

# Making the Right Thing Easier...

Health Plan Initiatives in  
Quality Enhancement and Error  
Reduction

The Quality Colloquium  
August 23, 2004

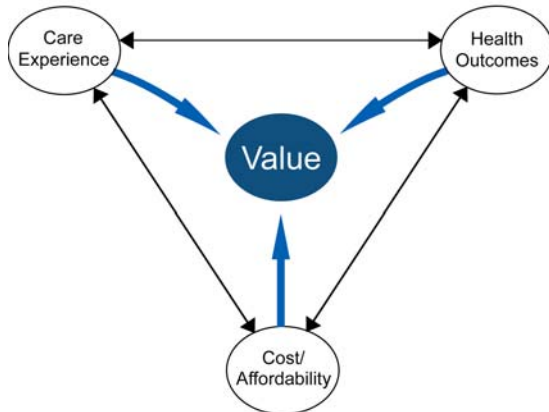
Paul Wallace MD  
Care Management Institute  
Kaiser Permanente

[Paul.Wallace@kp.org](mailto:Paul.Wallace@kp.org)

# Kaiser Permanente

- America's oldest and largest private, nonprofit, integrated health care delivery and financing system —  
Founded in 1945
- Multi-specialty group practice prepayment program —  
Headquartered in Oakland, CA
- Operations in 9 states and Washington, D.C. with 29  
Medical Centers and 423 Clinics
- KP Research Centers - \$100,000,000 in external  
funding in 2003 for Health Systems Research
- 8.3 million members — 6.1 million members in California
- Over 12,000 physicians representing all specialties and  
130,000+ additional employees
- All employees and their families are KP members

# The Pursuit of Value: *Make the right thing easier...*



- *Identify the right thing*
  - Evidence-based medicine
  - Measurement
  - Successful practices
  - Member centered and culturally competent care
- *Make the right thing easier*
  - Focus on the delivery system
  - Networks of individuals and groups
  - Technology to support effective work

- Critical Design Considerations
  - The Clinician
    - Knowledge management
    - Information seeking behavior
  - The Patient
    - Who are these folks?
    - What else is likely going on? Co-morbidities
    - What is the patient's role in their care?
- System Support
  - A Model of Care
    - The Population View
    - The Chronic Condition Model
  - Leverage of Information Technologies
    - Support for Decision Making
    - Ongoing Care

# Knowledge Management...One Approach



# Common Threats to Safety

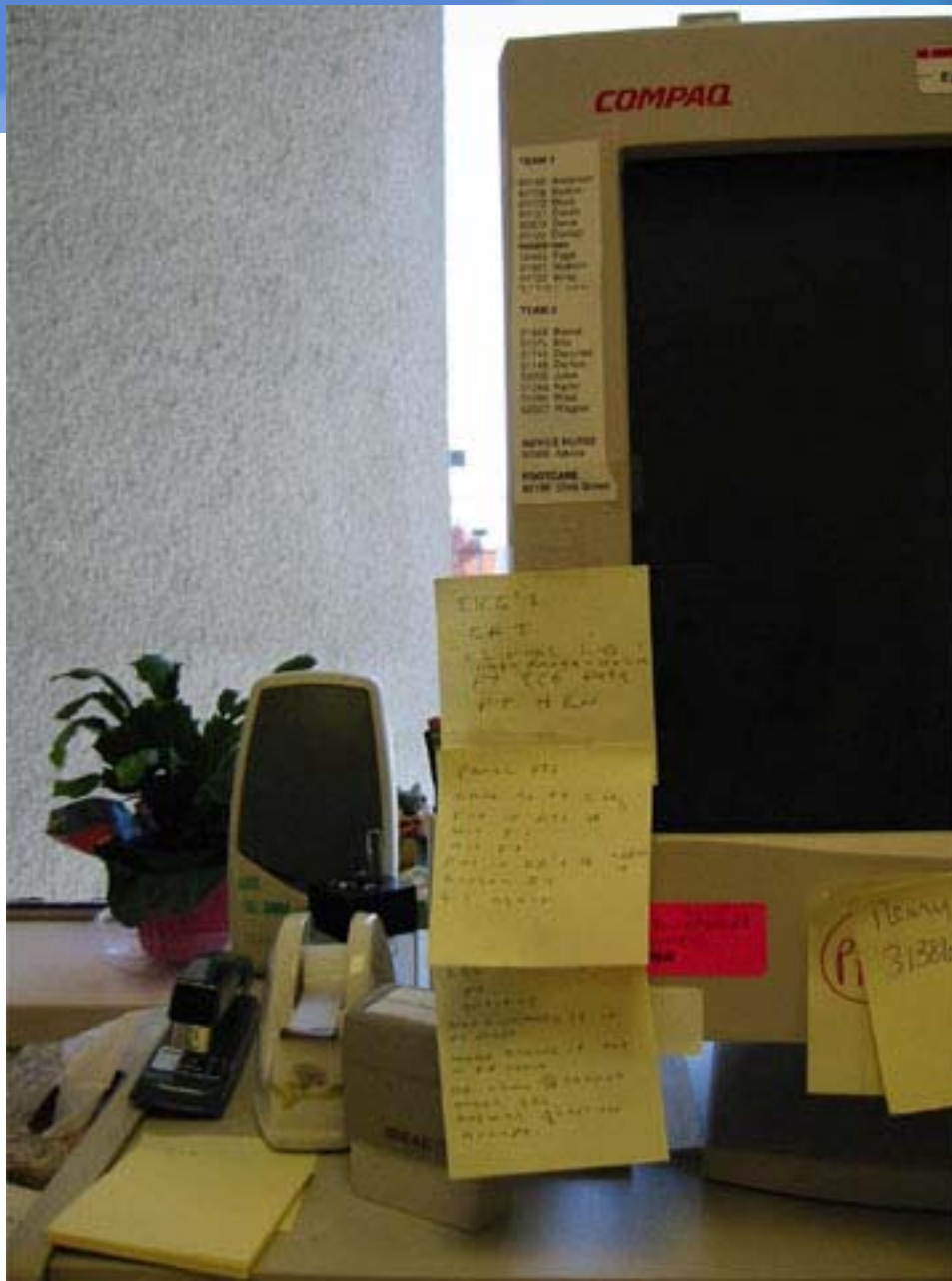
- Interruptions
- Fatigue
- Poor communication
- Limited memory capacity
- Limited ability to multi-task

