

Collaboration Amongst Independent Practices on a Common EMR Database

P4P and IT Track

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Integrated Physician Systems

www.ips-med.com



P4P Summit 2006

- Major Constraints for Widespread Implementation of P4P
- 65% of doctors are independent, practicing in groups of five, or fewer
- Small practices need help re-engineering
- The single point of failure is at the doctor, patient, technology interface
- Achieving physician involvement and ROI

Major Areas to be Addressed by P4P

- “Unnecessary” care
- Necessary care not received
- Medical errors and duplication of tests
- Treatment variation
- Inability to track and follow-up care
- Prevention of disease and complications
- “Perverse” reimbursement incentives

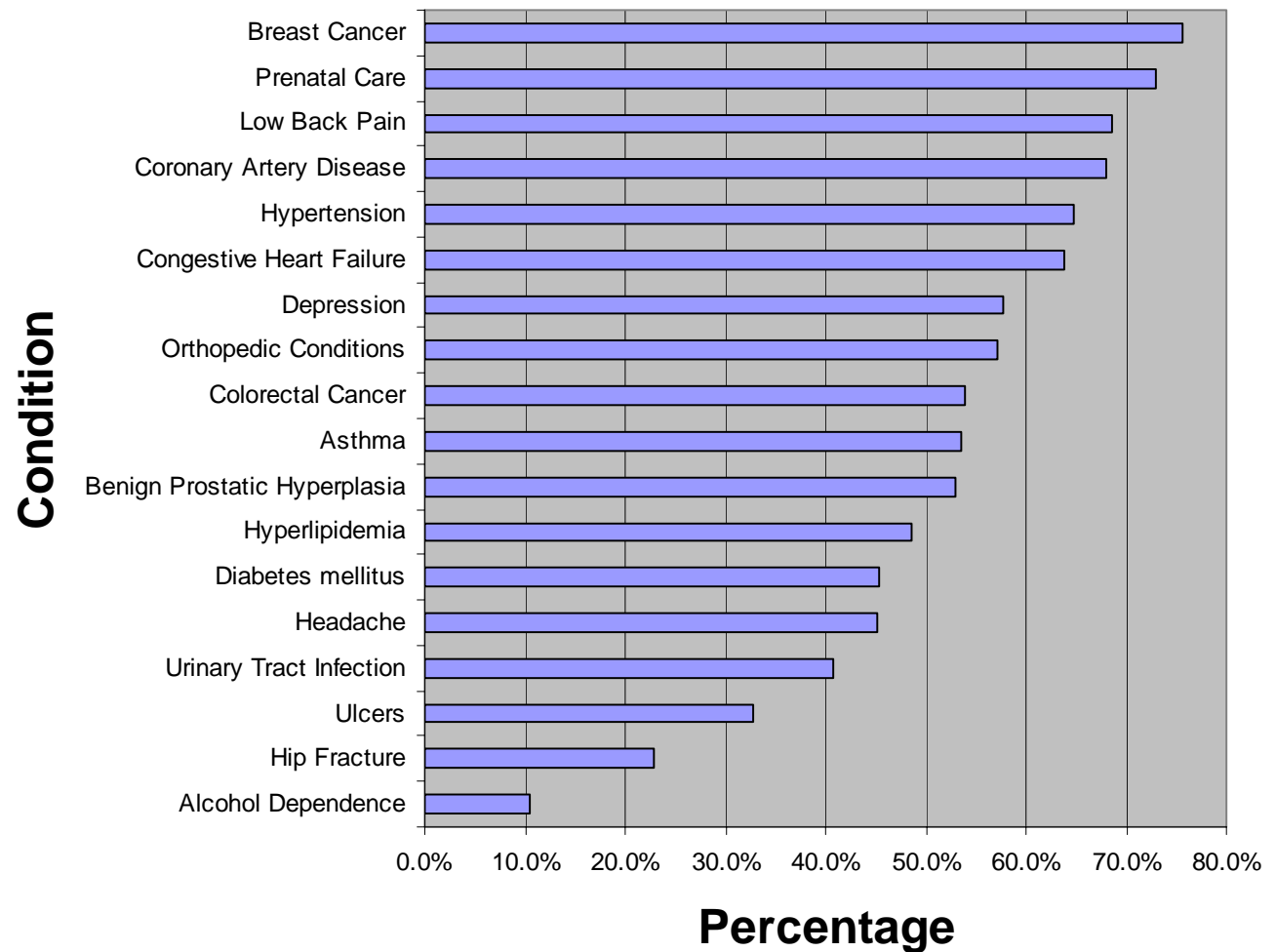
\$600 Billion Potential Cost Savings

- \$120 billion from elimination of “simple” things (i.e. duplicate tests)
- \$80 billion from use of technology to manage chronic disease
- \$400 billion from evidence-based care with a radical change in reimbursement protocols (includes prevention, error reduction, and tracking patient care)

Variation in Recommended Care

RAND Corp:
“Of treatments proven to work, only half the patients who need them actually get them

Quality Shortfalls

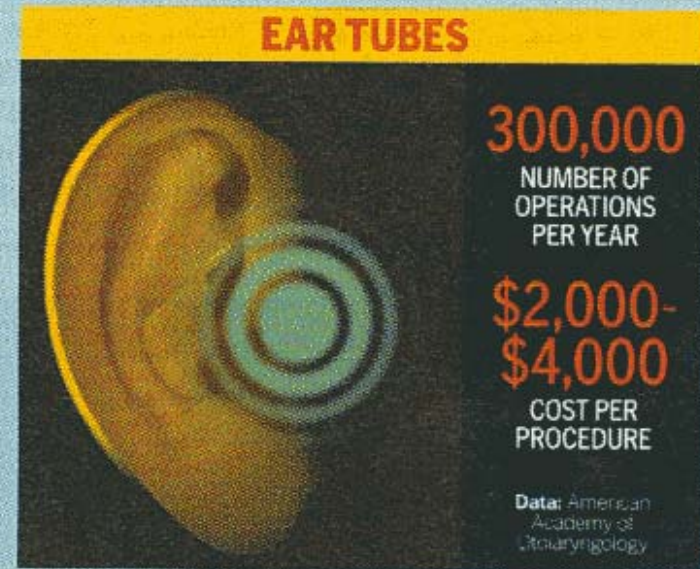


“Treatments are based largely on rules and traditions, not scientific evidence”

Leave Those Ears Alone

In the 1950s, kids routinely got their tonsils taken out. Then physicians such as Dr. Jack L. Paradise of the University of Pittsburgh School of Medicine showed that the procedure brought no benefits to most children. In a study published last August, Paradise took on another common treatment: implanting tubes to drain the fluid in children's ears—thought to hamper hearing and slow language development. Children with fluid do tend to have more speech problems.

But Paradise believes the two conditions have a common cause: poor living conditions. “Medicine is fraught with error when people assume correlation is causality,” he says. So Paradise did a study of 6,000 babies. By age three, 429 had persistent fluid in their ears. Half got ear tubes, the other half didn't—and there was no difference in outcomes between the two groups. Paradise's advice to parents of such kids: “Don't just do something. Sit there.” Many doctors still perform the surgery, however. “People are reluctant to believe our results,” Paradise says. Why? “You get paid for operating and not paid for not operating.”



“Top Down” PPMC Model

- Practice purchase
- Loss of independence
- Lack of technological integration
- Centralization of processes with inability to manage practices
- Lack of data necessary for changing behavior or managing practices
- Workflow unchanged, complexity increased, resulting in “dis-economies”

“Bottom-up” IPS Model

- Doctor up model
- Integrated software at the point of care
- ASP with shared database
- Collaboration in clinical and business areas
- Process and Workflow Reengineering
- Hybrid centralization/decentralization
- Demonstrated ROI with continuous improvement
- Evidence based medicine
- Trust and physician involvement

Changing Behavior

- “In God we trust – all others must bring data.”
 - Dr. W. Edwards Deming
- You get the behavior you measure
- If you pay for it, you will get more of it

CONSTRAINTS

Overcoming the Challenges at the
Physician-Patient-Technology Interface

Physician Needs a Return on Technology Investment

“The typical company is getting only 20% of the benefits possible from technology.”

Bill Gates, *Business @ the Speed of Thought*.



“Efficient” Machines

- 1991 paper, Stanford University economic historian, Paul David
- The problem is not the tool, but rather, how we use this tool

“Automating a bad process not only ensures that we can do a bad job every time but that we can do it faster and with less effort than before.”

