

Using Patient Portals & Technology to Improve Efficiency and Meet Metrics

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Owner – Partners in Healthcare Education, LLC

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Disclosures

- Speaker Bureau
 - Sanofi-Pasteur, Merck, Pfizer, Seqirus, Moderna – Vaccines
 - Exact Sciences – Colorectal Cancer Screening
 - AstraZeneca – Asthma and COPD
- Consultant
 - Sanofi-Pasteur, Merck, Pfizer, Moderna, and Seqirus – Vaccines
 - GSK: OA/Pain
 - AstraZeneca – Asthma and COPD
- All relevant financial relationships have been mitigated.

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Objectives

- Upon completion of this lecture, the participant will be able to:
 - Discuss technology opportunities for clinical practice
 - Identify implications of increasing use of technology
 - Identify potential negative consequences of technology

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The Technology Explosion

- Technology use has exploded in the United States
 - The use of technology in healthcare is no exception
- Technology in healthcare may:
 - Facilitate better documentation
 - Improve communication with patients and colleagues
 - Increase patient engagement and patient safety
 - Save time for patients and providers
 - Improve billables and collectables
 - Reduce duplication in healthcare and ultimately, reduce cost
 - Reduce malpractice cases

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However....

- For every positive, there are also a number of negative implications that must also be addressed:
 - Less human interaction
 - Documentation: phone vs. in writing
 - Hours spent documenting
 - Inaccurate information available in a minute search
 - More emails/messages to respond to
 - Patients reviewing online materials and wanting modified
 - Expensive
 - Doing more with less time
 - Ransomware/hacking/HIPAA violations

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Different Types of Technology

- Website
- Confirmation reminder calls/texts/emails
- Automated check-in (Kiosk)
- Touch screen computers
 - Tablet
- Patient portal
- Billing modules
- Reminder systems i.e vaccines, appointments
- Facebook/Twitter/Social media apps
- Smart phone apps – booking appointments/paying bills online
- Artificial intelligence
- Data analytics at our finger tips
- Virtual care

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Typical Monday at WAFHC

- More than 150 prescription e-refills have come in over the weekend
- > 1000 phone calls in and out of the practice will happen on any given Monday
- More than 250 portal messages needing to be addressed
- Requires 2.5 staff for every 1 NP employed

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Technology to Enhance Provider-Patient Communication

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Website

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Time to register patient

- Approximately 15 – 20 minutes to register a new patient using telephone
- Can technologies and innovation make this less staff intensive?

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New Patient Registration

- Registration Process
 - Collect insurance information pre-visit whether it be over the phone or across the patient portal
 - Collect email at time of registration to auto send an invite for the patient portal
 - Set expectations for financial responsibility
 - Use website and portal - let them know copay, coinsurance, deductibles are to be paid at the time of service.

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New Patient Registration

- Optimize efficiency
 - Place registration forms, new patient information, release of records and patient bill of rights on website
 - Drive patient to site at time of call to familiarize them with this site
 - Direct mailing costs are significant; website can save time and money in staffing/copying/mailling

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Snapshot of Our Web-page

NEW PATIENTS

Thank you for your interest in our practice. We look forward to seeing you at your appointment. Below is a checklist of the things that need to be done prior to your appointment.

1. Change your primary care provider with your insurance company prior to your visit. Please ask your insurance company to list your primary care provider. If you have any problems with this, please ask your insurance to contact us at [redacted]
2. Please print out and complete our [Patient Registration Form](#) prior to arriving. This will save you time at your initial visit. If you are unable to complete prior to visit, please bring along a list of your medications (dosage, frequency), any allergies and arrive 15 minutes prior to scheduled appointment for paperwork
3. Bring your insurance card and co-payment to the visit.
4. Request your medical records from your previous provider using our [Record Release Form](#). Please complete this form and mail to your previous provider as soon as possible.
5. Please print out the [Release of Information Form](#) and bring to your first appointment. Only the names listed on the Release of Information Form will be allowed to communicate with our office regarding your health care.
6. If you are visiting our office for a consult only, please be certain to obtain a referral from your primary care provider in advance.
7. Please review our [Policies](#).

