

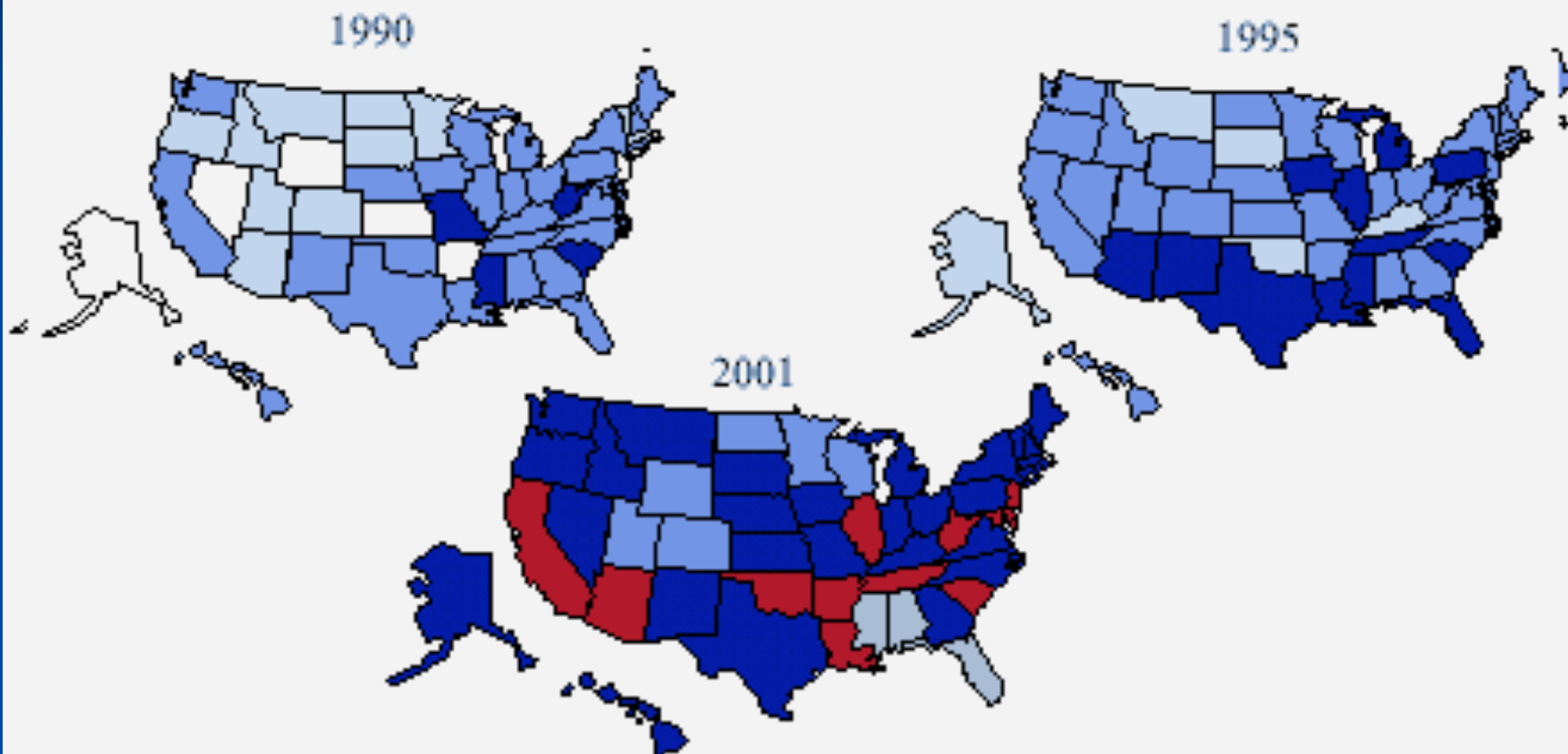
The Chronic Care Model: A Change Package for Diabetes

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7/20/07 Ukiah CA

“Connecting California to Improve Care”

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Diabetes Trends in US (CDC)



2002 Snapshot

- 2 million Californians have diabetes, 600,000 undiagnosed
- \$17.9 billion annual CA expenditures on diabetic care, ~ 100 billion nationally
- 25% of US population with “metabolic syndrome”, and growing; 58% of cases of diabetes can be prevented in this group via weight loss and exercise (NEJM)
- diabetic per capita health care costs \$13,243 vs. \$2,560 for non-diabetics

