	(0.10)
Occupancy and Use	(0.09)
General Administrative and Marketing	(0.13)
NET INCOME	**0.03**

Most practices do a really good job analyzing benchmarks for revenues and expenses for their practice operations. However, very few organizations routinely use various cost accounting strategies to measure costs that incorporate the use of relative value units (RVUs). The term **COST ACCOUNTING** is defined by the business dictionary as "a method of accounting in which all costs incurred in carrying out an activity or accomplishing a purpose are collected, classified and recorded." RVU analysis is a valuable tool for cost accounting and for management to measure clinical productivity, determine reimbursement strategies and gain a greater understanding of the cost per unit in the delivery of a product or service.

A very simple calculation can be made to determine the gross costs per RVU by dividing the total practice costs by the total RVUs billed by the practice over a specific period of time. It is important to make sure the expense and time periods are congruent. RVU calculations are based upon three major components: work expenses (RVUw), practice expenses (direct and indirect- RVUpe) and malpractice costs (RVUmp). We also recommend that you calculate the cost per procedure by incorporating the use of RVUs. This methodology will provide you with an analysis of the specific cost per procedure that can be monitored and studied over time. Remember, "If a specific cost is not being studied carefully, it cannot be improved."



TO REDUCE THE TRUE COST PER PATIENT ENCOUNTER, YOUR PRACTICE MUST:

1. Maximize clinical support staff utilization (within legal/ethical laws and guidelines)
2. Increase physician productivity (we recommend through the "Ready Time" System)
3. Design and maintain efficient and effective space planning to all aspects of the clinic
4. **Understand how to properly use various cost accounting practices to measure and reduce the cost of providing an encounter or diagnostic test**

CLINICAL SUPPORT STAFF NOT BEING UTILIZED AT THEIR HIGHEST LEGAL LEVEL USUALLY CREATES:

1. Lengthy patient wait times (at one or all stops of the work-flow)
2. Bottlenecks in patient flow
3. Margin for error
4. Redundant work
5. Wasted man-hours
6. Excess staff and space required to support providers

DOES YOUR CLINIC FLOW CURRENTLY RESEMBLE ANY OF THESE EXAMPLES?

EXAMPLE 1

Morning session is typically running long and the clinic manager/lead technician does not release technicians to lunch in time to have clinical staff available to start the afternoon schedule on-time. Consequently, the afternoon session starts late and continues to run late even though the provider was on time and available to see patients.

EXAMPLE 2

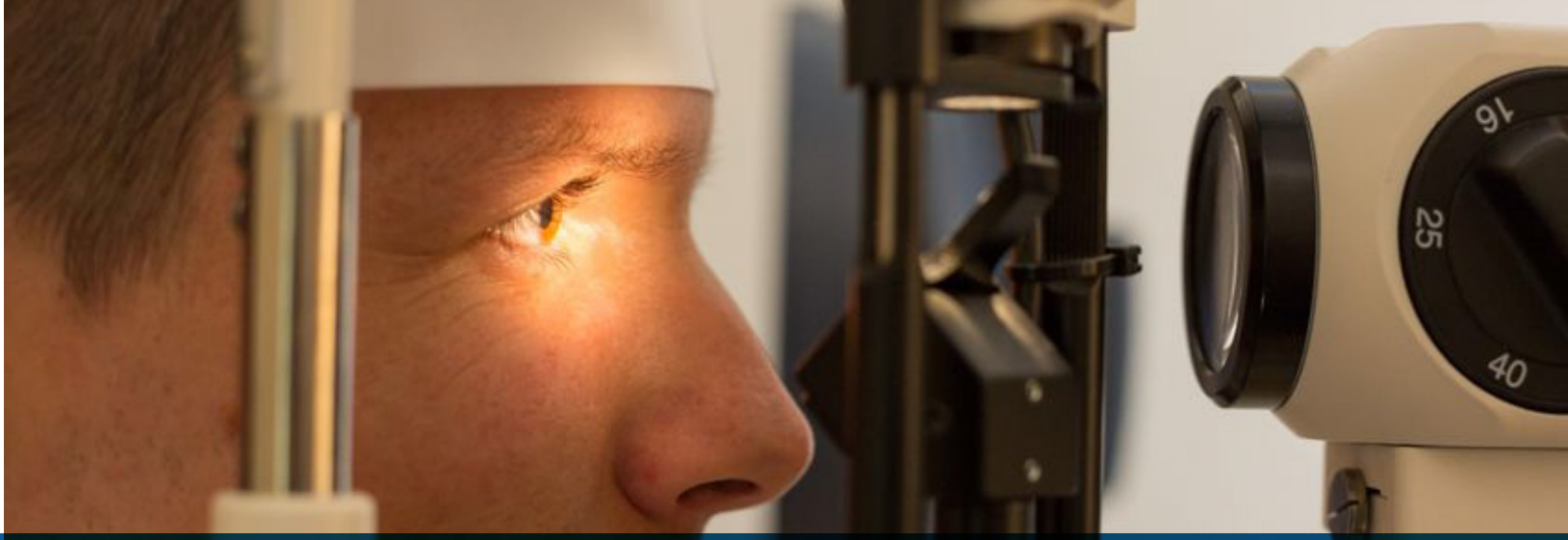
During a session, the technician is available but there are no open lanes in which to screen the patient.