H. James Harrington, author *Business Process Improvement*

Waiting for “Best” Software

- What is the best word-processing software, Microsoft Word or WordPerfect?
- TEPR '99 experience
- Optimize
 - The product (CCHIT Certification)
 - The company (it's understanding of workflow)
 - The project implementation team's ability to train and execute
 - The company's level of support, help, and commitment to achieve your goals
 - Physician involvement from beginning to end

Establish “The Goal”

“Begin with the end in mind”

A photograph of a cluttered office desk. The desk is covered with numerous stacks of papers, folders, and documents. A computer monitor is visible on the right side of the desk, displaying a blue screen with some text or data. The background shows a wall with a framed picture or map. The overall scene suggests a busy, paper-heavy office environment.

Is Your Goal “Paperlessness?”

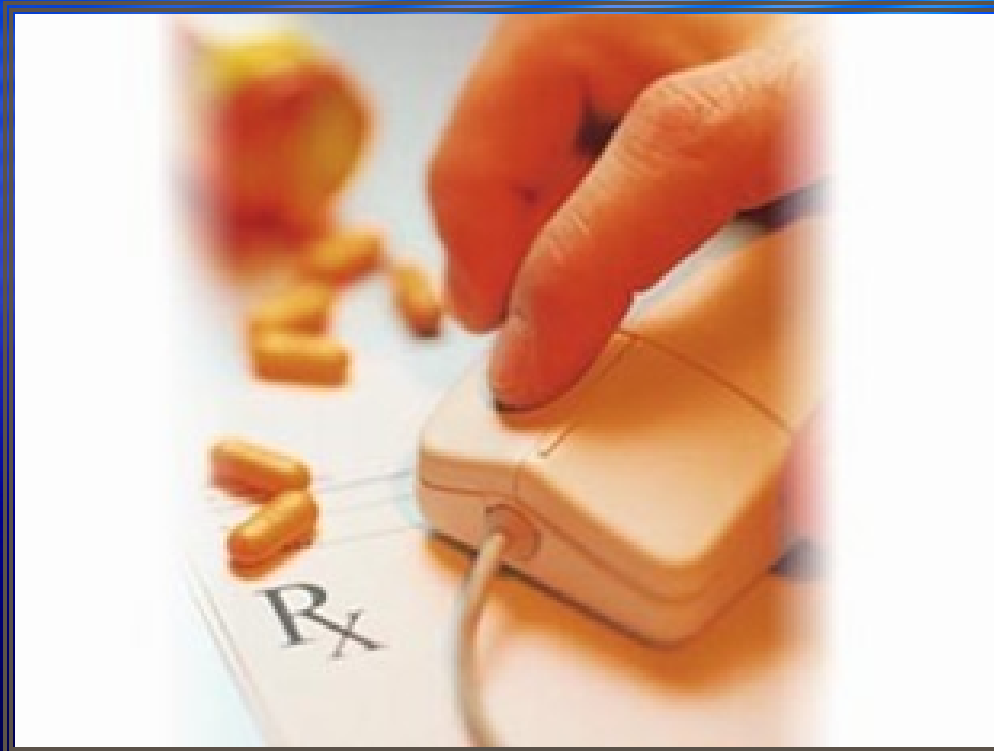
Is Your Goal Dictation Replacement?



Is Your Goal to Eliminate Filing and Chart Movement?



Is Your Goal to Write Electronic Prescriptions?



Or, Are Your Goals All of These Things; Plus...

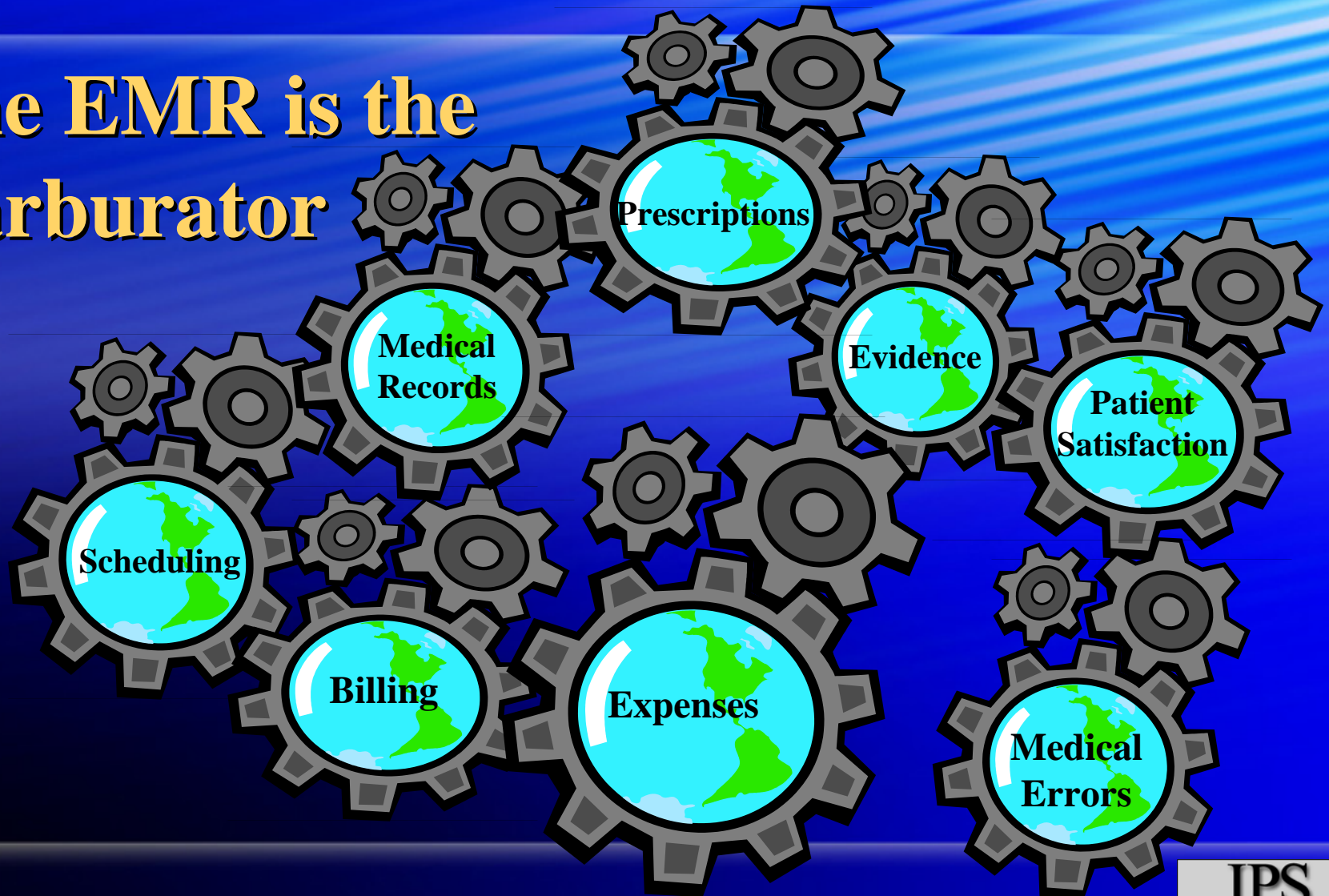
- Increase efficiency
- Increase productivity
- Increase quality
- Manage volume and complexity
- Increase patient satisfaction
- Employ EBM, Measure Outcomes, Participate in P4P ...?

EMR is but One Component of a Total System



Processes Are All Connected

The EMR is the
Carburetor



Understanding Workflow

“While the practices of engineering continually evolve, the laws of physics remain relatively fixed.”

Jim Collins, *Good to Great*

Volume and Complexity



300+ Business Transactions



Streamline (Make it Simple)

“Some of the most revolutionary ideas come from spotting something old to leave out rather than thinking of something new to put in.”