Why Control Matters

To the patient and their family

Maintenance of glycemic control at 7.2% :

- Increases life expectancy
- Reduces complications
 - Blindness reduced 72%
 - End Stage Renal Disease reduced 87%

Combined with cholesterol control:

- Reduces risk of cardiovascular event from 39% to 17%

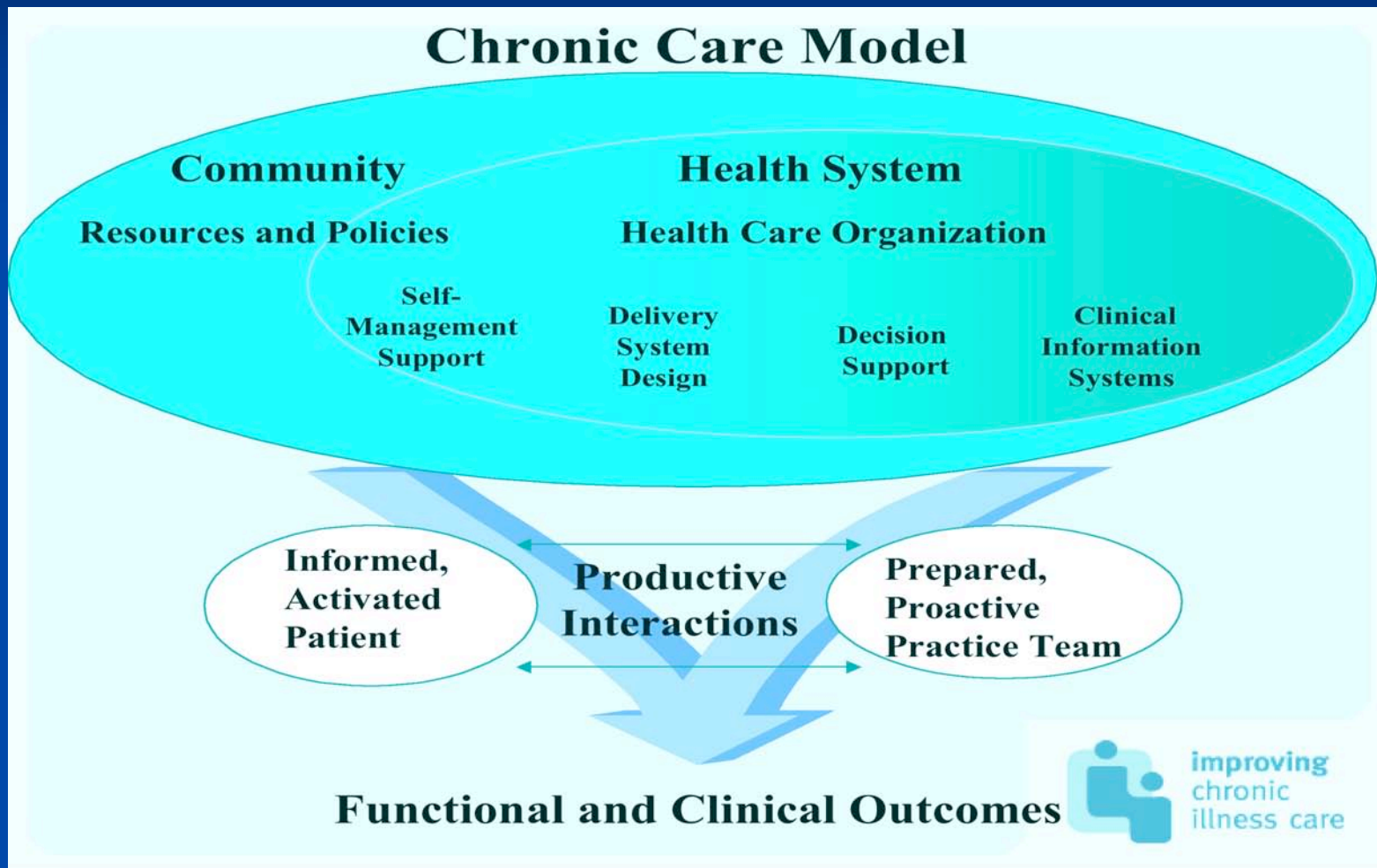
To those who pay for their care

- Costs increase 10, 20 and 30% for each 1% increase over 7%

Eastman RC, et al. Analysis of the health benefits and cost-effectiveness of treating NIDDM with the goal of normoglycemia. *Diabetes Care*, 1997; 20(5): 735-44

Gilmer TP et al. The cost to health plans of poor glycemic control. *Diabetes Care*, 1997; 20(12): 1847-53.