EXAMPLE 3

Technician sees an open lane and retrieves a patient from the reception area then discovers the lane he/she had hoped to use is now occupied. The patient, often infirmed, follows the technician all the way around the clinic to find a place to sit and wait again for another lane to become available. While waiting for a lane to open up, the technician becomes involved with another task (telephone call, relay message, etc.) and is busy when a lane does become available, delaying once again, the progress of patient flow. Additionally, the patient may be skipped in the flow process or forgotten altogether.

EXAMPLE 4

Unnecessary "shuffling" of charts. Once the patients are checked in, the front desk deposits the charts into the clinic chart rack, in no particular order. When there are multiple charts, the technician will pull all of the charts and sort through them to find the next "chronologically scheduled" patient. Then shortly thereafter, another technician arrives at the provider bin and this technician does the exact same thing, looking at all the charts to determine the next patient to retrieve. This scenario can, and usually does, occur multiple times in rapid succession throughout the day. This seemingly simple ritual performed by the technicians can consume enough valuable staff hours in a clinic day to equal 1 technician FTE and occurs in practices using paper charts and EMR charts.



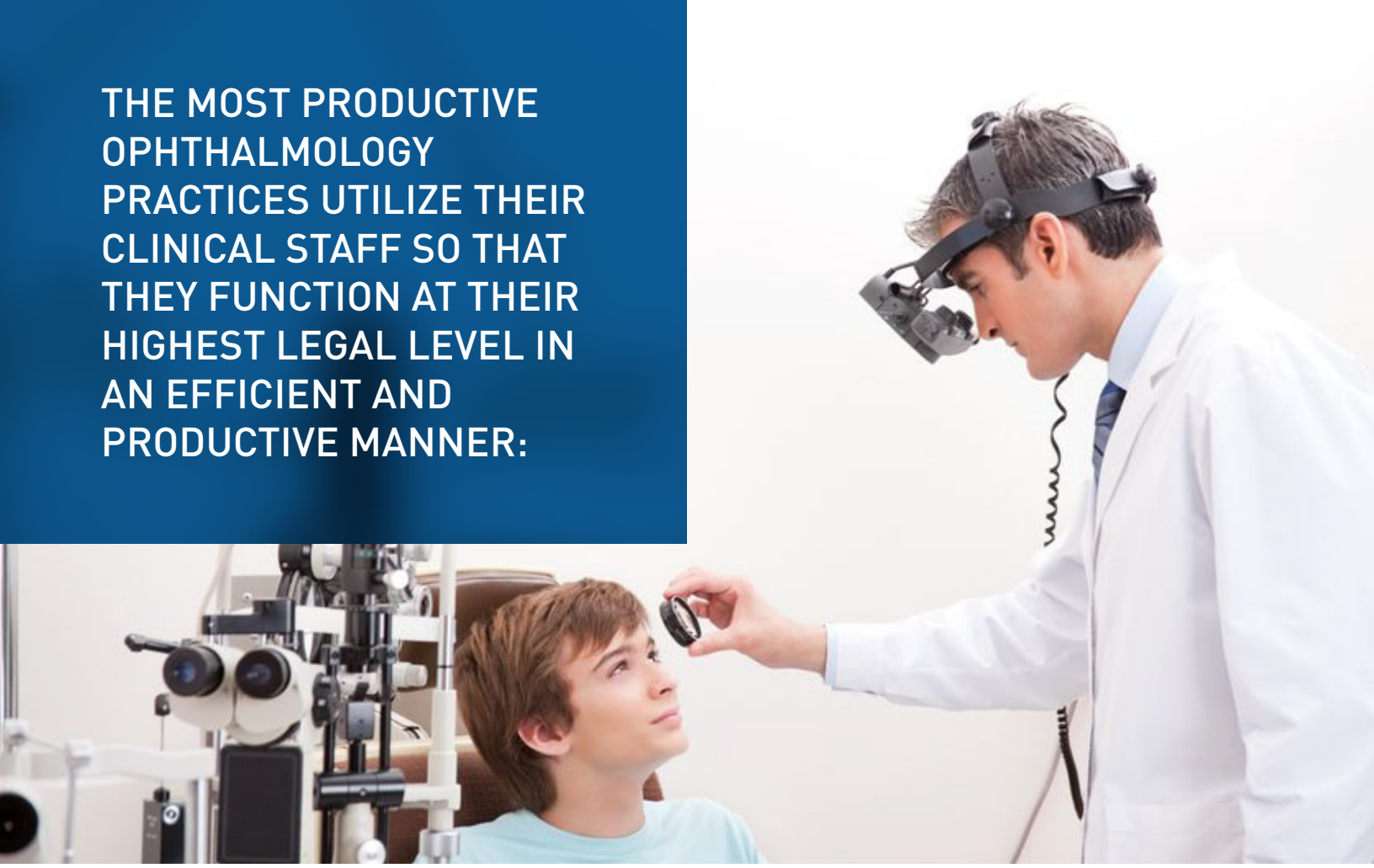
PHYSICIAN COSTS ARE USUALLY THE HIGHEST COST FACTOR IN AN OPHTHALMOLOGY PRACTICE.

Protocols and processes should be in place in the clinic so the physician is 100% productive at each step of the patient exam. Therefore, **on a routine basis, physicians should not be:**

1. Escorting patients
2. Searching the clinic for medical records
3. Tracking down ancillary test results
4. Re-doing the procedures assigned as part of the technician work-up
5. Completing documentation that the technician did poorly or omitted
6. Correcting technician's spelling, grammar, capitalization entries
7. Managing the patient flow
8. Returning unnecessary patient phone calls the staff is capable of handling
9. Searching for supplies/hand-held instruments
10. Cleaning and supplying the lanes
11. Conducting basic patient education and instructions (this should be handled by a scribe)

An effective and efficient clinical support staff should be routinely performing ALL of the above duties so the physician is spending maximum face-to-face time with the patient. This results in maximized productivity for both the physician and clinical staff.