## ■ Methodology

- Observed clinical day for 20 KP clinicians
  - 4 Regions (CO, NW, NC, SC)
  - 1 Physician consultant in each region
  - 1 expert computer user in each region
  - 1 Physician novice computer user in each region
  - 1 Physician Assistant or Nurse Practitioner in each region
  - 1 Medical specialist in each region
- Data
  - Ethnographic Notes
  - Pictures
  - Artifacts

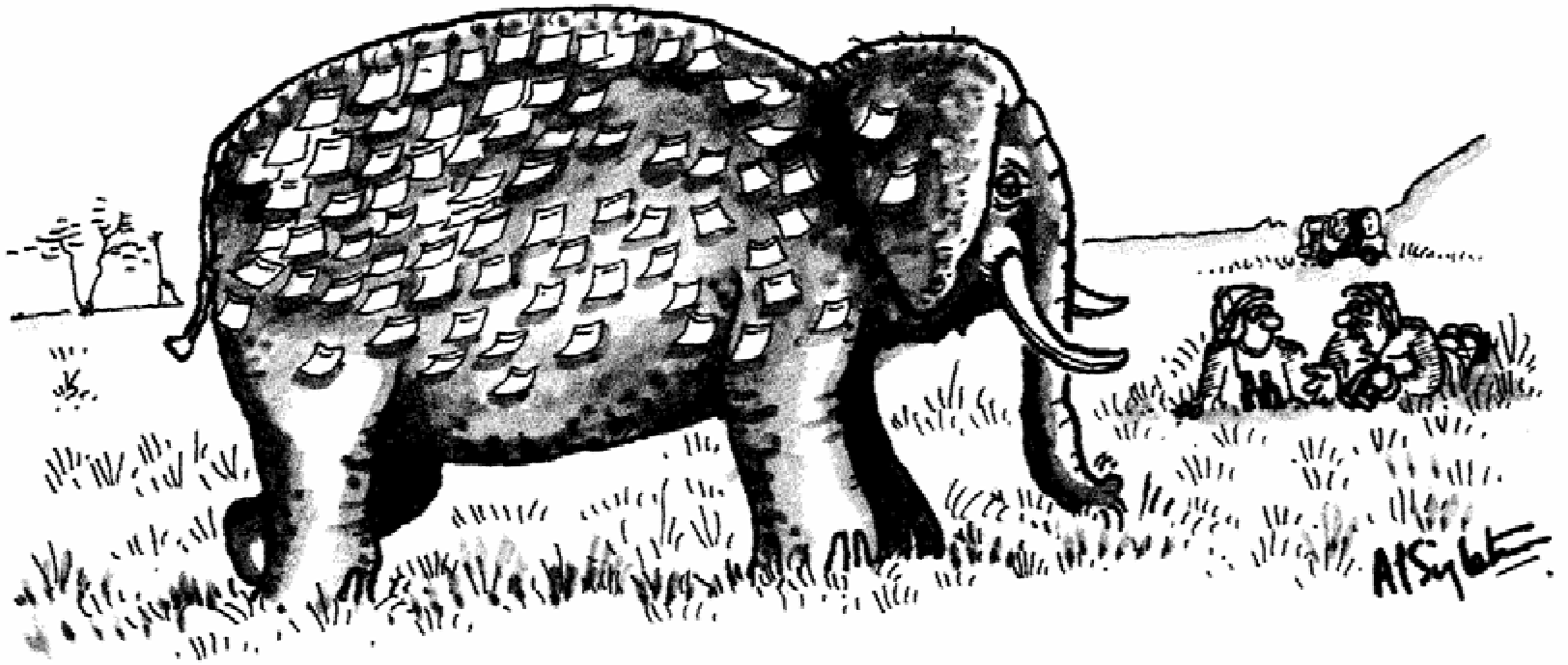
# Desk Close-Up





Stickies were ubiquitous

Labels with patient information and pre-visit summaries are also used as reminders



*“And folklore has it they never forget!”*

# Need for Information at the Point of Care



Clinicians  
carry  
frequently  
used  
information  
resources  
with them

Information systems goal: Empty the lab coat pocket

	<b>Patient-specific</b>	<b>Non-patient-specific</b>
<b>Medical</b>	Patient Medical Record	Medical Science
<b>Non-medical</b>	Social & Demographic	Operational

# Why Were Questions Unanswered?

## ■ Features of the environment

- Time
- Memory (short-term and long-term)
- Pervasive irritation with handling information
- Risk-aversion (economics of time invested)

## ■ Barriers

- Design Incomplete
- Data Incomplete
- Access difficulties
- Time issues
- Communications

# Permanente Knowledge Connection

<http://pkc.kp.org>

The screenshot shows the homepage of the Clinical Library National website. At the top, there is a navigation bar with the logo 'Clinical Library National' and the tagline 'Permanente Knowledge Connection'. Below the logo, there are links for 'National', 'NCAL', 'SCAL', 'Colorado', 'Georgia', 'GHC', 'Hawaii', 'Mid-Atlantic', 'Northwest', and 'Ohio'. A search bar is located below the navigation bar, with a dropdown menu set to 'Kaiser Clinical Content'. To the right of the search bar are links for 'Ask a Librarian' and 'Phonebook'. The main content area is divided into several sections: 'Clinical Guidelines ...' with links to various regional guidelines; 'Member Education ...' with links to handouts and publications; 'The Reference Shelf ...' with links to MD Consult, Micromedex, Ovid, etc.; 'Clinician Education ...' with links to online CME and conferences; 'Drug, Lab & Imaging ...' with links to DME, pharmacy, and formularies; 'Healthcare News ...' with links to CMIdeas, KP Stat, and Yahoo Health News; 'Operational Resources ...' with links to Care Management Institute and other resources; and 'What's New' with a date of May 21, 2003, and a list of recent news items. At the bottom, there is a footer with contact information for the PKC Help Desk and a logo for Kaiser Permanente.