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We Have Also....

- Placed registration form on-line so it may be completed and automatically sent to office
 - Many EHRs now have "bubble forms" available which merge with EHR to save importing of data
 - Often very costly
 - Must be confirmed and clarified as many mistakes happen
 - Risk of malpractice from inaccurate or unclarified information

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Statistics re: Web Page

Summary by Month										
Month	Daily Avg					Monthly Totals				
	Hits	Files	Pages	Visits	Sites	KBytes	Visits	Pages	Files	Hits
	6	3	3	3	3	33	3	3	3	6
	2429	2165	410	107	1870	3074269	3012	11481	60629	68034
	2628	2329	441	116	2185	3725164	3604	13701	72226	81484
	2269	1980	383	103	1832	3075220	3219	11898	61407	70342
	2585	2228	434	113	1881	3732944	3398	13045	66864	77558
	3138	2566	523	136	2307	5132434	4223	16241	79557	97283
	2736	2286	477	122	1918	5114395	3664	14312	68585	82089
	2269	1920	388	99	1725	4327739	3093	12038	59542	70356
	2365	1978	393	97	1807	4658327	3034	12183	61344	73340
	2184	1811	372	96	1700	4005743	2882	11178	54345	65535
	2320	1901	396	98	1693	4233515	3036	12338	58938	71942
	2207	1846	364	86	1573	4068654	2584	10920	55403	66232
Totals						45148437	35754	139338	698843	824201

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Can Drill Down....

Top 30 of 1870 Total Sites										
#	Hits	Files	KBytes	Visits	Hostname					
1	1046	125	2087	22	static-edia-64-223-180-196.ngn.east.myfairpoint.net					
2	584	251	11520	7	c-71-233-228-78.hsd1.nh.comcast.net					
3	566	483	20608	14	169.152.251.99					
4	509	416	15394	9	74-92-53-81-newengland.hfc.comcastbusiness.net					
5	493	488	26661	13	c-73-167-20-226.hsd1.nh.comcast.net					
6	445	444	23361	17	c-76-28-19-87.hsd1.ct.comcast.net					
7	423	160	7209	1	dhlsl1-49.dhlsl.state.nh.us					
8	422	422	25272	14	c-75-67-224-122.hsd1.nh.comcast.net					
9	395	385	20036	10	c-50-169-255-46.hsd1.nh.comcast.net					

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Top Referrers...

- Can choose where to put our money for marketing

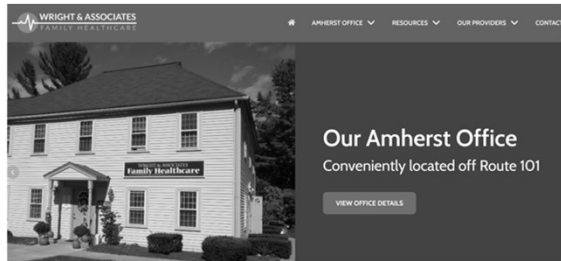
Top 30 of 101 Total Referrers										
#	Hits	Referrer								
1	5737	- (Direct Request)								
2	462	http://www.google.com/								
3	435	https://www.google.com/								
4	219	http://www.google.com/url								
5	83	http://www.bing.com/search								
6	52	http://r.search.yahoo.com/ vlt								
7	44	http://semalt.semalt.com/crawler.php								