Douglas Adams, The Salmon of Doubt

Remove Constraints (TOC)

- Valerie Borzov: “The winner of the sprint is not the one who runs the fastest, it’s the one that slows down the least

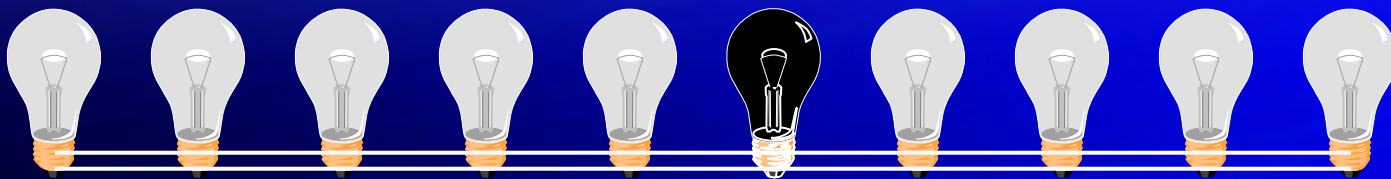
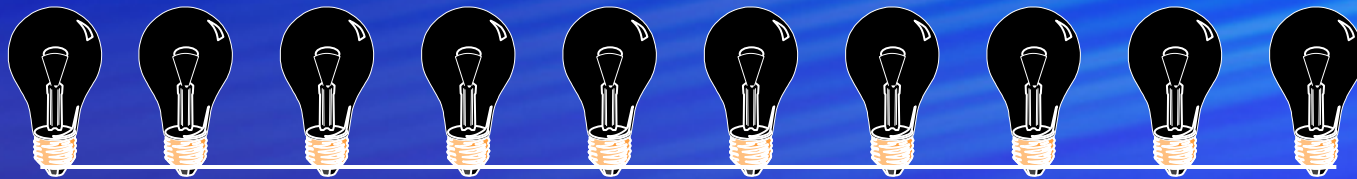
Information

- Capture data one time, when it is first created
- “Just-in-time” inventory concept applied to information

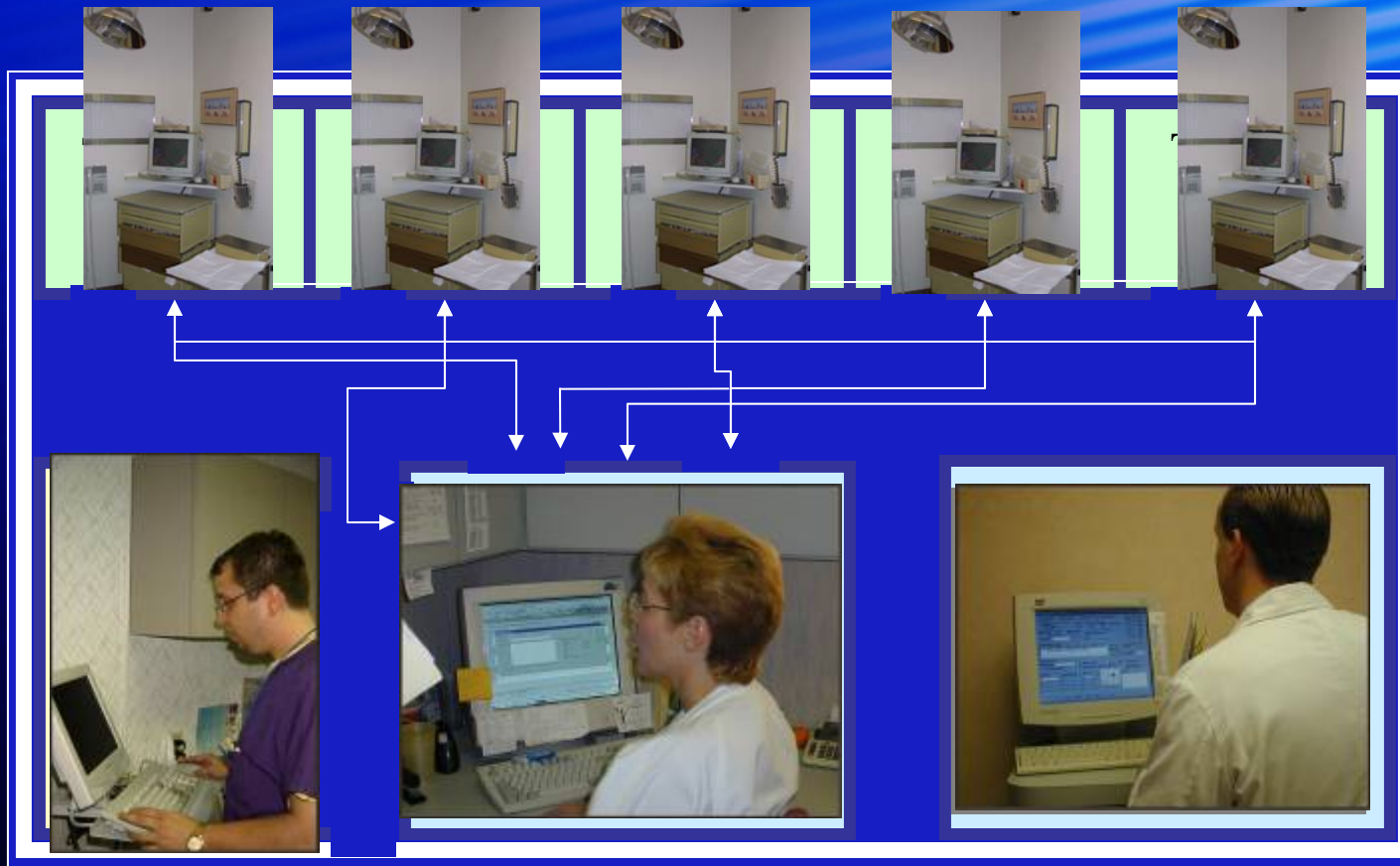
The Butterfly Effect (Quality)

- **“Sensitive dependence on initial conditions”
(ripples to tsunamis (point of care EMR))**
 - **Companies operating at 3 to 4 sigma spend 25% to 40% of their revenues “finding and fixing problems.”**
 - **Companies operating at 6 sigma spend less than 5% of revenues finding and fixing problems**

Dependent Series Versus Parallel

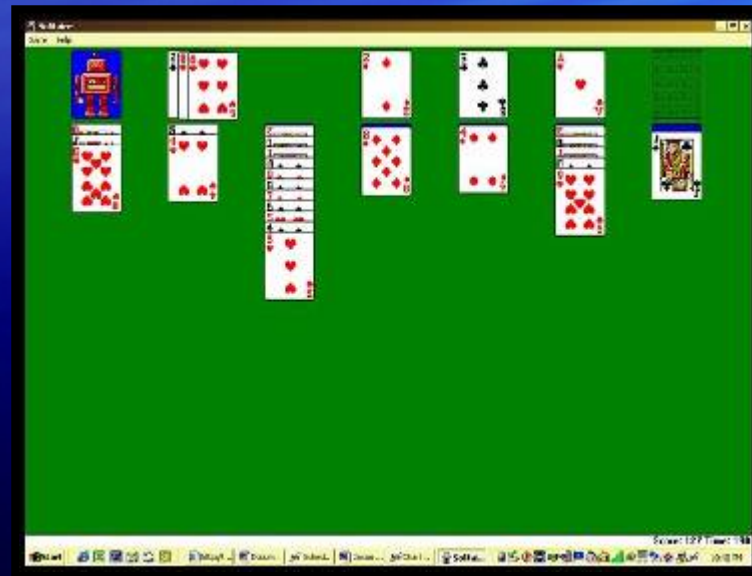


EMR Necessitates Parallel Infrastructure



Staffing Ratios

Toyota estimated that using traditional processes, 85% of workers may not be working at any given time.



Only 5% are actually not working

Where Does the Time Go?

25% are performing waste

30% are waiting for something



25% are using inefficient methods



Double Interruptions

Ask three questions



- What information was unavailable?
- What training was not received?
- What authority was not delegated?

Intra-Office Communication



Just In Time (JIT)



Organizer for WEST TECH Doctor: Master Clinic Schedule - CareRevolution

Organizer Modules View Tools Help

CareRevolution

Today Action List Phone Calls Pending Results Incomplete Patient Records

Today's Appointments:				
Apt	Check-In	Name	Reason	Out
2:15 PM	1:28 PM	Traylor, Hany D		<input checked="" type="checkbox"/>
2:15 PM	1:03 PM	Lombard, Bridget		<input type="checkbox"/>
2:30 PM	1:26 PM	Weber, Frances		<input type="checkbox"/>
2:30 PM		Fle, May		<input type="checkbox"/>
2:30 PM	1:24 PM	Dunbar, Mildred		<input checked="" type="checkbox"/>
2:30 PM	2:13 PM	Walker, Cheryl M		<input type="checkbox"/>
2:45 PM	1:24 PM	Mitchell, Marjorie		<input type="checkbox"/>
2:45 PM	3:07 PM	Viverson, Donna		<input checked="" type="checkbox"/>
2:45 PM	1:31 PM	Schepers, WW		<input type="checkbox"/>
3:00 PM	1:50 PM	Bell, Colton L		<input type="checkbox"/>
3:00 PM	2:14 PM	Richburg, May W		<input type="checkbox"/>
3:00 PM	2:24 PM	Walker, Grace E		<input type="checkbox"/>
3:15 PM		Mullins, Jack		<input type="checkbox"/>
3:15 PM	1:29 PM	Kunzlin, Marly		<input type="checkbox"/>
3:15 PM	2:15 PM	Tierrell, Gerald		<input type="checkbox"/>
3:30 PM	2:57 PM	Christ, Wilbur J		<input type="checkbox"/>
3:30 PM	2:45 PM	Kassul, Cassiel		<input type="checkbox"/>

Flags: Received Sent

Patient	Priority	Description
---------	----------	-------------

Send Results:

Date Ordered	Description	D
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Print Paper Interface
View Paper Interface

Undo Check-In

Patient Administration
Charge Entry

Refresh Now

What's This?