THE MOST PRODUCTIVE OPHTHALMOLOGY PRACTICES UTILIZE THEIR CLINICAL STAFF SO THAT THEY FUNCTION AT THEIR HIGHEST LEGAL LEVEL IN AN EFFICIENT AND PRODUCTIVE MANNER:



1. Determine the number of clinical support staff needed based on the number of patients scheduled per hour

2. Assignment of Clinical Staff:
   - **a.** Work-up Technicians: 1 work-up technician per 4-6 patients per hour
   - **b.** Testing Technicians
   - **c.** Scribes or Clinical Medical Assistants
   - **d.** Hall Monitor: to orchestrate the work-flow

3. Assign technician work-up rooms: one lane per work-up technician

4. Assign physician rooms according to the average length of time each physician spends with a patient:
   - **a.** 20+ minutes per patient: assign 1 room
   - **b.** 15-20 minutes per patient: assign 1-2 rooms
   - **c.** 10-15 minutes per patient: assign 3 rooms
   - **d.** 5-10 minutes per patient: assign 4 rooms
   - **e.** 3-5 minutes per patient: assign 5 rooms (can use 4 rooms if additional person assigned to specific duties to facilitate flow)

5. Scheduling the correct number of staff per day is a continual work in progress. Many factors can affect the clinical staff schedule, including, but not limited to:
    a. Specialty type (retina vs. glaucoma vs. cataract vs. well-care with contact lenses, etc.)
    b. Average amount of testing performed
    c. Time of patient testing (performed on the same day as the physician visit versus patient returns for testing when physician is out of the office, in surgery, at satellite, etc.)
    d. Average speed of each clinic staff and/or physician

6. An effective Clinical Manager will learn the practice patterns and be able to effectively schedule the clinic on a daily basis to keep the patient flow moving gracefully and well-timed

The grid below portrays an example of an ophthalmology/glaucoma specialty clinic with EMR charts. The technicians each average 5-6 patient work-ups per hour. This is based on the physician working at a pace that allows him/her to remain on time as determined by the patient's "Ready Time".

	PATIENTS SCHEDULED PER HOUR			
Support Needed:	**4-6**	**8-9**	**10-11**	**12+**
Work-Up Techs	1	2	2	3
Scribes	1	1-2 (2 allows the physician to leave the room and the scribe provides patient education/ instructions)	2 (2 allows the physician to leave the room and the scribe provides patient education/ instructions)	2 (2 allows the physician to leave the room and the scribe provides patient education/ instructions)
Testing	Assigned per Practice Patterns			
Work-Up Rooms	1	2	2	3
Physician Rooms	1-2	2-3	3-4	4-5

Customer Service is paramount to the viability of today's ophthalmology practices. With the continual advancement of social media technology and ongoing uncertainty with current healthcare changes, years and years of exemplary customer service acknowledgements can be wiped out with a couple negative online reviews. It is not only the patient's actual experience during the visit but also the patient's perception of what is going on in the practice that defines the patient's overall opinion of your practice and the entire staff.

All medical practices are concentrating on ways to enhance the patient experience and improve customer service, as well as trying to develop new and creative ways to capture the patient's opinion of their experience in your practice. Everything else has gone the way of technology, so we anticipate that it is time for customer service systems to follow suit. The Humm System for Ophthalmology is one of the newest forms of customer service technology. We have found that if the patient is able to express their opinions concerning their current visit before they leave the practice, whether positive or negative, problems can be addressed immediately and resolved before the patient heads to Yelp, Healthgrades, Google and Zocdoc online to negatively express their complaints. The patient survey is completed quickly on an iPad tablet before the patient walks out of the practice!

ARE YOU READY FOR THE "READY TIME" SYSYEM?

THE **READY TIME SYSTEM** WAS DEVELOPED BY OUR EXPERT CLINICAL CONSULTANTS WHO CONTINUALLY SAW DISORGANIZED AND CHAOTIC DAYS IN THE OPHTHALMOLOGY CLINICAL SETTING – continually stressful for the physicians, the clinical staff AND the patients. We have implemented the "Ready Time" system into hundreds of ophthalmology practices – large and small, rural and urban, academic and private.