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Office links



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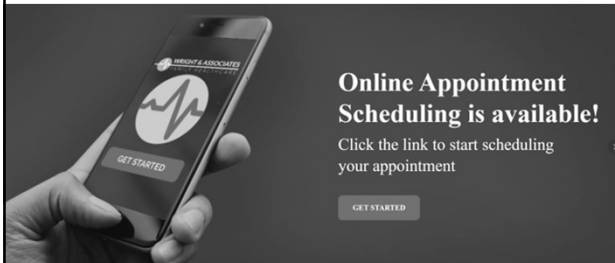
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Scheduling

- Patients may request appointment from patient portal or via website
- EHR allows for appointment selection by the patient
 - We have turned off this feature
 - Concern: many inaccurate bookings
 - We also try to customize NP schedule based upon newness to practice
 - I.e. double time

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Scheduling



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Confirmation Calls

- Conducted from Electronic health record system sent automatically 2 weeks, 1 week, 48 hours, 24 hours, and 4 hours before appointment
 - Found that waiting until 24 hours before caused numerous appointments to go unfilled
 - Allows patient to cancel while listening to reminder
 - Message sent to office to facilitate rebooking
 - Has reduced no shows significantly

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Automated Programs to Improve Care

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Automated Broadcasts vs. Texts

Your voice broadcast named "flu age 19 -64" has completed. Here are the results:

Voice Broadcast Results

All Calls : 1779
 Live Person : 861
 Voice Mail : 878
 Busy/NA : 15
 Invalid Number : 9
 Not Completed : 16

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Can Be Used For....

- Vaccines
- Physical examinations
- Seen used for outbreaks of disease
- Can use for important community information

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Patient Portals

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Patient Portal

- Benefits:
 - Improve communication with patients
 - Can publish labs and documents to portal
 - Patients have access to health record 24/7
 - Patients can trend labs
 - Pay bills on line
 - Request refills, appointments or ask questions
 - We also use for:
 - Rescheduling bumped appointments
 - Reminders

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Potential Negative Consequences

- Portals
 - It is now in writing
 - People will send messages over weekend about acute health issues despite messages telling them not to do this
 - Not always sure people get their messages (but same is true of emails and snail mail)
 - More contact than would expect if left to phone calls
 - Volume is huge
 - Expensive

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Statistics

SUMMARY

TOTAL PORTAL PATIENT:

1,374

10 This month
13 In February
27 In January

ALL PORTAL PATIENTS



■ Activated from invitation : 95%
■ Patients who created account : 5%

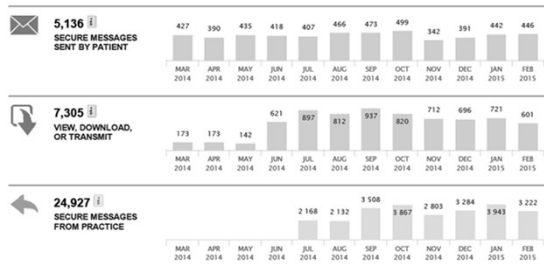
This accounts for 1/3 of our patient population
Meaningful use: 50%

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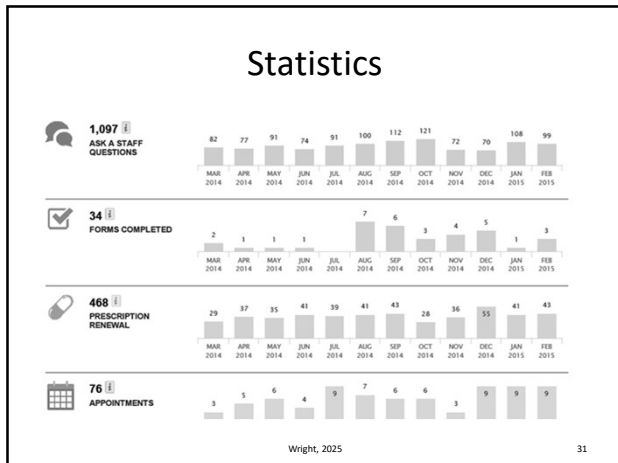
Statistics: Patient Portal