Chronic Care Model



Community Resources and Policies: Humboldt Diabetes Project

- CHCF-funded research project started 11/02; International Diabetes Center
- P4P provides resource as well
- *County-wide effort* coordinated by IPA (>95% of all clinicians in the county, including MDs, advanced-practice clinicians, behavioral health providers) but...
- IPA manages only 10% of lives in Humboldt County (little managed care) so...
- “*Point-of-care*” strategy: little administrative data available

Community Resources

- *Community Health Alliance*: community-based
- *Health Education Alliance*: ADA-recognized, community-based health education business
- Press coverage
- Support groups
- Pharmacies
- Pharmaceutical support (*quid pro quo?*)

Policies

- Generally not supportive of the Chronic Care Model *except* in managed care environment:
 - Lack of coordination between local and planned DM efforts
 - “Planned care/group visit” restrictions: multiple providers cannot bill from same location on the same day
 - Preventive/evidence-based (secondary prevention) services with deductibles and co-pays, or not covered at all
 - IPAs working with PPO insurers for management/administrative fees to run registries not easy
- Practices must learn new skills to better serve patients:
“*Efficiency experts, not just clinical experts...*”

System Design

- Principal investigators (CEO, CMO)
- “Invite implementers into the planning process”
- 25 members (MDs, mid-levels, mental health professionals, dietitians, pharmacist/CDE, office managers, medical assistants, patients)
- IPA providing staff to HDP (IT, case management, data entry, educational umbrella, ADA/ NCQA recognition effort)
- Office champion network (coordinated by FNP)
- Clinical microsystems approach: *all-staff quality meetings*