NUM

IPS

INTEGRATED · PHYSICIAN · SYSTEMS

Barriers for Physician Collaboration and Involvement

- Understanding “quality,” value, patient satisfaction, and workflow
- Trust
- Technological barriers and fear of change
- EMR learning curve
- Reengineering disruption
- Cost and ROI of technology investment

The High Fixed Cost Model



Consolidation
requires efficient
throughput

Requirements

Gene Pascarella DPM, MBA
President IPS

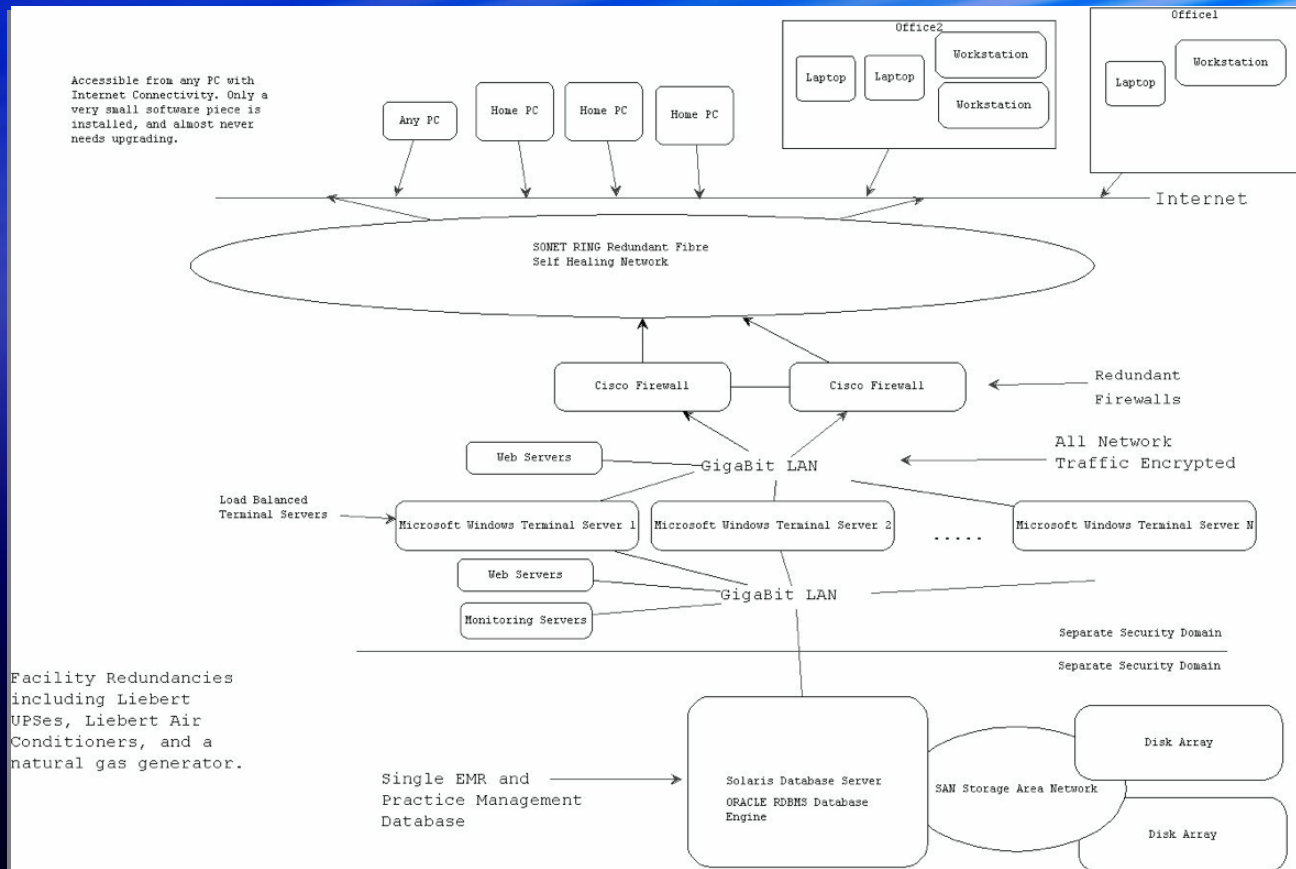
Requirements

- Solid Technical Foundation
- Operational Re-engineering
- Healthcare Executive Driver of Change
- Physician Acceptance

Technical Components

- ASP Model
- Oracle database
- Connectivity
- Electronic Medical Record
- Practice Management Software
- Business Intelligence Software

ASP Model



Electronic Medical Record

- Medicin
- Improve Patient Care
- Reduce Medical Errors
- Produce traceable data
- Physician adoption
- Increase efficiency

EMR One Piece of the Puzzle

- Practice Management
- Electronic Medical Record
- The two must be fully integrated and work as one seamless system!

Clinical Data Entry

Chart for Zz Test - CareRevolution Today's Date

Chart Modules Paper Interface View Tools Help

TEST, ZZ / F Patient #: 80128 Encounter Date: 12/13/2001
 DOB: 01/01/2001 / 12 month Chart #: None Encounter Location:
 Phones: None Allergies: No Known Allergies Insurance: No Insurance

Encounters Overview Previous Visits Vitals
 Orders Current Summary Checklist Correspondence

Select Order Type to Add or Review:

- Consults
- Radiology Tests
- Immunizations
- Path/Labs
- Medications
- Procedures

Orders Summary For: 12/13/2001

- VIOXX (Tabs 12.5MG)
- VIOXX (Tabs 25MG)
- VIOXX (Tabs 25MG)

Rx	Quantity	Sig	Refills	Day
VIOXX (Tabs 25MG)	30	1 tab qd	0	1
VIOXX (Tabs 25MG)	30	1 tab q day	0	30
LEVAQUIN (Tab)	30	1 tab q day	0	30
CELEBREX (Cap)	30	1 tab qd	2	30
THSC AMOXICILIN	30	1 tab q 8 h	1	10
Amoxicillin (Trihy)			0	
Amoxicillin (Trihy)	30	1 tab q 8h	1	10

Pharmacy: _____ Phone: _____

Past Medications:

Rx	DC	Date Disc	Ordering Clin
Amoxicillin (Trihydr)	CC	10/08/2001	Katz, Robert D.

Prescription Renewal

Do you wish to renew CELEBREX (Caps 200MG)?

Yes No

NUM

4:29 PM



EMR Facilitates Data at the POC

- Diagnostic and billing codes (ICD-9,Cpt)
- Modifiers
- Clinical notes
- Patient return appointments
- Lab and radiography orders
- Surgical scheduling/routing forms

EMR Facilitates

- Access of patient data by clinical staff at any given location
- Accurate and complete claims processing by insurance companies
- Building automated checks for drug allergies and interactions
- Clinical note
- Prescriptions
- Scheduling
- Sending to and viewing by labs

EMR

Improve Patient Care

- Clinical Event Manager
 - Decision Support tool
 - Tracks Patient Compliance
 - Best Practice Guidelines
 - Clinical Protocols

Clinical Event Manager

The screenshot displays the 'Clinical Event Manager' application window. The interface is divided into several sections:

- Left Panel (Rule Definitions):** Contains a tree view with 'New Rule', 'Diabetic Shoe Inserts', and 'Shoes and Inserts for Diabetics'.
- Top Panel (Rule Maintenance):** Shows configuration for the selected rule:
 - Rule Category:** Adult Preventive Screening
 - Rule Description:** Diabetic Shoe Inserts
 - Status:** Inactive
 - Continuous Selection:** Checked
 - Associated Protocol:** Diabetic Shoe Reminder Letter
- ICD9 Diagnosis Codes Section:** Includes a 'Summary' field with the text 'Find any code in the code group DIABETICS documented in chart ever.' and buttons for 'New', 'Delete', 'And', and 'Or'. A yellow arrow points to the 'Medication' section below.
- Bottom Panel (Navigation):** Lists 'Rule Definitions', 'Protocols', 'Actions / Letter Builder', 'Results', and 'Letter Processing'.