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Phone or Tablet

- Smart Phone or Tablet
 - Enables me to sign into a patients chart on weekends or evenings without computer
 - Allows me to verify medications and allergies
 - Allows me to document shortly after call has been placed

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Technology has allowed us to: Care Plan

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Pre-visit Preparation

- Improving clinician visit and improving patient outcomes
- Our model of care:
 - Longer visits with comprehensive care
 - What This Means: we attempt to address all preventive and acute needs at every visit, every time

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Pre-visit Preparation

- Two days before visit: check out sheet is completed by staff member working with particular provider
 - Focus is on HEDIS/Quality measurements
 - Address:
 - Mammograms
 - Bone density
 - Colonoscopy
 - Immunizations
 - Diabetes measurements
 - A1C
 - Foot examination
 - Microalbumin
 - Eye examination

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Check-out/Care Planning Sheet

☐ Email
☐ Collected Patient Responsibility
☐ Clinical Summary

Name: _____

You are due to follow up appointment in _____ day(s) ☐ week(s) ☐ month(s).

You are due for a physical on or after _____ and a physical on _____

You are scheduled for a follow up on _____

You are due for ☐ fasting ☐ non-fasting labs on _____

☐ Mammogram due _____ Last done on _____

☐ Bone Mineral due _____ Last done on _____

☐ Colonoscopy due _____ Last done on _____

☐ Diagnostic test needed _____

Facility requested _____ Day/Time preferred _____

DIABETIC PATIENTS: Last A1c _____ glucose _____ other _____

Eye Exam on _____ Foot Exam on _____

☐ PFT's
☐ EKG
☐ Venipuncture
☐ A1C
☐ Urine
☐ Vaccines

☐ Flu test
☐ Strep test
☐ Mono test
☐ Pregnancy test
☐ Microalbumin

Reminder: Zosyn >40, PPV23 >65 or 19-64 smoke status ♥ lung liver CKD, IDA, etc.

Referrals: _____

Records needed from _____ ☐ Scanned

Reminders/Notes: _____ Provider: _____

Thank you for visiting with us today.
Please hand this form to the staff member at the window prior to leaving.

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Here is what has happened...

- Began implementing early 2013
 - Billables have increased significantly
 - More vaccines are being given
 - More A1C, microalbumin testing is being done
 - More preventive visits/procedures are being booked
- Mammograms/colonoscopies – procedures that were overdue are being booked
 - Staff books these at check-out
 - Serves two purposes:
 - Gets accomplished
 - Provides excellent malpractice defense

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Here is what has happened...

- Specifics:
 - Amherst:
 - Two of the past 5 months have been the highest billable months in the history of our practice
 - No new staff has been added (providers)
 - Number of patient visits is NOT higher
 - Means that more vaccines, A1C's, microalbumins are being done
 - Concord:
 - Highest five months of billables in three year history of practice
 - Still with one provider
 - Big change was implementation of care planning

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Ultimately, Most Important Goal...


- Good patient care
- Improved outcomes
- Happy customers

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With a one-hour session with our IT specialist, 60-80 hours of work was eliminated each week



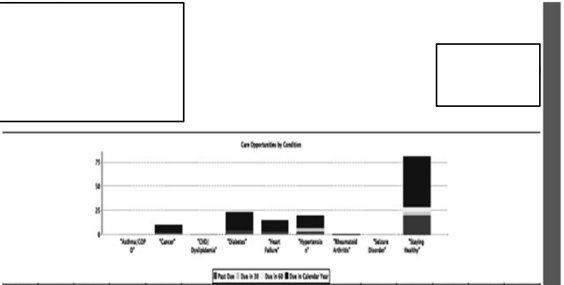
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On-line Quality Metrics and Tracking

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On-line Insurance Quality Systems