Project Interventions and Support

Clinician
Education

Patient
Education

Registry
and Flow
Sheet

Prompts
and
Reminders

Case
Management

Integrated
Decision
Support

Patients
Involved In
Self-Care

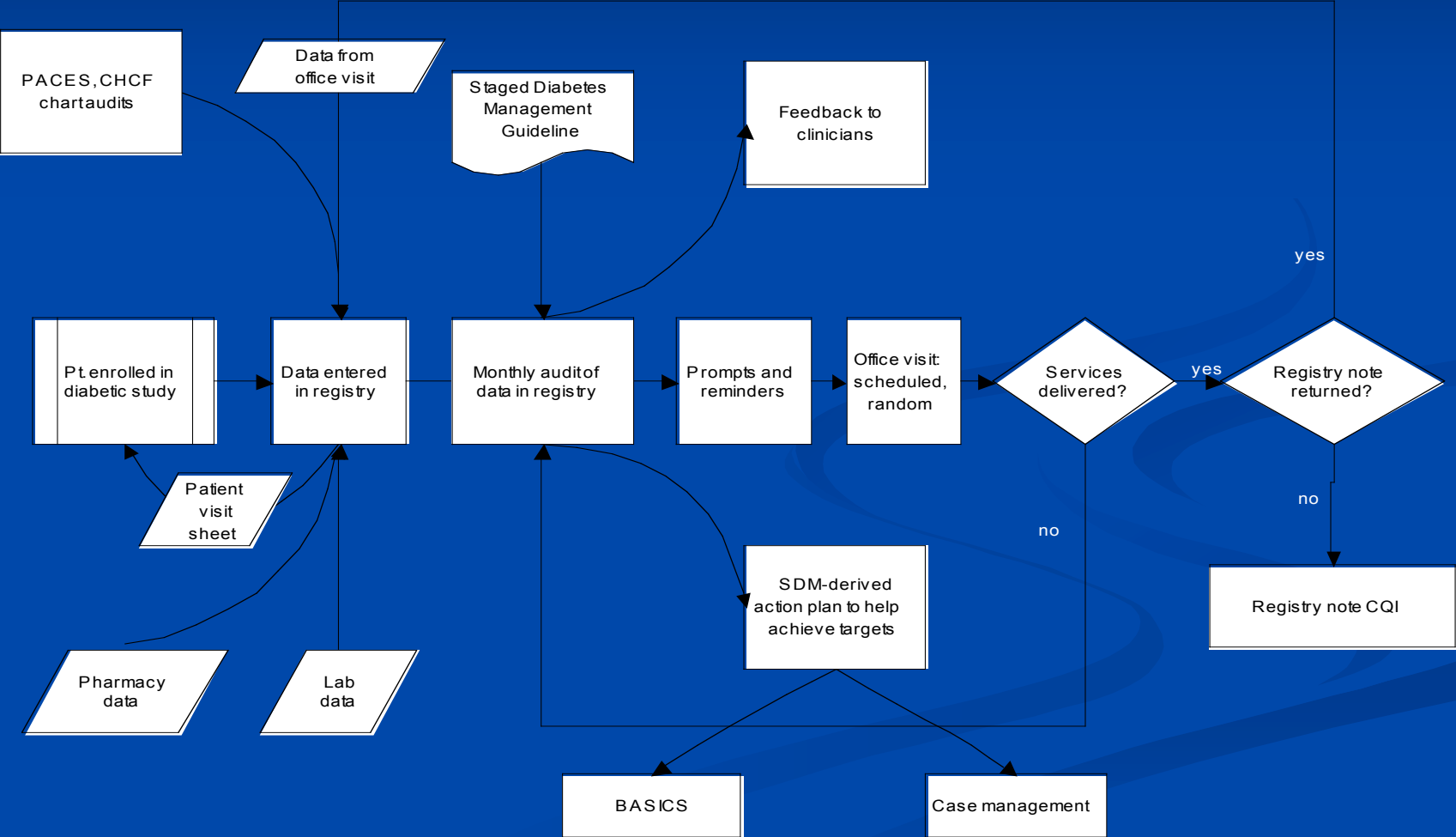
Get Payers
and Hospitals
to Play

Build and Maintain a
Chronic Care
Infrastructure

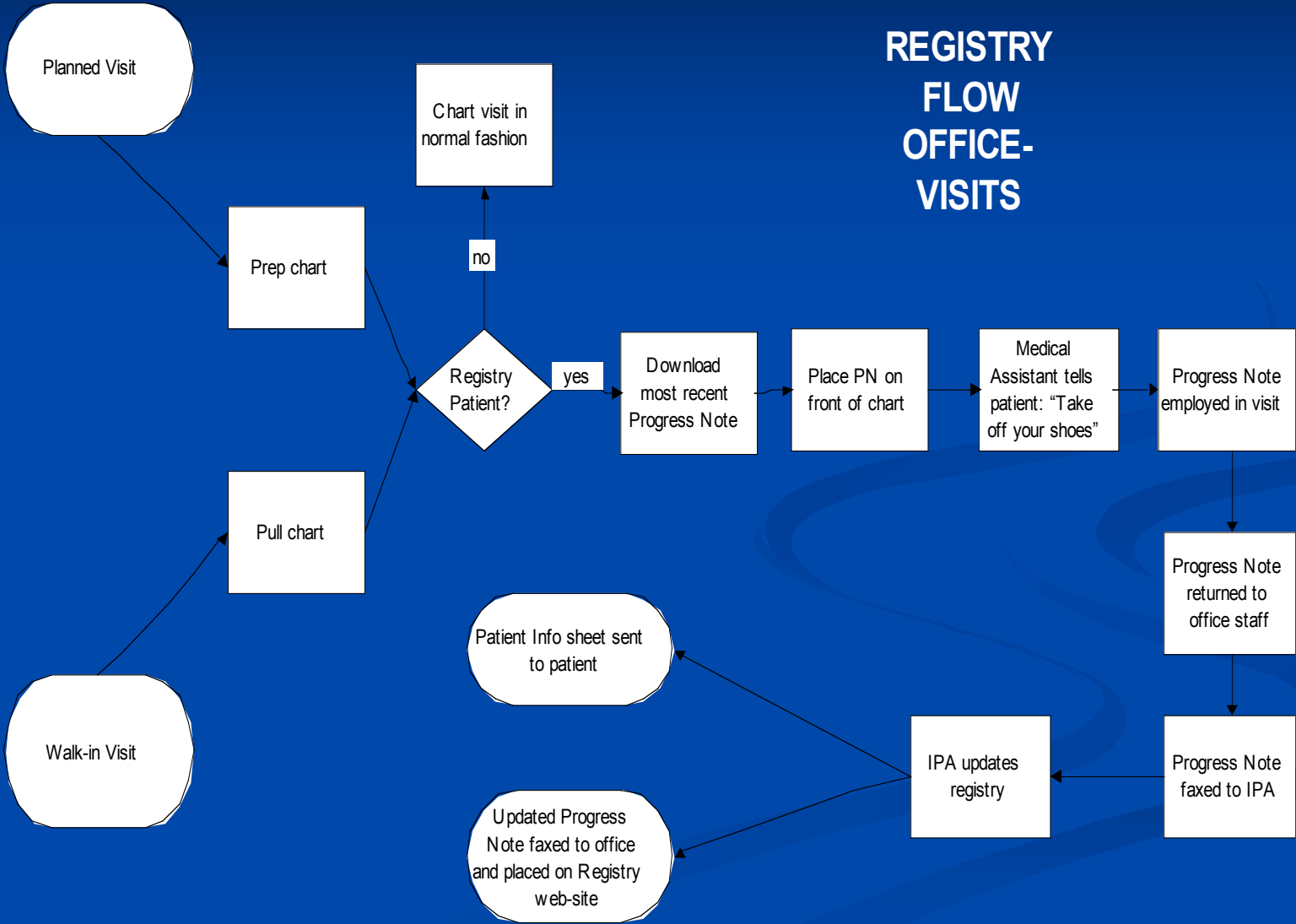
Next
Chronic
Disease

Connect Offices
to the Internet for