- More than 30,000 KP clinical knowledge documents
- Online Access to over 180 journals and over 100 textbooks
- Comprehensive databases in Mental Health, Alternative Medicine and EBM
- Partnering to Provide Clinicians with Relevant and Trusted Information at the Point of Care



*"Nurse, get on the internet, go to SURGERY.COM, scroll down and click on the 'Are you totally lost?' icon."*

# Making the right thing easier... Evidence in the exam room

What's wrong with this picture?



# The patients we see...

## All Physician Encounters, 2002, Southern California

DESCRIPTION	# visits
HYPERTENSION NOS	548152
ROUTINE MEDICAL EXAM	399709
ACUTE URI NOS	333785
DMII WO CMP NT ST UNCNTR	228718
VIRAL INFECTION NOS	201255
BACKACHE NOS	200177
ABDMNAL PAIN UNSPCF SITE	161436
ACUTE SINUSITIS NOS	151216
ACUTE BRONCHITIS	149490
URIN TRACT INFECTION NOS	144969
FOLLOW-UP SURGERY NOS	144540
DERMATITIS NOS	132286
HYPERLIPIDEMIA NEC/NOS	116853
ALLERGIC RHINITIS NOS	115779
ASTHMA W/O STATUS ASTHM	112796
CELLULITIS NOS	109130
SCREEN MAL NEOP-CERVIX	108894
ACTINIC KERATOSIS	100671
SPRAIN NOS	100389
HEADACHE	94300
NONINF GASTROENTERIT NEC	88132
OBESITY NOS	87859
OSTEOARTHROS NOS-UNSPEC	85860

### CHRONIC CONDITIONS

Clinical Area	KP Members with this Condition	
Asthma	141,000	(2.1% of members)
Coronary Artery Disease	256,000	(3.8%)
Depression	411,000	(6.2%)
Diabetes	577,000	(8.7%)
Heart Failure	94,000	(1.4%)
<i>(1 or more of the above)</i>	<i>1,120,000 or 16.1% of members)</i>	
Cancer	25,000 new cases/yr	
Chronic Pain	~1,000,000 (?)	
Elder Care	917,000	
Obesity	~ 25% of adults	
Self Care & Shared Decision Making	8.2 MM	
Anti-coagulation...	~100-150,000?	

## *Then...*



## *Going Forward...*

- **Process and experience oriented**

- **Local and tribal**

- **Access: to Clinicians and Visits**

- **Knowledge Management — Paper and Recall**

- **Clinician treating patients and curing acute conditions**

- **Outcome and knowledge oriented**

- **National and global**

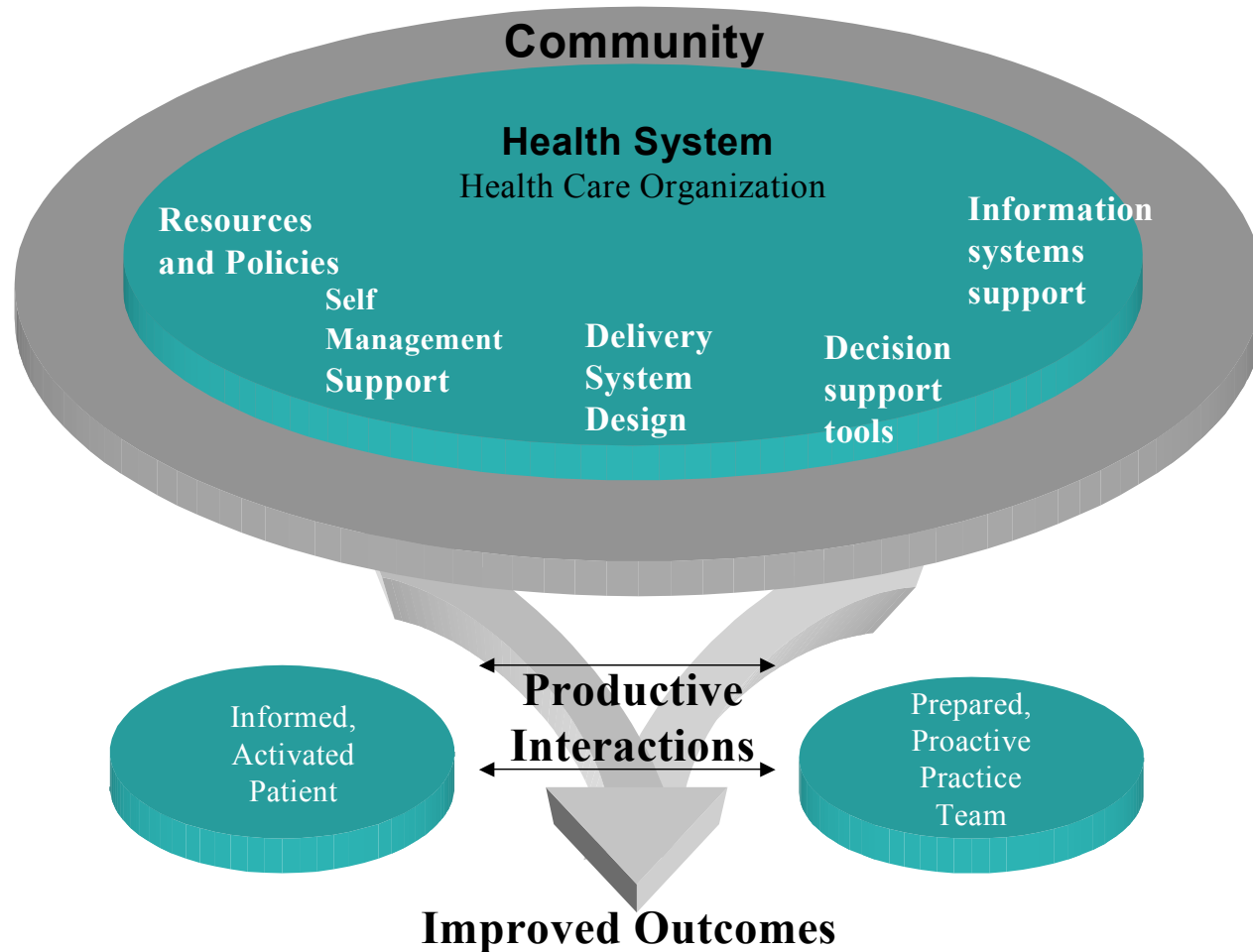
- **Access: to what you need, whenever you need it**