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On-Line Quality Metrics

- We then use these to:
 - Drill down to individual patient levels; reminders set, calls made and attempt to improve adherence implemented
 - Allows us to look at system issues
 - Are we over utilizing ED
 - Numbers were elevated so used this technology to:
 - Put information up in each examination room about where to go with different illnesses
 - Also....changed our triage working

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Not Always Accurate

- For instance...
 - Patient with vasospastic angina
 - We are being penalized for no ACE on her
 - Patient s/p hysterectomy
 - We are being penalized for no PAP
 - Quality metrics may be outdated or inappropriate
 - Based upon claims only
 - I.e. Bronchitis and antibiotics
 - Chlamydia screening on 16-24 year old females

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Continuous Quality Improvement

- Is essential
- Ensures that gaps are being filled
- We are always good with the patients we see....
 - It is the ones we don't see where we are lacking

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Using Reporting Modules

- To improve care....
 - Smoking rates
 - Diabetes care
 - Mammograms
 - Cervical Cancer Screening
 - Vaccines
 - Tracking of orders/referrals
 - Education provided by each provider
 - Physical examinations in past year

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Utilize Reminders

- Here are three examples of our reminder system to enhance patient care and improve outcomes

6 *** MEDICARE - QUALITY REPORTING AT EVERY VISIT REQUIRED IE MED RECON, PNEUMO, BML ETC - DONT FORGET ... 8/25/2013 2:13 PM Menu

Subject: *** MEDICARE - QUALITY REPORTING AT EVERY VISIT REQUIRED IE MED RECON, PNEUMO, BML ETC - DONT FORGET TO INCLUDE !!!!!!!!!!!!!!!

Note:

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Utilize Reminders

- Diabetes: Recommended Hepatitis B Series for all individuals with Type 1 or Type 2 diabetes < 60 years of age

15 **PATIENT NEEDS HEP B SERIES**

4/3/2013 9:29 AM

WRIGHT, 2013 09 03 09:29 AM

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Utilize Reminders

- Hepatitis C screening



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Tablets

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Tablets

- Benefits:
 - Portable
 - Cost effective
 - Allows signatures
 - Touch screen
 - Pictures
 - Quick internet searching
 - Can use for patient education
- Disadvantages:
 - Extensive typing is difficult
 - Not all applications available

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Tablet



All medical assistants carry a tablet
Allows signatures on screen
Highly portable
Less expensive than full computers

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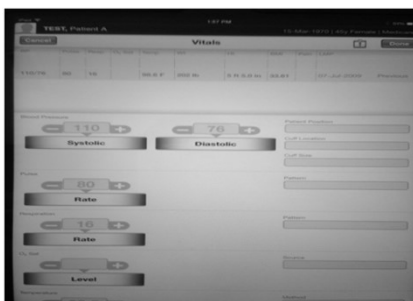
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Check-in

- MA's use WAND
 - Check-in module on I-pads
 - Less laptop utilization
 - Portability
 - Able to enter this information while they are weighing in patients or getting height
 - Capture pictures for chart while in examination room
 - Will become requirement
 - Reduces potential of insurance fraud

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Tablet/Wand



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Facebook or Other Social Media



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Purpose(s)

- Marketing of practice/clinic
- Free, just requires time, unless advertisements are purchased or posts boosted
- Can communicate with patients, family and friends about new providers, closures, new hours, community issues

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When It Is Good....

- But...when it is bad.....

Bad Service. Hate it. Spread it.