EMR

Reduce Medical Errors

Search:

Allergies:

Name	Sig	ac-ce	Description
Accuzyme 10%-10% spray	applied topically 2 times a day 30 day(s)		penicillin
Accuzyme 830,000 units/g-10% ointment	applied topically 2 times a day 30 day(s)	ce-de	Vioux
acetamino			
acetamino			
Acetocot			
Adapin 10			
Aldara 5%			
Allerhist-1			
allopurinol			
alprazolam			
Ambien 10			
Ambien 5			
Amlactin 1			
amoxicillin			
amoxicillin			
Apresoline			
aspirin 81			
Augmentin			
Augmentin			
Augmentin			
Augmentin			
azithromyc			
Bactrim 40			
Bactrim D			
Bactroban			
Bensal HF			
Beta-Val Valerate 0.1% cream	applied topically 2 times a day		
BuSpar 10 mg tablet	1 TAB orally 3 times a day 30 day(s)		
Caladryl	applied topically 2 times a day		
Carac 5% cream	applied topically 2 times a day		
carbamazepine 100 mg tablet, chewable	2 TC chewed 4 times a day 30 day(s)		
Cardiotek Rx Vitamin B Complex with Folic Acid ta...	1 tab(s) orally once a day 30 day(s)		
Carmol-40 40% cream	applied topically 2 times a day		
Carmol-40 40% gel	applied topically 2 times a day		

Drug Interactions For Augmentin:

ALLERGIC REACTIONS:

This patient is allergic to penicillin. Amoxicillin, which is a component of amoxicillin-clavulanate is a(n) penicillin and may show allergic cross-reactivity to penicillin.

This patient is allergic to penicillin. Clavulanate, which is a component of amoxicillin-clavulanate is a(n) beta lactamase inhibitor and may show allergic cross-reactivity to penicillin.

THERAPEUTIC DUPLICATION:

Amoxicillin, clavulanate, terbinafine, and tinidazole are all anti-infectives. Concomitant use of these medications may therefore represent therapeutic duplication.

Electronic Medical Record Reportable Data

The screenshot displays an EMR software interface with a menu bar (File, Entry Mode, Options, Forms View) and a toolbar. The main window is titled "Entry details for current selection" and shows patient information: Brandon Pascarella, Gender: M, DOB: 6/18/1985, Encounter Date and Time: 10/25/2006 12:35PM, Examiner: Eugene M. Pascarella, DPM.

Chief complaint
[The Chief](#) Complaint is: Heel Pain.

History of present illness
Brandon Pascarella is a 21 year old male.
• [Bone pain](#) in the left heel • [In the](#) heel worsens with weightbearing • [In the](#) heel occurs after rest

[Painful](#) heel which has been increasing in severity. Local conservative efforts with shoegear modifications and over the counter inserts have failed to alleviate the symptoms. Patient is thus seen for evaluation and treatment

Physical findings
Musculoskeletal system:
Foot:
Right foot: • [Tenderness](#) on palpation of the calcaneal tuberosity
Left foot: • [Tenderness](#) on palpation of the calcaneal tuberosity

Tests
X-Ray Foot:
[Lateral](#) and medial oblique view x-rays of the right foot were performed

Imaging Studies:
[Lateral](#) and medial oblique view x-rays of the left hindfoot were performed

Assessment
• [Plantar](#) fasciitis of the left foot
• [Plantar](#) calcaneal spur of the left foot

Therapy
• [Reviewed](#) stretching exercises for both ankles

Counseling/Education
• [Post-op](#) teaching about wound care The needle was withdrawn and the injection site was cleansed and bandaged. The patient tolerated the procedure well and after a period of monitoring was discharged with instructions for post injection care

Plan
• [Injection](#) in the plantar fascia of the left foot After sterile alcohol preparation of the injection site, the symptomatic area was identified and a 25-gauge needle was inserted into the region. The steroid solution with local anesthetic was injected
• [A follow-up](#) appointment has been made
[Kenalog-40](#) acetronide 40 mg/ml suspoension. SIG: 4 mg by intra-articular injection once

The left sidebar contains a "Categories" list with expandable sections for various medical specialties such as EYE DISORDERS, ENT DISORDERS, ODONTOLOGIC DISORDERS, etc. A yellow arrow points to the "Assessment" section in the main text area.

Transition to EMR

The Good

- Easy to use medical records
- Never have to look for lost charts
- Quick creation of letters, handouts
- Easy prescribing
- Improved patient flow
- So easy a doctor can use it

Transition to EMR

The bad



- There is change...change is hard
- There is a learning curve
- Disruption of workflow...at first

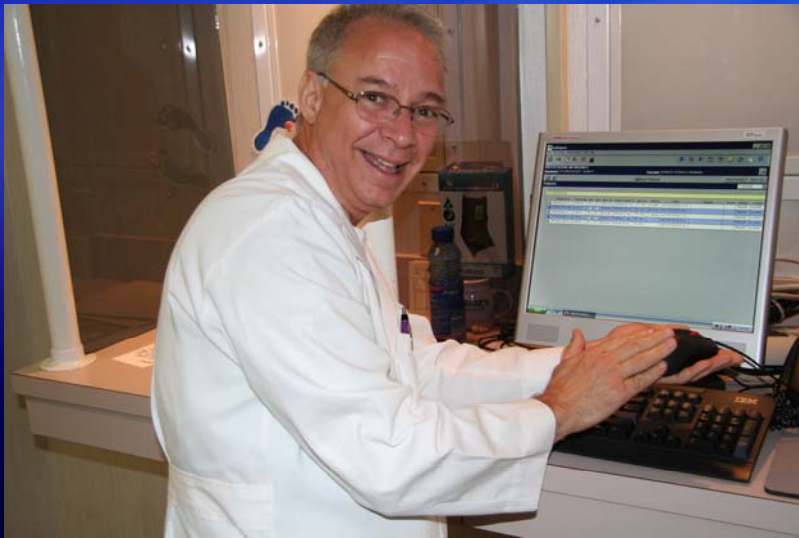
Transition to EMR

The Ugly



- Dr. A uses the system, Dr. B refuses
- System failure with office full of patients
 - Where are the paper superbills
 - Why are you here anyway
 - Someone will call to make your appointment when the computers are back up

Improve your chances of success



- Build ownership from all stakeholders---from an early point
- This means conducting a workflow analysis
- Provide ample time for training
- Take small steps

Attach
Superbill

Write Patient Info
on Superbill

Move to Treatment
Room

Mark Diagnosis

Mark Charges

Move to Front
Office

Store until
Large Batch

Have a
Computer

NO

Enter Diagnosis

YES

Enter
Diagnosis

Enter Charges

Enter Charges

Balance Day
Sheet

End

E-Superbill

Paper Superbill

Enter
Diagnosis

Enter
Treatment

End



Attach
Superbill

Write Patient Info
on Superbill

Move to Treatment
Room

Mark Diagnosis

Mark Charges

Move to Front
Office

Store until
Large Batch

Have a
Computer

Enter Diagnosis

Enter
Diagnosis

Enter Charges

Enter Charges

Balance Day
Sheet

End

The Paper Process



Electronic Entry per bill

Charge Entry - careREVOLUTION

Charge Entry Batch ID: 4831 - 01/07/02 BRAD MJC ADMIN Claim ID: 71909

Patient Information
 Patient Number: 80128 Claim ID: 71909 Guarantor Name: TEST, ZZ Check-In: 01/08/2002 3:45 PM
 Patient Name: TEST, ZZ Patient Date of Birth: 01/01/2001 Checkout: 01/08/2002 3:52 PM

Summary Charges Cash Out HCFA-1500 Data Additional Patient Data Notes Transaction Details UBS2 Data SUBMITTED

Diagnoses Table:

Rank	ICD9 Code	ICD9 Description
1	726.73	CALCANEAL SPUR
2	715.97	OSTEOARTHRISIS, UNSPECIFIED WHETHER GENERALIZED OR LOCALIZED

Birth Date: 01/01/2001
 Visit Location: BRADENTON
 Billing Clinician: 13-KATZ, ROBER
 Examining Provider: 13-KATZ, ROBERT
 Referring Provider:
 Hold Claim