- **Knowledge Management — Electrons and Judgment**

- **Teams — including members — managing chronic conditions**



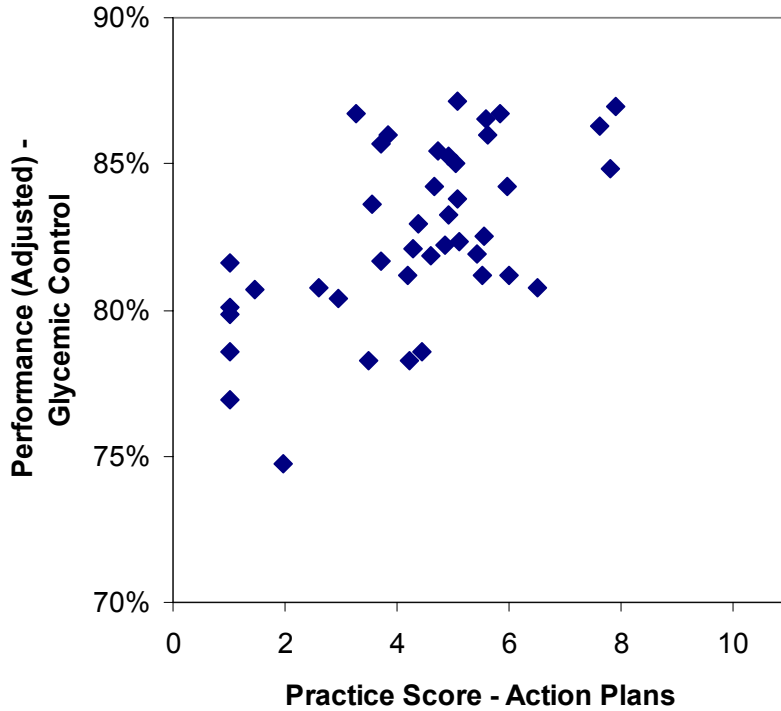
## Chronic Care Model



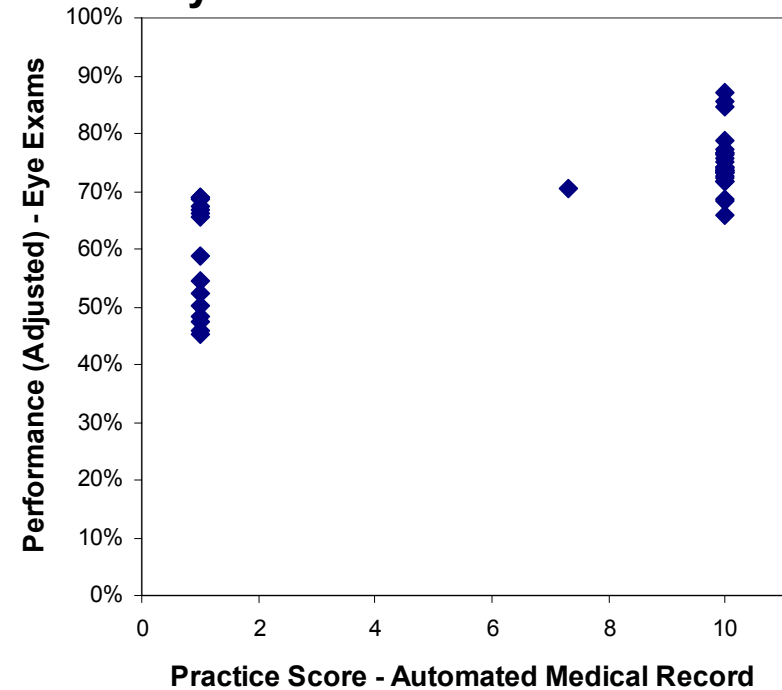
Source: From Improving Chronic Illness Care, Ed Wagner, Md