Ophthalmology clinics are probably the most complex and dynamic clinics of all medical specialties – they tend to have more "moving parts." The "Ready Time" system is not a one size fits all system – we customize the system to your particular practice size, specialty and practice patterns. Each clinic will be designed differently depending on the number of providers, type of clinical staff, number of procedures performed, testing protocols and procedures and space utilization. Even though the "moving parts" for each practice may be different, the essential steps of the "Ready Time" system stay consistent and the end result is always a reduction in patient waiting time – the average reduction we have experienced over the years has been 50%!

TERMINOLOGY
FOR "READY TIME (RT)" SYSTEM:

SESSION
A half day of patient care. There are ten (10) sessions per workweek per physician. The number of staff assigned per session is determined by the number of patients scheduled per hour, per session.

PATIENT SCHEDULE
The patient schedule is the screening tech's schedule, not the physician's schedule. The art of creating a patient schedule is to skillfully determine what time the patient will arrive and be ready for the physician (the time they are ready for the physician would be the physician's schedule).

PATIENT WAITING TIME (PWT)
PWT is not how long the patient is in the office, but the amount of time a patient "waits to go to the next step" when they are doing nothing but waiting (dilation, counseling, and patient education are not PWT). Advantage surveys have determined a patient's "wait" tolerance is no longer than 50% of the time spent with staff and providers.

READY TIME (RT)
RT is the time the patient is ready for the next step of the work-flow process. Staff should not have to open the chart to determine when the patient is ready for that next step. Instead, place the ready time on the upper corner of the fee ticket or router sheet, and process the patient in RT order at each step of the exam. The result is all patients "wait" the same amount of time. You will no longer have a short-quick exam patient with a long wait behind the complicated complete exam patient who had zero wait time, even though both patients were in the practice the same amount of time.

THE NUTS AND BOLTS OF THE "READY TIME" SYSTEM:

1. IMPROVE PATIENT FLOW AND CUSTOMER SERVICE BY IMPLEMENTING A "READY TIME" (RT) WORK-FLOW SYSTEM:

A. Differentiate the technician's schedule from the physician's schedule:

- **I.** Patient appointment schedule = Technician's schedule
- **II.** Ready Time (RT) schedule = Physician's schedule (the physician's schedule is based on the patient's ready time as determined by the technician/testing staff

2. "READY TIME " SCHEDULING CAN RESULT IN:

A. Consistent patient wait time – all patients wait the same amount of time

B. Improved customer service – patients leave the practice happy

C. Maximized individual physician capacity – physicians see more patients per day which generates incremental income for the practice with less effort due to improved efficiency

