

One Primary Care Physician and the Partners Signature Initiatives:

Changes in Doctoring

Timothy Ferris, MD, MPH

Computer Replaces Pen

SI-1: Electronic health record

Before

- Hope paper chart shows up
- Hope key data are in it
- Jot down notes during conversation
- Flip through chart for letters/labs
- Provide general handouts

After

- Preview panel from home
- Type partial notes during conversation
- Scroll through other MD letters/notes/labs
- Show/print results for patient
- Look up latest recommendations
- Print customized instructions

Lab results always followed up

SI-1: Electronic health record

Before

- Stack of papers in my mailbox
- Letters variously formatted somewhat inflexible or typing a completely original letter
- Some patients didn't receive any communication at all

After

- Computer organizes/prioritizes results in program called Results Manager
- Alerts for alarming results
- Letter generated for routine values
- Can work from home
- Reassigned a clinical assistant

Allergies and interaction always checks

SI-2: Patient safety

Before

- Difficult to find prior Rx list (especially if other doc writing Rx)
- Write Rx and separately record in chart (maybe)
- Verbal allergy check
- Review poster with options covered by pt's insurance
- Low likelihood of interaction

After

- Reconcile med list with patient's understanding
- Provide lowest cost option for patient that is effective
- Automated allergy and drug/disease interaction check
- Prescription and charting simultaneous occur

LMR OMA18 MEDICATIONS - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://ppd.partners.org/scripts/phsweb.mwl?APP=LMR&SESSION=37927982

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TL1 BIMA 12/10

Select Desktop Pt Chart: Medications Oncology Custom Reports Admin Sign Results ? Resource Popup

Warning

You are ordering: VIAGRA (SILDENAFIL)

Drug - Inactive Intervention

Alert Message

VIAGRA (SILDENAFIL) 50MG PO x1 was previously entered and is currently inactive.

Drug - Drug Interaction

Alert Message

Patient is currently on: **FLOMAX (TAMSULOSIN) 0.4MG PO QD**

Patient is on Sildenafil and Tamsulosin - May result in significant hypotension - Recommend to avoid concurrent use.

Keep New Order - select reason(s)

Will D/C pre-existing drug

Reasons for override:

Will adjust dose as recommended

Will monitor as recommended

Patient has already tolerated combination

No reasonable alternatives

Other

266 - 375(15,188,31,0,0,141) Internet

Discharge summaries have all elements

SI-2: Patient safety

Before

- Dictated a stream of consciousness regarding patient
- Frequent omissions

After

- Mandatory inclusion of specific fields in the discharge summary
- All key data are included
- Readers know how to find data quickly

Reminders prompt actions

SI-3: reducing variation

Before

- Looked up latest recommendations for periodicity of testing
- Combed through chart looking for last value
- Mentally calculated periodicity of test (e.g., Pap smear)

After

- Summary view with recommendations for currently due test ordering, med changes, and resources
- Off-loading work to designee

LMR OMA18 SUMMARY - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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BIMA

Select Desktop Pt Chart: Summary Oncology Custom Reports Admin Sign Results ? Resource Popup

Reminders

- Patient is overdue for Ophtho exam (rec: q 1 year).
- Patient is 50 years old or older, recommend Influenza vaccination
- Recommend bone densitometry and appropriate treatment for patients at high risk for osteoporosis.

<p>Problems Add New</p> <ul style="list-style-type: none"> Coronary artery disease Diabetes Hypertension Hemorrhoids Stasis ulcers Heel spur (left) Decreased hearing Squamous cell carcinoma Past smoker 40 years ago Chronic renal dysfunction 	<p>Medications Add New</p> <ul style="list-style-type: none"> Acetylsalicylic ACID (CHILDREN'S) 325 MG PO QD Atenolol 50 MG PO QD Furosemide 20 MG (20MG TABLET take 1) PO QOD Glyburide 1.25 MG PO QD Hydrocortisone CREAM 2.5% (HYDROCORTISONE... CREAM TOP BID Lisinopril 40 MG PO QD Lovastatin 20MG TABLET take 1 Tablet(s) PO QHS Norvasc (AMLODIPINE) 10MG TABLET take 1 Tablet(s) PO QD 	<p>Allergies Add New</p> <table border="1"> <thead> <tr> <th>Codeine</th> <th>Allergen</th> <th>Reaction</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>- GI upset</td> </tr> </tbody> </table> <p>Sticky Notes Add New</p> <p>Advance Directives</p> <p>Radiology</p> <p>Customize</p> <p>Family History Add New</p> <table border="1"> <thead> <tr> <th>Family History Problem</th> <th>Relative</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Codeine	Allergen	Reaction			- GI upset	Family History Problem	Relative		
Codeine	Allergen	Reaction										
		- GI upset										
Family History Problem	Relative											
<p>Procedures Add New</p> <ul style="list-style-type: none"> S/p cholecystectomy S/p tah_uso 	<p>Flowsheets Add New</p> <p>Health Maintenance</p> <p>Notes Add New</p> <p>To Do Add New</p>											
<p>Social History</p> <p>Visits</p> <p>Patient E-mail</p>												

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High risk Medicaid patients get a health coach

SI-4: Improving care coordination for high risk patients

Before

- Mental list of sickest patients
- Considerable time spent dealing with social and administrative tasks (e.g. insurance, free medications..)
- Considerable time spent coaching on lifestyle choices/options
- Sometimes fall off radar, only to re-emerge in ED

After

- Emailed lists of my sickest patients
- Option to provide them with 24/7 access to a nurse “coach”
- Emailed progress notes
- Emailed with questions/problems
- Knowledge that someone is checking in

X-rays orders checked for appropriateness

SI-5: Trend management

Before

- Fill out slip of paper and give to secretary
- Get call later with scheduling or technical questions

After

- Order and schedule test with pt in the room
- Get immediate feedback on appropriateness
- Coming soon – data on my own test-ordering patterns, and how I compare with my colleagues

Overall Impact Why privacy matters

Partners Signature Initiatives

- Care is more reliable, more efficient, and safer
- Considerable synergy among the Signature Initiatives
- Using the systems requires learning and commitment by busy physicians
 - There are sacrifices in making the transition
- Time is required, but time is saved
- Growing intolerance of non-users
- The care is better, and no one wants to go back