# Associating High Performance with Operational Features- Examples

## Glycemic Screening x Action Plans

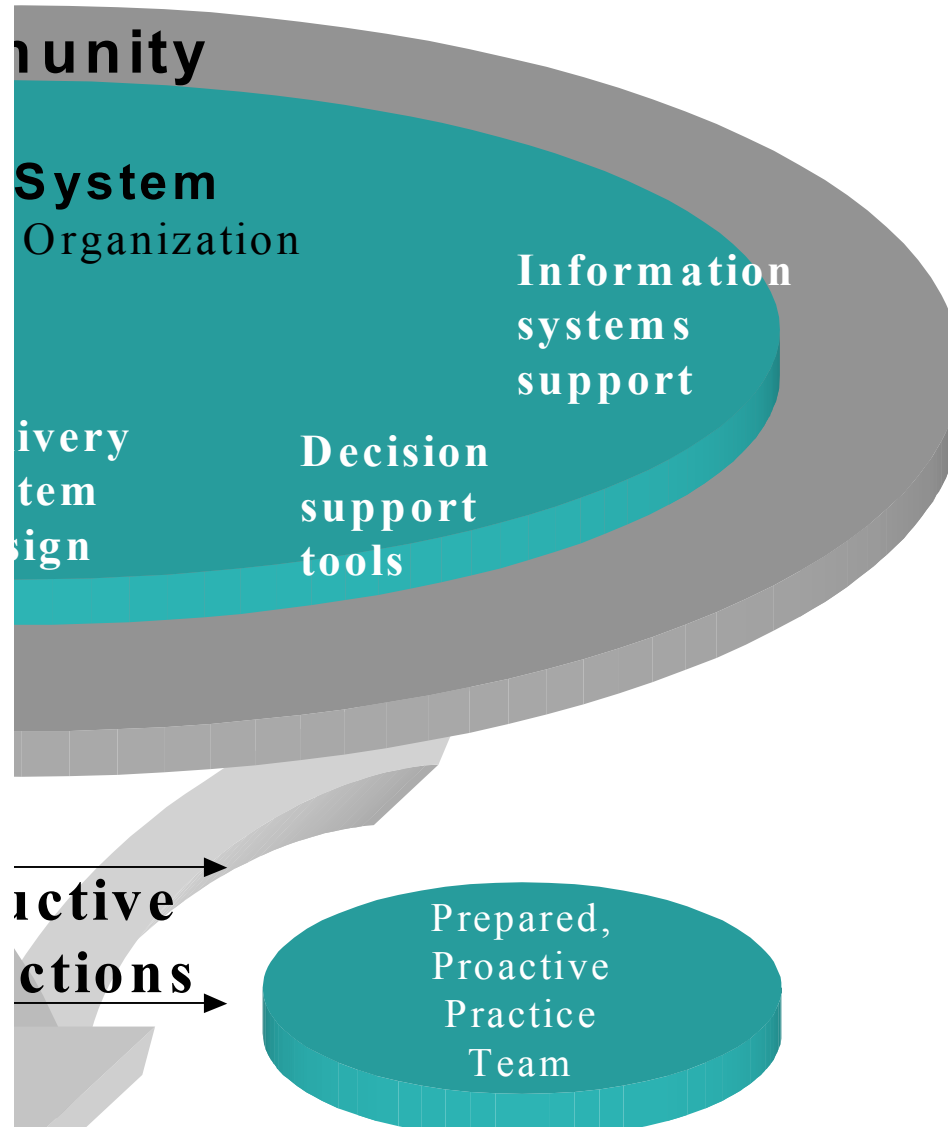


## Eye Exams x AMR



*Performance values shown are adjusted for all other Practices, based on model estimates*

- Practices most associated with high performance
  - Action plans
  - Automated medical record
  - Registry
  - Outreach and follow-up
  
- Practices sometimes associated with performance, but with less strength and/or consistency
  - Financial incentives
  - Provider alerts
  - Guideline distribution & training
  
- Practices under further study
  - Patient education
  - Self-Mgmt Integrated with care
  - Stratified services
  - Risk stratification
  - Inreach
  - Care coordination
  - Team-based care
  - Cultural competence



Source: From Improving Chronic Illness Care, Ed Wagner, Md

# Is There Capacity for Delivering Health?

**TABLE 4—Summary of Annual and Daily Time Requirements by Patient Group and USPSTF Rank of Service Recommendation**

Patient Group	Hours Required by Rank of Service Recommendation		Total Hours Required Per Year	Total Hours Required Per Day
	A	B		
Adults aged 25 years and older (n = 1618)	262	805	1067	4.4
Children aged 0 to 24 years (n = 882)	169	365	534	2.2
Pregnant women aged 15 to 44 years (n = 36)	10	11	21	0.1
High-risk groups	85	67	152	0.6
Total hours required per year	525	1248	1773	...
Total hours required per day	2.2	5.2	...	7.4

Note. USPSTF = US Preventive Services Task Force.

Yarnall KSH, Pollack KI, Ostbye T, Krause KM, Michener JL. Primary care: is there enough time for prevention? *Am J Public Health* 2003; 93:635-641

# Best Practice Alerts- Intrusive

Decrease reliance on memory. Minimize variation.

**Chan, Laura T** Age: 52 y.o. Sex: F DOB: 11/28/1951 MRN: 123441 Allergies: Penicillins, Dust, Iodine PCP: NATIONS, PAI\* Alerts: HM INS: MyChart: Active

**Best Practice Alerts Reminder**

- Patient is due for Pap smear (PAP YEARLY last satisfied: 4/25/2002)
- Patient is due for mammography (MAMMOGRAM last satisfied: 4/25/2002)
- AST/ALT should be monitored semi-annually in patients taking HMGCoA reductase inhibitors. (Last AST=38 on 4/25/2002) (Last ALT=33 on 4/25/2002)
- Patient is due for following diabetes management topics: (FOOT EXAM last satisfied: 5/13/2002) (EYE EXAM last satisfied: 5/13/2002)

Diagnosis: MIXED HYPERLIPIDEMIA [272.2] Active, 3/ HYPERTENSION NOS [401.9] Active, 5/

# Drug-Drug Interaction

Flag harm. Use constraints.

Epic Hyperspace - FAMILY MEDICINE, WEST - DEMO - EPIC HEALTH SYSTEM CLINICS

Desktop Action Patient Care Scheduling HIM Billing Hospital Billing Reg/ADT Surgery Pharmacy Referrals Reports Tools Admin Help Training

Back Forward Home Schedule In Basket Chart Encounter Tel. Enc. Hospital Chart Patient Lists Secure Print Log Out

Home Chan, Laura T Workspaces

**Chan, Laura T** Age Sex DOB MRN Allergies PCP Alerts INS MyChart  
 52 y.o. F 11/28/1951 123441 Penicillins, Dust, Iodine NATIONS, PAI\* HM Active

Activities Order Entry (Encounter Date: 05/11/2004) - Weight: (Not entered for this visit) Height: (Not entered for this visit)

SnapShot Chart Review Results Review Flowsheets Problem List

Association Code Search Pref List Interactions Pharmacy Providers References Open Orders Pend Orders Sign Orders Financial Routing