D. Improved use of physician time – physician sees more patients each day AND ends the day on time!

E. Reduced bottlenecks – patient flow is consistently smooth and the lanes are not chaotic!

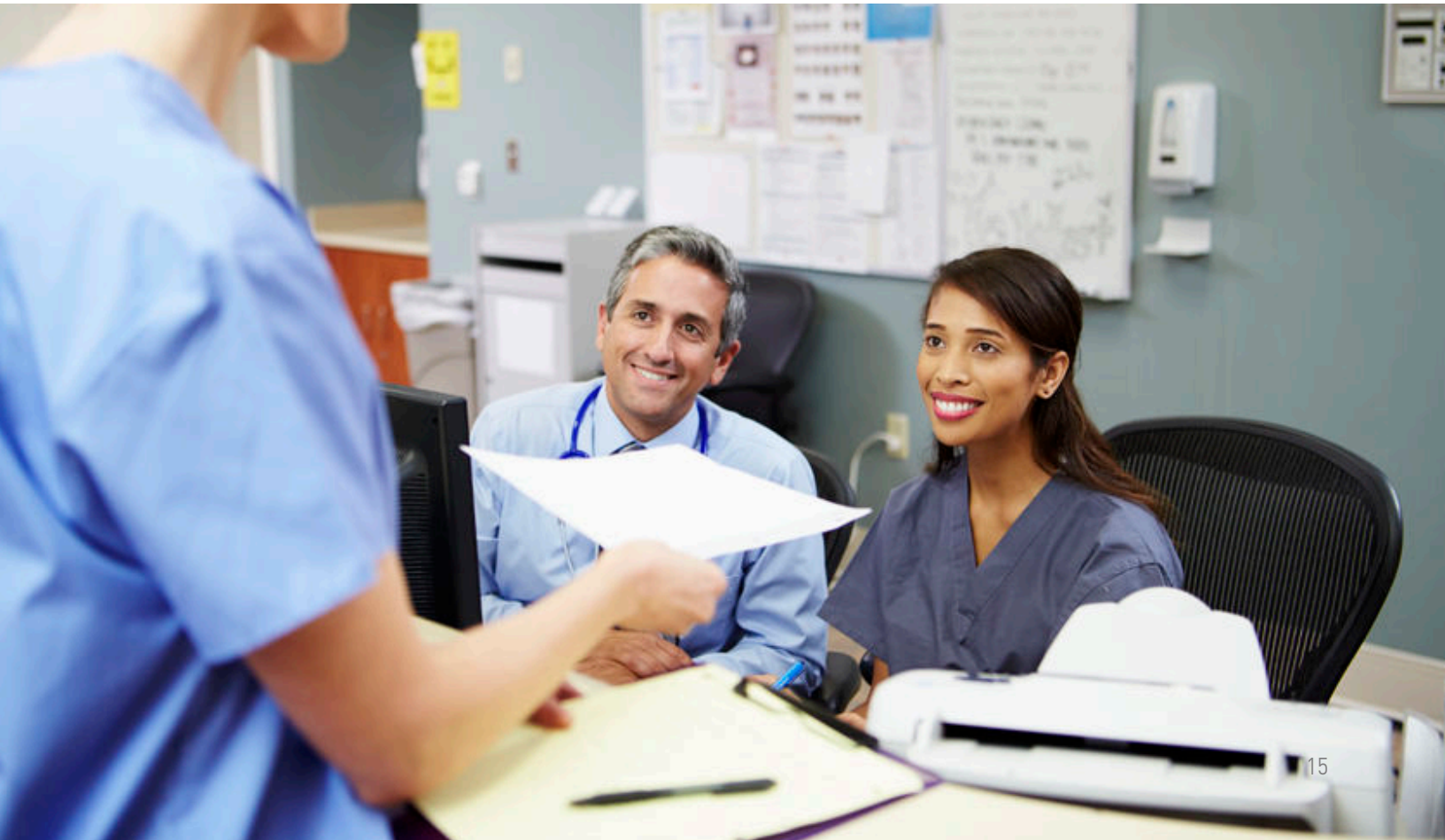
F. Elimination of the physicians' irregular "ebb and flow" work-flow pattern

G. Consistent on-time physician start for every session

H. Reduced cost per patient encounter – costs are being controlled

"READY TIME" BENCHMARKS:

1. Front Desk staff should be able to process a patient/chart within 5 minutes of arrival
2. Techs should call the patient within 10 minutes of the Tech RT (time the chart is placed in the clinic chart rack)
3. The PWT for testing should be within 15 minutes of the Test RT (time chart is placed in testing bin)
4. Provider's schedule should allow him/her to see the patient within 20 minutes of the Dr. RT. Using this method, physician will always know exactly how on-time he/she is (or not) and schedules can be rearranged using this data
5. Document the RT on the exposed corner of the encounter form, superbill or router sheet of each patient
6. Place patients in physicians' lanes to be evaluated in RT order
7. Creates a system where all patients are waiting the same amount of time for the physician
8. Utilize time flow studies to monitor progress and discover potential bottlenecks



CASE STUDY: COMPARISON OF OPHTHALMOLOGY PRACTICE PRE AND POST "READY TIME" IMPLEMENTATION

Practice is a typical 5 MD ophthalmic clinic with six locations that is open six full days per week - Monday through Saturday. MDs rotate through all locations six days a week. There are 2 ODs at each location. There is an optical store in each location. There is a well-established EMR system in place.