Procedures Table: Refresh Fee Schedule

Row	CPT	M1	CPT Description	Reven	From Date	To Date	Qty	Unit Price	Charge	Diag	Coins	Copay	Filing Method
1	99213		OFFICE/OUTPATIENT	490	01/08/02	01/08/02	1	102.00	102.00	2	0.00	0.00	Inhibited-Insur 1
2	73620	LT	X-RAY EXAM OF FOOT	490	01/08/02	01/08/02	1	89.00	89.00	1	0.00	0.00	Inhibited-Insur 1
TOTAL								191.00	191.00		0.00	0.00	

Print Receipt Reset Apply Save Clear Close

Start In... Ci... S... S... Mi... E... Ch... Micro... 5:03 PM

Enter
Diagnosis

Enter
Treatment

End

- Medcin (Symptoms)
- encounter background information
- systemic symptoms
- pain control techniques
- head-related symptoms
- eye symptoms
- otolaryngeal symptoms
- neck symptoms
- breast symptoms
- cardiovascular symptoms
- pulmonary symptoms
- gastrointestinal symptoms
- genitourinary symptoms
- endocrine symptoms
- skin symptoms
- hematologic symptoms
- musculoskeletal symptoms
- neurological symptoms
- psychological symptoms

Zz Test, Gender: F, DOB: 1/0

Chief complaint
[The Chief](#) Complaint is: Patie
 custom molded orthoses.

History of present illness
 Zz Test is a 2 year 9 month old female.
 • [Past medical](#) history reviewed with no additions.
 • [Bone pain](#) in the right heel which is improving. ° [No bone](#) pain in the left heel. • [Bone pain](#) in the heel occurs after rest which is resolved.

Past medical/surgical history
Reported History:
Physical trauma: [No physical](#) trauma.

Personal history
[Social](#) history unchanged.

Family history
[Family](#) history unchanged.

Allergies
[Penicillins](#). Reaction(s): Anaphylaxis. Identified: Unknown.

Physical findings
General appearance:
 ° [Patient](#) was awake. ° [Patient](#) was alert. ° [Patient](#) was oriented to time, place, and person. ° [Patient](#) appeared healthy. ° [Patient](#) appeared to be in no acute distress.

Cardiovascular system:

- IPS Heel Pain
- IPS Nail Care
- IPS Verruca
- IPS History and Physical
- IPS Hallux
- IPS Hammertoe
- IPS Ingrown Nails
- IPS Fracture
- IPS Orthotic Evaluation
- IPS Digital Post-op



Categories

Loc	Qual	Sev	Dur	Tim	Ctxt
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Uni	Mod	As	<<	>>	<>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Entry details for current selection

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Select Treatment

Forms Input - IPS Heel Pain

CC and HPI | Physical Exam | X-ray | **Diagnosis** | **Treatment** | Follow-up

Injections:

	Left	Right
Plantar Fascia	<input checked="" type="checkbox"/> Y <input type="checkbox"/>	<input checked="" type="checkbox"/> Y <input type="checkbox"/>
Corticosteroids Flexor Tendons	<input type="checkbox"/> Y <input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/>
Corticosteroids Inj Sinus Tarsi	<input type="checkbox"/> Y <input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/>
Corticosteroids Inj Achilles Bursa	<input type="checkbox"/> Y <input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/>
Post-Injection Wound Care	<input type="checkbox"/> Y <input type="checkbox"/>	
Corticosteroids: - Use Multum		

Goals

Goals Alleviate Joint Pain	<input type="checkbox"/> Y <input type="checkbox"/>
Goals - Alleviate Skeletal Pain	<input type="checkbox"/> Y <input type="checkbox"/>
Goals - Alleviate Muscle Pain	<input type="checkbox"/> Y <input type="checkbox"/>

Referrals:

Physical Therapy Consults	<input type="checkbox"/> Y <input type="checkbox"/>
Ultrasound Soft Tissue	<input type="checkbox"/> Y <input type="checkbox"/>
MRI Foot	<input type="checkbox"/> Y <input type="checkbox"/>
Bone Scan	<input type="checkbox"/> Y <input type="checkbox"/>

Hydrotherapy Y

Follow-Up Appointment Has Been Made Y

Strapping / Orthotics

Initial Orthopedic Strapping Ankle	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
Orthopedic Strapping Ankle	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
Unna boot	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
Orthopedic Footwear Insert	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
Ordered Soft Orthotic	<input type="checkbox"/> Y <input type="checkbox"/>
Ordered Berkeley Shell	<input type="checkbox"/> Y <input type="checkbox"/>

Plan

Recommend Reduced Physical Activity	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
Discussed Wear Appropriate Shoes	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
Discussed Orthopedic Footwear	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
Discussed Anti-Inflammatory Agents	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
Exercises Both Ankles Stretching	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
Patient Education	<input type="checkbox"/> Y <input type="checkbox"/>

Surgery

Surgery Discussion	<input type="checkbox"/> Y <input type="checkbox"/>
Pre-Op Reinforcement Of Risks_Benefits Of Procedure	<input type="checkbox"/> Y <input type="checkbox"/>
Extracorporeal Shock Wave	<input type="checkbox"/> Y <input type="checkbox"/>
Endoscopic Plantar Fasciotomy	<input type="checkbox"/> Y <input type="checkbox"/>
Therapy (Use For Free Text)	<input type="checkbox"/> Y <input type="checkbox"/>

Entry details for current selection

Requested injection in the plantar fascia of the right foot After sterile alcohol preparation of the injection site, the symptomatic ar

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
ordered				...				

Charges Populate Chart And Billing Module

Chart for Brandon Pascarella - CareRevolution Today's Date: 02/04/2006

Chart Modules Specified View View Tools Help

PASCARELLA, BRANDON / M Patient #: 63868 Encounter Date: 02/04/2006
DOB: 06/18/1985 / 20 Yrs Chart #: 82560 Encounter Location: Altamonte Springs
Phones: Home:(407) 333-3827 Allergies: Multiple Exist Insurance: No Insurance

Problems Path/Labs Radiology Tests Checklist Misc Index Patient Alerts Referrals/Consults Requisitions
Encounters Vitals Orders Overview Previous Visits Current Summary Correspondence Procedures

Encounter: 02/04/2006 2:48 PM Examining Clinician: Pascarella, Eugene M Check-Out: Save
Location: ALTAMONTE SPRINGS Billing Clinician: Pascarella, Eugene M Dictation Req Undo Submit

Details for Selected Encounter

Reason for Encounter: Unknown Diagnoses/Orders Comments:
E&M Code: []
Documented Diagnoses:

Rank	ICD-9 Code	Description	Bill
1	728.71	PLANTAR FASCIITIS LEFT	<input checked="" type="checkbox"/>

Additional Encounter Data
 Visit related to accident or injury?
 Visit related to eye surgery?
 Are outside services provided?
 Are ancillary services provided? Details

Return Appointments
 Days Months
 Weeks Years

Notes:
Referral Notes:

Documented Orders:

CPT Code	Description	Dx Rank	Bill	Units	No Chg	LT	RT
20550	Injection Of Ligament F	20550	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
73620	X-Ray Left Foot AP An	73620	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70550	Injection Of Ligament F	70550	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Episode of Illness Dates
Onset of Illness: 02/04/2006 LMP: []
Onset of Acc/Inj: []
Previous Episode: []
Surgical Consult: []

Charges Populate Chart And Billing Module

Chart for Brandon Pascarella - CareRevolution Today's Date: 02/04/2006

Chart Modules Specified View View Tools Help

PASCARELLA, BRANDON / M Patient #: 63868 Encounter Date: 02/04/2006
DOB: 06/18/1985 / 20 Yrs Chart #: 82560 Encounter Location: Altamonte Springs
Phones: Home:(407) 333-3827 Allergies: Multiple Exist Insurance: No Insurance

Problems Path/Labs Radiology Tests Checklist Misc Index Patient Alerts Referrals/Consults Requisitions
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Details for Selected Encounter

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E&M Code: []
Documented Diagnoses:

Rank	ICD-9 Code	Description	Bill	Additional Encounter Data
1	728.71	PLANTAR FASCIITIS LEFT	<input checked="" type="checkbox"/>	<input type="checkbox"/> visit related to accident or injury? <input type="checkbox"/> visit related to eye surgery? <input type="checkbox"/> Are outside services provided? <input type="checkbox"/> Are ancillary services provided?