Order: ERYTHROMYCIN BASE 250 MG PO TABS Sig: Dispense:

Refill: 0 Start date: 5/11/2004 End date: Class: Assoc.  DAW

History Medication Alerts Letters Demographics Order Entry Immunizations Allergies Medication Visit Navigation

Current Alerts Group by: Type Importance Orders  Set as startup option Expand Collapse

Summary: Drug-Drug (1) Drug-Food

Imp.	Significance	Description	Order(s)	Override Reason/Comment
<input checked="" type="checkbox"/>	Major	Macrolides-HMG-CoA-R Inhibitors	<input checked="" type="checkbox"/> ERYTHROMYCIN BASE 250 MG PO TABS • LOVASTATIN TABS	New (1)

**Details:** WARNING: ERYTHROMYCIN BASE may increase pharmacologic effects of LOVASTATIN. Elevated plasma concentrations with toxicity characterized by liver enzyme elevation and myopathy may occur. Onset: Delayed Document Level: Probable

**Interacting Medication(s)/Order(s):**

Macrolides	HMG-CoA-R Inhibitors
ERYTHROMYCIN BASE <ul style="list-style-type: none"> <li>Order: ERYTHROMYCIN BASE 250 MG PO TABS Route: Oral Start: 05/11/2004 End: none</li> </ul>	LOVASTATIN <ul style="list-style-type: none"> <li>Order (180913): LOVASTATIN TABS Route: Oral Start: 05/11/2004 End: 05/11/2005</li> </ul>

EFFECTS: ERYTHROMYCIN BASE may increase pharmacologic effects of LOVASTATIN. Elevated

Use for All Non-specified Above Reason for override: Comments: Show Legend

Start M... A... M... Ja... Vir... EpicH... M... Ja... EpicH... 1:59 PM 27

# Oncology Breast Care Plan

Minimizes variation. Decrease reliance on memory. Use constraints.

**Epic Hyperspace - RKW-FP**

Desktop Action Patient Care Reports Tools Help

Back Forward Home Schedule In Basket Chart Encounter Tel. Enc. Staff Secure Print Log Out

Home **Kpnw, Forty-Two** Workspaces

**Kpnw, Forty-Two** Age 51 yrs Sex M DOB 6/9/1952 MRN 00000002 Allergies Walnuts English, Chocolate, \* Type (None)\* PCP EBACHER, JAMI\* INS (N/A) PHL Active

Activities

**SmartSet - ONC CARE PLAN - BREAST**

Association Edit Item Add to Favorites Pharmacy Questionnaire Health Mart Accept/Pend Accept/Sign Cancel

- DIAGNOSIS
  - Diagnosis (multiple)
    - CANCER-BREAST- INVASIVE DUCTAL CA [174.9A]
    - CANCER-BREAST- INVASIVE LOBULAR CA [174.9B]
    - CANCER-BREAST [174.9]
    - CANCER-BREAST-METASTATIC [198.81]
- ORDERS
  - BASELINE Laboratory Tests - EXPAND if needed (multiple)
  - Prior to Each Cycle - All Protocols (multiple)
    - CBC (INCLUDES AUTO DIFF)
    - PLATELET COUNT
  - Prior to Each Cycle - 21D Cycle (multiple)
    - T, BILI - [AC, AC-T, TAC, IV-CMF, Taxane+/- Her., Vinorelbine]
    - CREAT. - [IV-CMF Mets.]
    - SGOT/AST - [IV-CMF Mets, TAC, Taxotere]
    - ALK, PHOS. - [IV-CMF Mets, TAC, Taxotere]
    - U/A - [IV-CMF Mets]
  - Prior to Each Cycle - 28D Cycle (multiple)
    - T, BILI - [CAF, CMF Adj.-IV/Oral, Taxol wkly]
    - CREAT - [CMF Adj.-IV/Oral]
    - SGOT/AST - [IV-CMF Adj., Taxol wkly]
    - ALK, PHOS. - [IV-CMF Adj.]
    - U/A - [CAF, IV-CMF Adj., Oral CMF]
- SMARTTEXT

Authorizing Provider: KRALL, MICHAEL [2531]

SmartSet Notes: R. D. Bigler MD

Legend:
 

- Standing order
- Future order

Right click data row to edit

Exit Workspace

Start | C:\... | We... | DE... | Me... | Ja... | EpicHy... | EpicHy... | C:\... | Evi... | 2:41 PM

Minimizes variation. Decrease reliance on memory. Use constraints.

**Additional Progress Notes**

ONCOLOGY CARE PLAN

A PARQ conference was held with the patient. The following care plan was discussed and has patient approval.

5/12/2004 Primary Oncologist: Michael Krall, M.D.

Other Clinicians: Oncology: \*\*\*  
Surgery: \*\*\*  
Radiation Therapy: \*\*\*

DIAGNOSIS: \*\*\*  
STAGE: \*\*\*

REASON FOR TREATMENT: 2889

RELEVANT MEDICAL PROBLEMS: \*

Legend

- Standing order
- Future order

# Care Plan- Dosage Documentation

Minimizes variation. Decrease reliance on memory. Use constraints.

**Epic Hyperspace - RKW-FP**

Desktop Action Patient Care Reports Tools Help

Back Forward Home Schedule In Basket Chart Encounter Tel. Enc. Staff Secure Print Log Out

Home **Kpnw, Forty-Two** Workspaces

**Kpnw, Forty-Two**

Activities

- Chart Review
- SnapShot
- Flowsheets
- Problem List
- History
- Letters
- Demographics
- Graphs
- Growth Chart
- Meds/Allergies
- Order Entry
- Level of Service
- Smartforms
- Episodes
- Visit Navigator
- Select SmartSet
- SmartSet - ON...