Clinical
Information and
Communication

DIABETIC PROJECT FLOW DIAGRAM



REGISTRY FLOW OFFICE- VISITS



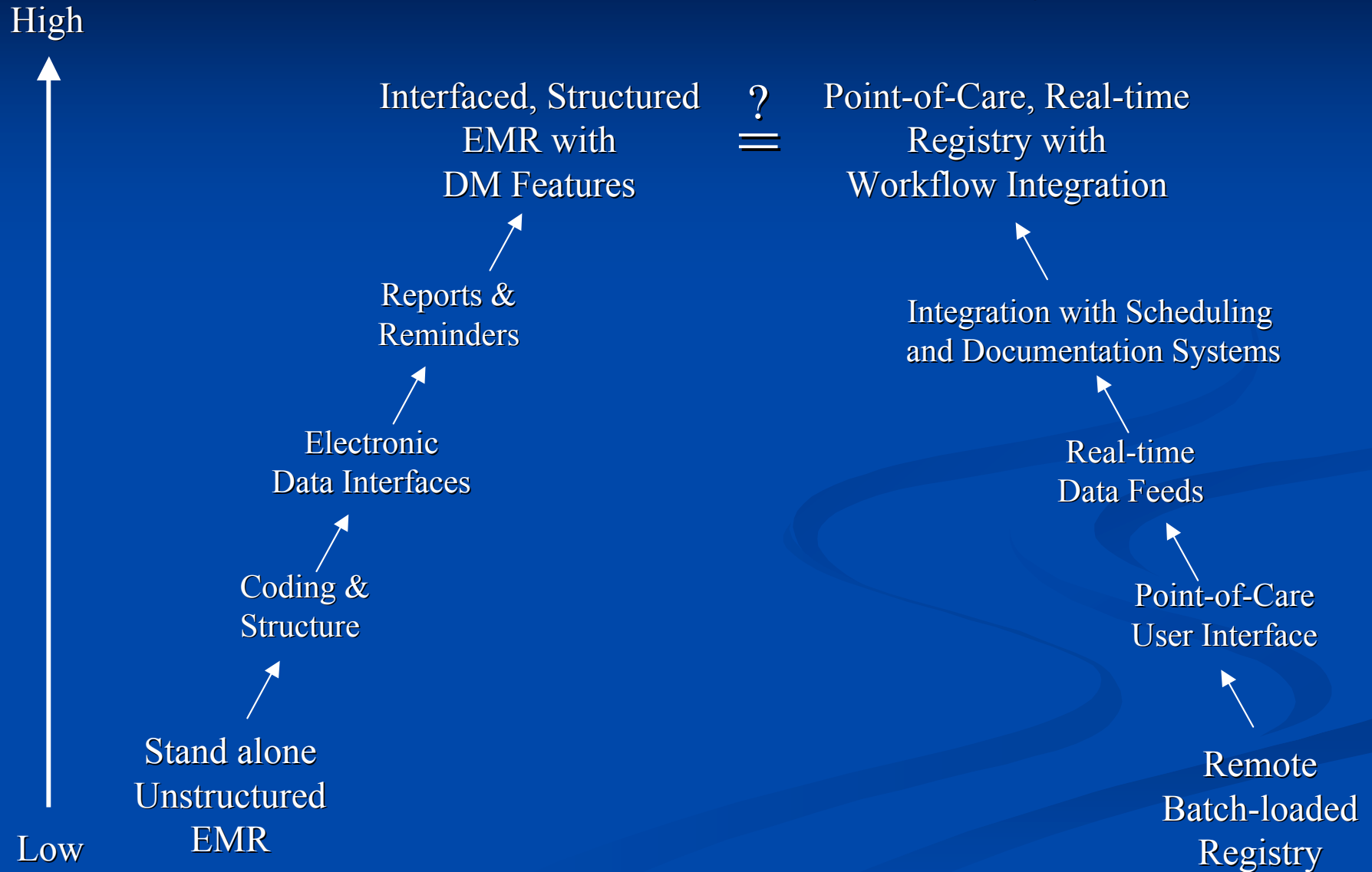
IT and Chronic Disease

“You can’t manage what you don’t measure.”