Documented Orders:

CPT Code	Description	Dx Rank	Bill	Units	No Chg	LT	RT
20550	Injection Of Ligament F	728.71	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
73620	X-Ray Left Foot AP An		<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70550	Injection Of Ligament F		<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Episode of Illness Dates:
Onset of Illness: 02/04/2006 LMP: []
Onset of Acc/Inj: []
Previous Episode: []
Surgical Consult: []

Return Appointments:
 Days Months
 Weeks Years

Notes:
Referral Notes:

Business Intelligence Software

- Business Objects
- Reporting

Reporting

- Clinical Data
- Financial Data
- Key performance indicators analysis
- Accounts receivable monitoring
- Peer review analysis - in office practice utilization by doctor, monthly
- Peer review analysis – among colleagues
- Financial Management - cost benefit analysis, scenario simulations, cost savings measures as needed
- Ad hoc reporting

Patients checked in not check out

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Patients Checked In And Not Checked Out

Patient #- Name	Claim #	Check In Date/Time/By	Bill Provider	Location	Financial Group	Appt Date/Time	Coll Copay
288408- John Smith	330871	07/28/2004 10:43 AM	MCHAS # Welby, Marcus	Altamonte	17 - Foot & Ankle Specialists	7/28/2004 10:30 AM	-
292031- Patty Jones	331022	07/28/2004 02:35 PM	KESSEX # Fife, Barney	Altamonte	17 - Foot & Ankle Specialists	7/28/2004 02:30 PM	25.00
298874- Jane Doe	330997	07/28/2004 02:12 PM	LSKLAR # Clooney, George	Altamonte	17 - Foot & Ankle Specialists	7/28/2004 02:15 PM	15.00
299269- John Doe	330988	07/28/2004 02:05 PM	GVEGA # Kildare, Harry	Altamonte	17 - Foot & Ankle Specialists	7/28/2004 02:30 PM	-

Total # of Patients :

4 Total copay collections:

40.00

Weekly Analysis By Doctor

Weekly Analysis by Doctor

Weekly Payments	Marcus Welby	Barney Fife	Jack Kevorkian
8/18/2005	-\$11,229.74	-\$8,647.32	-\$2,992.41
8/25/2005	-\$5,839.32	-\$3,079.66	-\$677.35
9/1/2005	-\$8,879.95	-\$10,161.87	-\$750.53
9/8/2005	-\$6,914.94	-\$4,067.71	-\$606.16
9/15/2005	-\$11,388.91	-\$10,828.14	-\$930.89
9/22/2005	-\$12,711.62	-\$9,798.17	-\$1,085.17
9/29/2005	-\$9,450.27	-\$5,655.76	-\$128.18
10/6/2005	-\$21,733.58	-\$17,536.55	-\$706.85
Sum:	-\$88,148.33	-\$69,775.18	-\$7,877.54

Weekly Charges	Marcus Welby	Barney Fife	Jack Kevorkian
8/18/2005	14,429.00	12,295.00	1,500.00
8/25/2005	18,061.00	2,786.00	1,772.00
9/1/2005	29,884.00	26,817.00	3,095.00
9/8/2005	29,207.00	10,443.00	1,250.00
9/15/2005	28,609.00	26,559.00	1,700.00
9/22/2005	30,622.00	27,649.00	2,000.00
9/29/2005	30,483.00	10,007.00	2,500.00
10/6/2005	35,865.00	6,994.00	2,250.00
Sum:	217,160.00	123,550.00	16,067.00

Revenue Per Visit/Procedure

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Revenue per Visit (with assoc acct period)	2004- January	2004-February	2004-March	2004-April	2004-May	2004-June	2004-July	Average
Welby, Marcus	\$139.90	\$128.53	\$121.67	\$126.78	\$112.36	\$102.21	\$31.24	\$108.96
Fife, Barney	\$127.37	\$126.43	\$124.88	\$122.00	\$118.07	\$89.69	\$31.93	\$105.77
Clooney, George	\$122.40	\$135.14	\$125.83	\$126.26	\$156.08	\$108.77	\$46.50	\$117.28
Kildare, Harry	\$108.52	\$99.21	\$104.30	\$110.47	\$108.61	\$80.27	\$30.52	\$91.70
Washington, George	\$92.55	\$98.82	\$96.05	\$99.40	\$96.54	\$81.70	\$24.57	\$84.52
	\$118.15	\$117.63	\$114.55	\$116.98	\$116.73	\$92.53	\$32.95	\$101.64

Revenue per visit by associated accounting period tells how much money was actually received per each visit the doctor performed. It allows you to better understand the value of each visit as well as compare how each doctor is collecting compared to others in your group. It is shown by associated accounting period which means that the payments are associated with the months the charges were incurred (i.e., if the charge was in January and the payment was received in March, the payment is reflected in the month of January).

Revenue per procedure (with assoc acct period)	2004- January	2004-February	2004-March	2004-April	2004-May	2004-June	2004-July	Average
Welby, Marcus	\$40.50	\$38.62	\$48.47	\$43.16	\$38.86	\$24.22	\$25.39	\$37.03
Fife, Barney	\$37.49	\$44.18	\$43.89	\$39.60	\$36.67	\$14.07	\$13.12	\$32.72
Clooney, George	\$45.46	\$42.39	\$53.27	\$44.12	\$57.21	\$21.57	\$19.25	\$40.47
Kildare, Harry	\$41.67	\$41.78	\$38.88	\$39.16	\$40.75	\$18.49	\$16.44	\$33.85
Washington, George	\$42.70	\$45.84	\$43.36	\$39.32	\$38.00	\$21.00	\$18.00	\$35.46
	\$41.56	\$42.56	\$45.53	\$41.07	\$42.30	\$19.67	\$18.44	\$35.91

Revenue per procedure by associated accounting period tells how much money was actually received per each CPT code billed. This calculation allows a more detailed understanding of the revenue per visit by showing the average of what is received for each procedure done. It is shown by associated accounting period which means that the payments are associated with the months the charges were incurred (i.e., if the charge was in January and the payment was received in March, the payment is reflected in the month of January).

Charge per Visit	2004- January	2004-February	2004-March	2004-April	2004-May	2004-June	2004-July	Average
Welby, Marcus	\$209.93	\$180.62	\$165.57	\$185.99	\$157.21	\$166.43	\$183.30	\$178.44
Fife, Barney	\$222.59	\$197.61	\$195.91	\$173.60	\$176.34	\$205.67	\$241.30	\$201.86
Clooney, George	\$191.93	\$187.07	\$216.14	\$211.18	\$217.33	\$218.07	\$174.23	\$202.28
Kildare, Harry	\$187.93	\$139.05	\$143.65	\$157.34	\$133.53	\$166.24	\$140.03	\$152.54
Washington, George	\$149.46	\$130.28	\$132.20	\$157.34	\$182.83	\$167.16	\$153.96	\$153.32
	\$192.37	\$166.93	\$170.69	\$177.09	\$173.45	\$184.71	\$178.56	\$177.69

Charge per visit the gross charges billed for each visit incurred. Although you typically do not receive the amounts charge, it allows for a comparison by doctor to further determine if you have different billing habits or to help the analysis of trends in total gross charges.

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Gross/Net Collection %

Gross Collection % with assoc acct period (by primary financial class)	2004-January	2004-February	2004-March	2004-April	2004-May	2004-June	Average
Aetna	84.8%	88.1%	87.3%	28.5%	58.4%	113.0%	73.2%
BC/BS	47.3%	48.2%	47.0%	43.1%	34.8%	35.1%	42.6%
Champus/Tricare	35.7%	29.4%	38.9%	32.1%	23.1%	18.6%	29.3%
Cigna	68.9%	57.9%	81.9%	87.0%	75.4%	5.2%	64.6%
Commercial	32.7%	53.8%	48.4%	40.2%	43.3%	30.7%	41.5%
Medicaid	51.5%	35.9%	37.1%	45.8%	47.1%	41.6%	43.3%
Medicare	88.0%	51.1%	50.4%	43.2%	52.2%	48.2%	51.9%
Private Pay	45.5%	89.0%	72.3%	72.4%	72.4%	60.9%	64.6%
United Healthcare	52.4%	48.4%	38.2%	44.2%	40.4%	35.8%	42.9%
Workers Compensation	38.5%	33.6%	42.2%	23.9%	19.5%	20.1%	29.6%
	50.1%	51.3%	58.2%	48.0%	48.5%	40.8%	48.3%

Gross Collection Percentage by associated accounting period shows the amount of payments received as a percentage of the gross charges incurred in that month. The higher this number is, the more money was actually collected (vs. contractual or other adjustments). It is shown by associated accounting period which means that the payments are associated with the months the charges were incurred (i.e. if the charge was in January and the payment was received in March, the payment is reflected in the month of January).