**SmartSet - ONC CARE**

Association Edit It

- CREA
- SGOT
- ALK. P
- U/A -
- SMARTTEXT
- Care Plan
- Treatment I
- ADRIV
- ADRIV
- CAF
- CAPE
- CAPE
- CMF.
- CMF.
- CMF.
- HERC
- TAXO
- TAXO
- TAXO
- TAXO
- VINORELBINE
- ZOLEDRONIC ACID

**Additional Progress Notes**

RELEVANT MEDICAL PROBLEMS: \*\*\*

ALLERGIES: Walnuts English  
 , Chocolate  
 , Menadione & Derivatives  
 , Morphine

PERFORMANCE (precycle 1): {1118}

Age: 51 yrs BP 118/72

Height: 170.18 cm 4/27/04  
 Weight: 104.33 kg 4/27/04  
 Adj. Weight: 81.39 kg 4/27/04  
 BSA: 2.15 sq m  
 BSA (adj.): 1.93 sq m

DOSAGE BASED ON: {1041}

DOSAGE MODIFICATIONS:  
 Review each course {1051::"Per Protocol"}

Accept Cancel

PCP: HER, JAMI\* INS: (N/A) PHL: Active

cept/Sign Cancel

**Authorizing Provider**

KRALL, MICHAEL [2531] ...

**SmartSet Notes**

R. D. Bigler MD

**Legend**

- Standing order
- Future order

Right click data row to edit Please enter notes details...

Start | C... W... I... O... M... J... EpicH... K... P... A... 10:22 PM

# Care Plan- Patient Education

Minimizes variation. Engage patient as partner .

**Epic Hyperspace - RKW-FP**

Desktop Action Patient Care Reports Tools Help

Back Forward Home Schedule In Basket Chart Encounter Tel. Enc. Staff Secure Print Log Out

Home **Kpnw, Forty-Two** Workspaces

**Kpnw, Forty-Two**

Additional Progress Notes

Age: 51 yrs BP 118/72

Height: 170.18 cm 4/27/04  
 Weight: 104.33 kg 4/27/04  
 Adj. Weight: 81.39 kg 4/27/04  
 BSA: 2.15 sq m  
 BSA (adj.): 1.93 sq m

DOSAGE BASED ON: {1041}

DOSAGE MODIFICATIONS:  
 Review each course {1051: "Per Protocol"}

FREQUENCY: {1052: "Per Protocol"}

DURATION OF THERAPY: {888}

REEVALUATE: after cycle \*\*\* with te

FOLLOWUP: {888}

PATIENT EDUCATION/COUNSELING: {887}

#####

#####

Accept Cancel

PCP: HER, JAMI\* INS: (N/A) PHL: Active

Accept/Sign Cancel

Authorizing Provider: KRALL, MICHAEL [2531]

SmartSet Notes: R. D. Bigler MD

Legend:  
 ● Standing order  
 ■ Future order

Activities: Chart Review, Snapshot, Flowsheets, Problem List, History, Letters, Demographics, Graphs, Growth Chart, Meds/Allergies, Order Entry, Level of Service, Smartforms, Episodes, Visit Navigator, Select SmartSet, SmartSet - ON...

SmartSet - ONC CARE

Association Edit It

- CREA
- SGOT
- ALK P
- U/A-I
- SMARTTEXT
- Care Plan
- CARE
- Treatment I
- ADRIV
- ADRIV
- CAF
- CAPE
- CAPE
- CMF,
- CMF,
- CMF,
- CMF,
- HERC
- TAC
- TAXO
- TAXO
- TAXO
- TAXO
- VINORELBINE
- ZOLEDRONIC ACID

Right click data row to edit Please enter notes details...

Start | C... W... I... O... M... J... EpicH... K... P... A... 10:24 PM

KAISER PERMANENTE

# Oncology Dosing Support

Minimizes variation. Decrease reliance on memory. Use constraints.

The screenshot displays the Epic Hyperspace interface for a patient named Kpnw, Forty-Two. The patient's demographic information is shown as 51 years old, Male, DOB 6/9/1952. The main window shows a 'SmartSet - ONC CARE PLAN - BREAST' with a list of treatment options. The 'CMF, ADJUVANT - IV' option is selected. An 'Additional Progress Notes' window is open, showing a note from Michael Krall, M.D. dated 5/12/2004. The note details the CMF IV regimen: Cyclophosphamide 800mg/m2, Methotrexate 40mg/m2, and 5-FU 800mg/m2, all administered on days 1 and 8. It also specifies hydration and antiemetic therapy. The antiemetic therapy for Day 8 is highlighted in yellow: Dolasetron 100 mg PO and Dexamethasone 12 mg PO, and Ondansetron 8 mg IV and Dexamethasone 10 mg IV. The interface includes a sidebar with navigation options like Chart Review, SnapShot, and FlowSheets, and a taskbar at the bottom with various application icons.

# Safe, Evidence-based Oncology Care

- Treatment Plan Management
  - Oncologists
- Treatment Administration
  - Treatment Nurses/Pharmacists
- Infusion Center Management
  - Treatment Coordinators
- Patient View of Treatment Plan
  - Patients

**Designed With Safety in Mind**

# Ongoing Health Conditions

Engage patient as partner.

**KAISER PERMANENTE.** Home Sign on Web site map Search our site

Change your region: California - Northern

Your health record Health advice Appointments/Rx refills Your plan Locate our services Mailbox

## Ongoing health conditions

- Help
- About this feature

Understand your condition and stay healthy, longer

This page displays your medical diagnoses that are documented in your medical record. Click the name of a diagnosis for more information about that diagnosis. This page may not display all of your diagnoses. If you have any questions about the information on this page, please call 1-800-123-4567.

Diagnosis	Date of diagnosis
<a href="#">Diabetes</a>	03/26/2003
<a href="#">Asthma</a>	06/03/2003
<a href="#">Reflux esophagitis</a>	09/03/2003

Related links:

- Featured health topics
- Drug encyclopedia
- Health classes

Back to top

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My Computer

# Understanding Your Condition

Engage patient as partner.