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Technology for Purposes of Education: Patients and Providers

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Apps for Providers

- Drug databases
- Clinical databases
- Drugs and Bugs
- ASCVD risk calculator
- Lab values
- ICD9 consult
- About herbs
- Pap guides

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Apps for Patients

- TNTC (Too numerous to count)
- Diet
- Exercise
- Tracking: headaches, menstrual cycle, weight loss, sleep patterns
 - Menstrual tracker, medication app
- Not all accurate but many are awesome
 - Find 5-10 that you love, have on your phone or tablet
 - Refer patients to them

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Technology to Manage Accounts Receivables and Staff

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Management Tools

[X] [Icon] **Abbott, Heather (3)**
 [X] [Icon] Bhatia, Chitra (MDRX) (1)
 [X] [Icon] Cardona, Richard (MDRX) (5)
 [X] [Icon] Duclos, Kathryn R (23)
 [X] [Icon] Feeney, A. Susan (9)
 [X] [Icon] Ganji, Sandeep (MDRX) (1)
 [X] [Icon] Gifford, Lauren J (1)
 [X] [Icon] Goud, Srikanth (MDRX) (1)
 [X] [Icon] Guillaume, John (MDRX) (1)
 [X] [Icon] LaFontaine, Ashley (3)
 [X] [Icon] Leclerc, Elizabeth (3)
 [X] [Icon] Ludt, Margaret A (11)
 [X] [Icon] Manager, System (1)
 [X] [Icon] Manter, Becky MA/PM (1)
 [X] [Icon] Nims-Largy, Justine T (4)
 [X] [Icon] Preston, Tyann (MDRX) (1)
 [X] [Icon] Rangam, Sri (MDRX) (2)
 [X] [Icon] Record, Courtney (2)
 [X] [Icon] Sanket, Satyam (MDRX) (1)
 [X] [Icon] Support, Medfusion (1)
 [X] [Icon] Toussaint, Caroline (1)
 [X] [Icon] Vadhvani, Sneha (MDRX) (1)
 [X] [Icon] Wright, Eric CIS (1)
 [X] [Icon] Wright, Melissa (13)

How many open encounters?
How old are they?

THESE ARE NOT PATIENT
NAMES!!

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Billing Management Systems

- Many allow:
 - Evaluation of patients insurance, valid, deductible, amount already paid and anticipated amount owed on visit
 - This is done on every patient prior to being seen
 - Saves a lot of back end work

- 3 mo f/u||Location: Exam Room 1||Status: Arrived
 - f/u- LM to r/s 2/16- balance of 79.34 on acct + cope
 x not Simple - abdominal pressure, ? UTI- balance on
 x not Simple - belly pain, fatigued||Location: Exam Roc
 x not Simple - ? ingrown hair||Location: Exam Room 1
 x not Simple - conjunctivitis- 117.33 for ded today||Loc

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Billing Management System

10/15/2014 3:07:53PM

Page: 55

	0 To 30 Days	%	31 To 60 Days	%	61 To 90 Days	%	Over 90 Days	%	Total Due	%	% Total
Insurance Category: Aetna											
Aetna	2342.00	100%	0.00	0%	0.00	0%	0.00	0%	2342.00	100%	1%
Totals for: AETNA	2342.00	100%	0.00	0%	0.00	0%	0.00	0%	2342.00		1%
Insurance Category: Blue Cross Blue Shield											
ANTHEM BC BS PEP - NH	823.00	100%	0.00	0%	0.00	0%	0.00	0%	823.00	2%	0%
ANTHEM	30199.89	81%	2151.99	6%	859.94	2%	4267.82	11%	37478.94	98%	21%
Totals for: BCBS	31022.89	81%	2151.99	6%	859.94	2%	4267.82	11%	38001.94		21%
Insurance Category: Flinn											

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Implications of Technology

- Cost savings
- Staff savings
- Efficiency

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Newest Technology

- Bi-directional fill history for patients
- Reduces medication interactions
- Verifies medication names/dosages for patients who are unable or unwilling to produce

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Sometimes...it's the simple things



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Artificial Intelligence

- Drafting letters to patients
- Helping with differential diagnosis
- Writing
- So much more.....potential is untapped

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But...

- Technology also allows:
 - Big brother watching
 - Know every chart touched
 - Every minute spent on different tasks
 - Tracking
- Much of this is frightening to average provider

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Thank You!
I Would Be Happy To
Entertain Any Comments
or Questions!

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