PRE "READY-TIME IMPLEMENTATION':

- 11 total technicians work at all locations (different each day, sometimes even by each session)
- All techs work-up the patient all the way through the entire exam
- The MD does not usually see the patient until 45 minutes after the patient appointment time
- Patient check-in is delayed because the staff must answer the phones as they check-in/out patients. First patient arrives late, the second arrives on time, the third arrives early - the 3 charts arrive at the clinic chart rack at the same time
- First technician obtains a chart and retrieves a patient; the second patient is taken by the second technician; third patient by the third technician
- The patient work-up and testing for each patient is performed by the technician who retrieved the patient
- Technicians wait in line for the testing instruments to become available as additional charts are ready for technicians but there are no techs available
- All three charts arrive to the physician about the same time; all three patients must now wait for the provider. The provider either has multiple patients to see at the same time or no patients are ready (ebb and flow pattern through the entire clinic session)
- If the provider orders additional testing, a work-up technician is now pulled from the available pool of working techs. With one less technician to do work-ups, the PWT for the technician begins to escalate and keeps escalating until the tech again becomes available. The technicians retrieve the next round of charts/patients and the process begins all over again.
- By mid-morning all aspects of the clinic work-flow process are behind
- The am session ends late. Staff go to lunch late; many times after the afternoon session patients have arrived
- The pm session begins as much as an hour late

POST "READY-TIME" IMPLEMENTATION WITH WORK-FLOW REVISIONS:

1. Call Center created. Phones no longer answered at the front desk. This eliminates the HIPAA violation of discussing confidential patient data within ear-shot of the reception room full of patients.
2. Call Center allows the check-in staff uninterrupted patient time with the check-in/out processes, creating accurate check-in/out collection processes and appointment scheduling.
3. Custom templates were created for each physician, work-flow and space capacity.
4. Clinic staff assignments were created:
    - **a.** Work-up Technicians: 1 work-up technician per 4-6 patients per hour (depending on specialty and practice pattern)
    - **b.** Testing Technicians: the number varied by the physicians' practice patterns
    - **c.** Scribes: the number varied by the physicians' practice patterns
    - **d.** Hall Monitor: responsible for orchestrating the entire work-flow process
    - **e.** Assigned each technician to a specific work-up room
    - **f.** Assigned each physician to a specific exam room(s)
5. Outcomes:
    - **a.** There is always a technician available to work-up patients
    - **b.** There is always a room available for technicians to work-up patients
    - **c.** Technician(s) consistently available for testing
    - **d.** Eliminated waiting lines for testing equipment
    - **e.** Scribes remain with their assigned physician the entire session(s)
    - **f.** Hall Monitor takes the patient when the scribe completes the work, walks the patient to the next step, cleans the room and places the next patient in the room
    - **g.** All staff have specific assignments and are focused and remain productive
    - **h.** All areas of the patient work-flow process are continuously working
    - **i.** Managers are able to quickly walk thru the clinic and easily spot problems/issues and the cause(s)
    - **j.** Patient wait-time is significantly reduced or non-existent
6. Accountability
    - **a.** Check-in/out, call center and all clinical staff are held accountable for efficiency and productivity
    - **b.** All staff are properly trained and cross-trained
    - **c.** Clinical Manager is responsible for daily review of the next-day's schedule and the patient schedule for the following two-weeks to ensure the templates are accurate, consistent and efficient

"Clinic would be a disaster without it"

"THE CHAOS IS GONE"

"I know how to do my job, but the way it was prior to the change, I was always being pulled in several directions at once. I was rushed and fragmented and disorganized. I don't have those problems now."

"I love having an assignment; I know what I am supposed to be doing"

This publication was written by Joe Carroll who has been working in the healthcare field for over 39 years. As the founder and CEO of Advantage Administration, Inc., he has provided managerial consultative advice to hundreds of ophthalmic practices and to some of the leading academic eye hospitals throughout the United States.

General References:
Cindy Dunn, "How to calculate cost/patient," Published: December 2012, Medical Economics