Diabetes - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print

Address C:\Documents and Settings\krallmi\Desktop\myhcdemo\Jan0904\_hc\_demo\_s\diabetes.html Go Links >>

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Your health record Health advice Appointments/Rx refills Your plan Locate our services Mailbox

## Diabetes

- Topic overview
- Basic facts
- Do you have diabetes?
- Managing your diabetes
- Eating well
- Controlling your blood sugar
- Medications
- Complications
- Health classes
- Message boards

### Healthier living with diabetes

Diabetes is a rapidly growing health problem. Currently, more than 17 million people in the United States have diabetes. Unfortunately, close to one-third (5.9 million) of those don't realize they have it.

If you have diabetes, you may already know that it is a life-long condition. What you may not know, however, is that by keeping your diabetes under control, you can continue to lead a healthy, active life.

So, in addition to the care and guidance you receive from your physician, use the resources we've gathered here to help you with the day-to-day management of diabetes. After all, you're living with this condition, so it's important that you become an expert too.

Select any of the diabetes-related topics on the left to learn more, or continue on to [basic facts about diabetes](#).

Done My Computer

KAISER PERMANENTE.

## Engage patient as partner. Facilitate follow-up.

Lab Test Results - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print

Address C:\Documents and Settings\krallmi\Desktop\myhcdemo\Jan0804\_hc\_demo\_s\labresults.html

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Change your region: California - Northern

Your health record Health advice Appointments/Rx refills Your plan Locate our services Mailbox

**Lab test results**

- Help
- About this feature

Stay up to date on your test results

This page displays your lab test results and the provider who placed the order. If you have any questions about this information, please call 1-800-123-4567.

Date	Test	Provider	Results
08/28/2003	<a href="#">CBC</a>	Grant Petersen, MD	<a href="#">Details</a>
11/06/2003	<a href="#">HBA1C</a>	Grant Petersen, MD	<a href="#">Details</a>

Back to top

Related links:

- Drug encyclopedia
- Health encyclopedia
- Contact a professional

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file:///C:/Documents and Settings/krallmi/Desktop/myhcdemo/Jan0804\_hc\_demo\_s/test\_setup.html My Computer

## Engage patient as partner. Facilitate follow-up.

**Contact a professional - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail

Address C:\Documents and Settings\krallmi\Desktop\myhcdemo\Jan0904\_hc\_demo\_sl\contact.html Go Links >>


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Change your region: California - Northern

Your health record **Health advice** Appointments/Rx refills Your plan Locate our services Mailbox

**Contact a professional**

- Contact a pharmacist
- Contact your doctor's office



**Send your questions**  
to our health care professionals

It's easy to ask a health-related question using our Web site. You'll receive a confidential reply in your [secure Kaiser Permanente mailbox](#) within 24 hours (except for weekends and holidays).

If you would like a more immediate answer to your question, or wish to explore other health topics, search our online [health encyclopedia](#) or [drug encyclopedia](#).

**Contact a pharmacist**  
Have nonurgent questions regarding prescription or nonprescription drugs? A Kaiser Permanente pharmacist will respond with general information about medications.

**Contact your doctor's office**  
If you have nonurgent concerns you can communicate with your primary care physician.

My Computer

# Pharmacist Question

Engage patient as partner. Facilitate follow-up.

**Contact a pharmacist - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media Print Mail

Address C:\Documents and Settings\kralimi\Desktop\myhcdemo\Jan0904\_hc\_demo\_sl\contact\_pharmacist2.html Go Links >>

**KAISER PERMANENTE.** Home Sign on Web site map Search our site

Change your region: California - Northern

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**Contact a pharmacist**

- Help

**Important: If you think you have a medical or psychiatric emergency, call 911 or go to the nearest hospital. Do not attempt to access emergency care through this Web site. Need to know what a medical or psychiatric emergency is? View [help](#) for more information.**

If you have an [urgent symptom](#) or you want to speak with a nurse, do not use this Web site. Instead, please call your local [Kaiser Permanente facility](#).

**Pharmacist question**  
Step 4 of 4: Enter your question

**Member: Laura Chan**

\* Indicates required fields

\* Enter your question for the pharmacist  
Limit your question to 1000 characters

We will respond to your question within 24 hours, excluding weekends and [holidays](#).

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# Drug Information and Identification

Engage patient as partner.

Drug Encyclopedia Topic - Microsoft Internet Explorer

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Address C:\Documents and Settings\krallmi\Desktop\San Diego Safety Conf\myhcdemo\Jan0804\_hc\_demo\_s\DE\_glyburide.html

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Drug encyclopedia

- Generic name
- Brand name
- Uses
- How to use
- Side effects
- Precautions
- Drug interactions
- Overdose
- Notes
- Missed dose
- Storage
- Medical alert

Read about

Headline: Read about drugs and drug topics

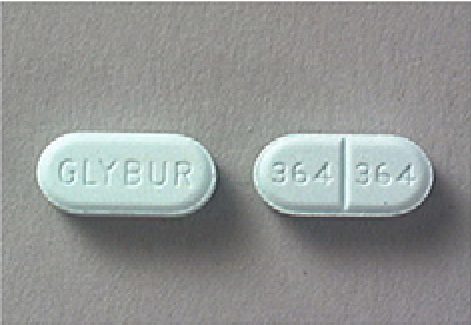
**Glyburide Oral Tablet 5 mg**

**GENERIC NAME**  
GLYBURIDE - ORAL

(GLY-byur-ide)

**COMMON BRAND NAME(S)**  
Diabeta, Glicron, Glynase, Micronase

**USES**  
Glyburide is an anti-diabetic drug (sulfonylurea-type) used along with a proper diet and exercise program to control high blood sugar. It is used in patients with type 2 diabetes (non-insulin-dependent diabetes). It works by stimulating the release of your body's natural insulin. Effectively controlling blood sugar helps prevent heart disease, strokes, kidney disease, blindness, and circulation problems, as well as sexual function problems (impotence).



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If we can make  
the right thing  
easier...

...it will  
likely  
happen

**Clinicians + Systems + Patients**