Net Collection % with assoc acct period (by primary financial class)	2004-January	2004-February	2004-March	2004-April	2004-May	2004-June	Average
Aetna	91.0%	89.0%	81.0%	53.2%	25.8%	25.0%	60.8%
BC/BS	97.9%	97.8%	95.4%	93.5%	87.1%	52.3%	87.3%
Champus/Tricare	103.5%	97.6%	95.2%	85.0%	71.1%	15.2%	78.0%
Cigna	85.7%	86.7%	85.1%	26.2%	13.9%	12.0%	53.3%
Commercial	93.7%	88.6%	91.4%	81.5%	46.3%	8.0%	68.3%
Medicaid	91.8%	99.3%	100.0%	97.0%	58.4%	0.6%	74.2%
Medicare	98.8%	99.0%	94.9%	93.0%	85.4%	20.0%	82.0%
Private Pay	99.0%	98.3%	98.4%	98.4%	89.4%	41.8%	88.9%
United Healthcare	95.4%	87.1%	89.8%	73.9%	44.8%	73.0%	77.2%
Workers Compensation	95.8%	89.2%	87.7%	85.0%	87.9%	44.1%	86.6%
	95.4%	94.2%	93.7%	79.4%	60.8%	39.3%	75.5%

Net Collection Percentage by associated accounting period shows the amount of payments received and adjustments entered as a percentage of gross charges. The ultimate goal is to get this percentage to 100% meaning that these charges are fully collected. In the example above, in January there has been 95.4% of the total charges collected or adjusted and a remaining 4.2% left to collect or adjust. It is shown by associated accounting period which means that the payments are associated with the months the charges were incurred (i.e. if the charge was in January and the payment was received in March, the payment is reflected in the month of January).

Comparative Analysis

FG #	1 - (adj + rev)/chrg	Visits	Proc	New Pt (NP)	Charge /Visit	Revenue /Visit	Revenue /NP	Revenue /Proc	Visits/ NP	Adj/Chg	CPT/Visit	\$/V/P/V	Orthotics	Orth/V	X-Rays	X-Ray/V	11750	Nail Proc/V	\$/day	A/R	Days in A/R
2	7.3%	36,659	75,089	8,163	\$256	\$94	\$557	\$46	5.9	56.2%	2.05	45.70	294	0.8%	10,832	29.5%	1168	3.2%	\$25,705	\$957,655	37.3
3	26.8%	33,103	84,340	3,545	\$250	\$116	\$1,079	\$45	9.3	27.1%	2.55	45.36	793	2.4%	8,694	26.3%	692	2.1%	\$22,716	\$812,195	35.8
7	9.0%	19,388	38,913	4,238	\$296	\$99	\$452	\$49	4.6	57.6%	2.01	49.26	435	2.2%	3,146	16.2%	826	4.3%	\$15,744	\$837,219	53.2
10	20.2%	27,485	49,996	4,822	\$265	\$102	\$581	\$56	5.7	41.4%	1.82	56.00	648	2.4%	8,184	29.8%	975	3.5%	\$19,956	\$744,282	37.3
11	2.7%	5,479	8,834	1,520	\$246	\$85	\$308	\$53	3.6	62.6%	1.61	52.91	55	1.0%	1,871	34.1%	270	4.9%	\$3,697	\$153,095	41.4
12	16.7%	4,876	10,431	1,006	\$258	\$107	\$518	\$50	4.8	41.9%	2.14	49.97	36	0.7%	2,547	52.2%	255	5.2%	\$3,449	\$243,158	70.5
13	11.8%	6,566	13,267	854	\$347	\$158	\$1,215	\$78	7.7	42.6%	2.02	78.22	318	4.8%	1,584	24.1%	229	3.5%	\$6,244	\$226,249	36.2
14	24.7%	2,890	6,274	438	\$330	\$109	\$716	\$50	8.6	42.4%	2.17	49.99	132	4.6%	768	26.5%	45	1.6%	\$2,610	\$246,649	94.5
15	36.8%	2,249	9,205	336	\$1,157	\$222	\$1,487	\$54	6.7	44.0%	4.09	54.26	76	3.4%	364	16.2%	89	4.0%	\$7,132	\$624,441	87.6
16	19.3%	6,581	13,339	1,606	\$282	\$118	\$483	\$58	4.1	39.0%	2.03	58.11	219	3.3%	3,465	52.7%	105	1.6%	\$5,090	\$218,005	42.8
17	10.3%	7,055	11,903	1,032	\$216	\$102	\$700	\$61	6.8	42.4%	1.69	60.65	151	2.1%	1,296	18.4%	266	3.8%	\$4,180	\$255,424	61.1
18	30.6%	10,386	17,989	1,756	\$220	\$86	\$510	\$50	5.9	30.2%	1.73	49.78	244	2.3%	750	7.2%	146	1.4%	\$6,268	\$396,232	63.2
19	33.3%	10,954	17,128	1,841	\$172	\$58	\$343	\$37	6.0	33.2%	1.56	36.86	317	2.9%	1,955	17.8%	69	0.6%	\$5,168	\$318,427	61.6
20	34.2%	10,482	15,861	1,714	\$182	\$69	\$423	\$46	6.1	27.8%	1.51	45.77	195	1.9%	1,019	9.7%	127	1.2%	\$5,227	\$311,179	59.5
21	15.3%	3,746	9,151	888	\$249	\$144	\$606	\$59	4.2	26.9%	2.44	58.83	401	10.7%	392	10.5%	47	1.3%	\$2,551	\$127,315	49.9
22	30.0%	3,418	10,767	589	\$410	\$113	\$653	\$36	5.8	42.6%	3.15	35.75	33	1.0%	795	23.3%	141	4.1%	\$3,841	\$372,374	96.9
23	47.9%	3,384	5,799	448	\$246	\$98	\$737	\$57	7.6	12.5%	1.71	56.95	104	0.03	427	12.6%	82	2.4%	\$2,284	\$64,971	28.4
24	15.8%	4,812	7,860	681	\$221	\$86	\$611	\$53	7.1	45.1%	1.63	52.92	199	4.1%	951	19.8%	160	3.3%	\$2,910	\$200,281	68.8
25	17.6%	4,127	8,574	601	\$253	\$95	\$655	\$46	6.9	44.6%	2.08	45.93	124	3.0%	682	16.5%	49	1.2%	\$3,115	\$174,447	56.0
26	34.9%	4,918	11,657	1,430	\$475	\$137	\$472	\$58	3.4	36.2%	2.37	57.90	320	6.5%	2,290	46.6%	262	5.3%	\$6,825	\$511,767	75.0
28	19.6%	3,264	5,736	891	\$206	\$62	\$228	\$35	3.7	50.2%	1.76	35.35	6	0.00	1,117	34.2%	95	2.9%	\$2,455	\$124,287	50.6
29	35.7%	3,180	7,247	254	\$244	\$80	\$1,003	\$35	12.5	31.4%	2.28	35.17	139	0.04	717	22.5%	63	2.0%	\$3,706	\$203,996	55.1
30	65.9%	6,063	10,378	786	\$211	\$45	\$346	\$26	7.7	12.9%	1.71	26.17	119	0.02	526	8.7%	107	1.8%	\$10,252	\$551,552	53.8
31	80.8%	1,033	3,071	125	\$501	\$60	\$499	\$20	8.3	7.1%	2.97	20.31	32	0.03	421	40.8%	30	2.9%	\$4,979	\$240,300	48.3
32	81.7%	2,792	6,038	645	\$343	\$39	\$169	\$18	4.3	6.9%	2.16	18.06	69	0.02	536	19.2%	243	8.7%	\$13,895	\$372,858	26.8
37	90.2%	718	1,649	127	\$289	\$26	\$148	\$11	5.7	0.7%	2.30	11.42	21	0.03	196	27.3%	17	2.4%	\$7,676	\$127,330	16.6
4	1.2%	5,007	11,949	468	\$311	\$146	\$1,561	\$61	10.7	51.9%	2.39	61.13	140	0.03	620	12.4%	193	3.9%	\$8,753	\$257,818	29.5
	39.1%	230,615		38,804	\$402	\$126	\$812	\$59	\$8	45.6%	2.76	\$59.46		4.27%		31.2%		4.0%			53.2

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Thank You

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