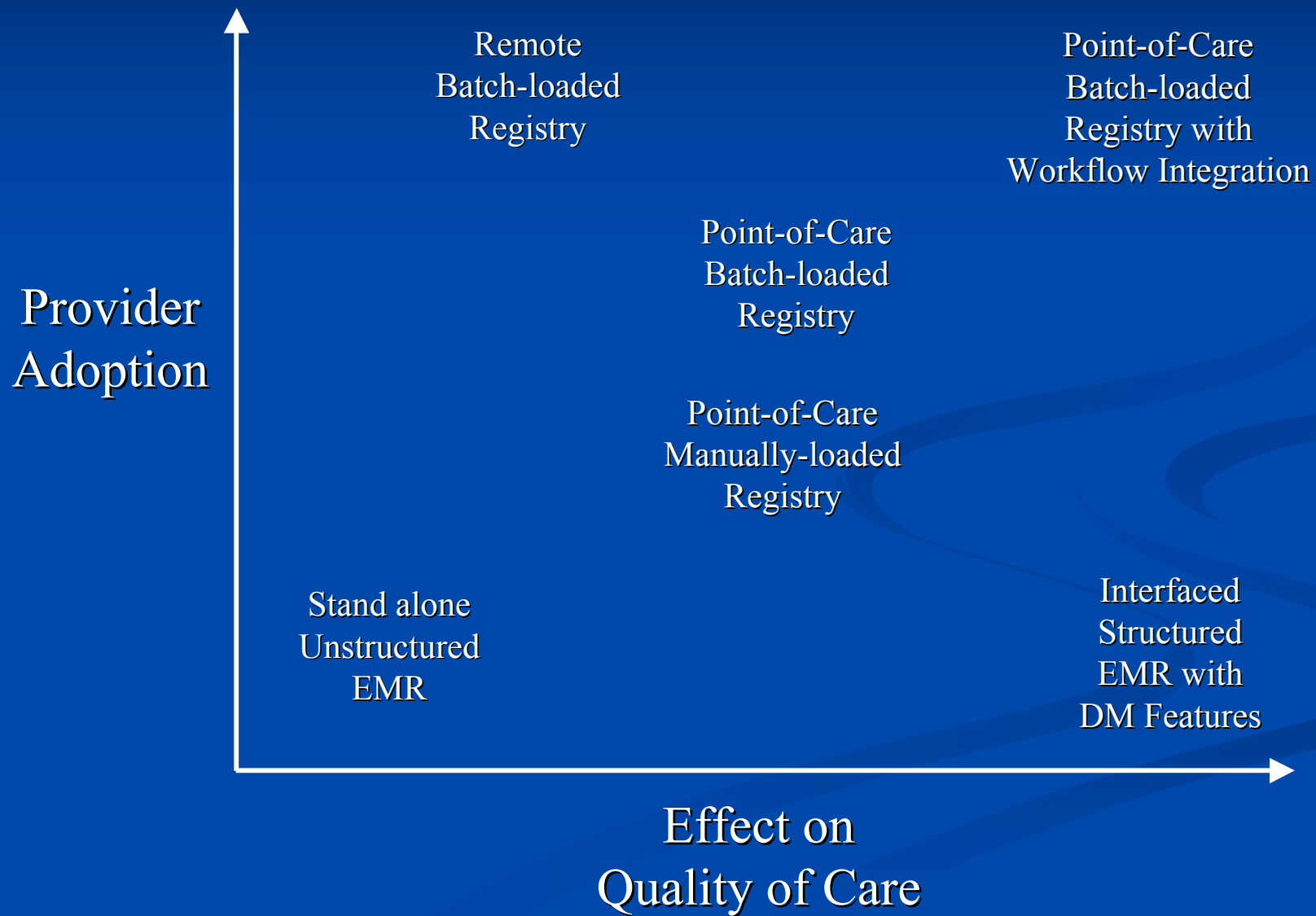
EMR vs. Registry

- EMR evolved from *acute care model*: templates for visits (URI, abdominal pain, sore throat) at the point of care
- Registries evolved from *planned care model*, including a population perspective at a distance
- Benefits to each: EMR for coding compliance, documentation, practice management; registry for population management
- Eventually, functions will merge into single system (single data entry crucial) *and why is it taking so long?*

Effect of I.T. on Quality of Care



Value Space



Point-Of-Care in Diabetes

- Administrative data vs. point-of-care data
- Encounter note as a *planned visit* protocol
- Availability of clinical data: BMI, blood pressure, foot exam, aspirin, tobacco, self-management goals
- Lab, pharmacy, services billed (>30 day delay) available administratively only in managed care
- Offices need a single system for all patients

Humboldt Registry

- Originally C-DEMS: public domain, open source, customizable, control data and reporting
- Currently PECSYS (multi-condition)
- ~4500 total (802 study, 1700+ in safety net)
- Starting point: *the office visit* per CLG
- Progress Note: *best practice tool actualized*
- Prompts and reminders: keep it simple (HbA1c>9, no HbA1c in past 6 months)

Patient Progress Note

Lindsay & Glaseroff, MDs

Humboldt Diabetes Project - Fax 443-2527

	Last Visit	This Visit			
Date (mmddyy)	5/10/2003	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weight (lbs)	290.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Height (ins)	72.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BP - Sys/Dia	120 / 75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

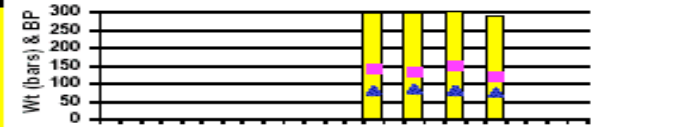
BOGUS Clinician: Glaseroff, Alan Diabetes Diagnosis Date: 5/10/1986

Last Name: Doe First Name: Jane Sex F DOB: 1/ 1/1950

Address: 12345 Main Street; Eureka, CA 95501 Phone (H): (707) 555-1212

Language: English Ethnicity: White BMI: 39.3 Insurance: CaliforniaCare

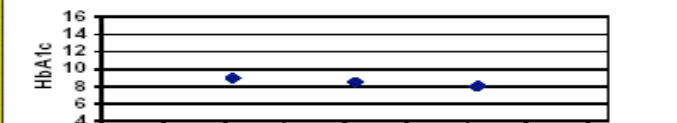
Conditions	Dx	D/C	Add
Cerebrovascular	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CVD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DM-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DM-2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HTN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hyperlipidemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypothyroidism	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metabolic Syndrome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nephropathy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neuropathy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Periph Vascular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retinopathy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Date	Wt	Sys	Dia
11/1/2002	295.00	141	82
1/1/2003	296.00	132	87
3/1/2003	300.00	150	80
5/10/2003	290.00	120	75

STUDY

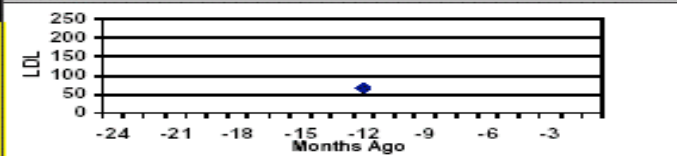
Meds	Rx	C/I	D/C	Add
ACE Inhibitor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ARB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ASA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BP Med	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diuretic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glucosidase Inhibito	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lipid Agent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meglitinide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metformin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sulfonylurea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TZD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Date	Result
4/1/2002	9.0
10/1/2002	8.5
4/1/2003	8.0

Clinician-Patient Interface Time:
_____ min

Total Counseling Time:
_____ min



Date	Result
10/1/2002	68

Other Vitals

Pulse _____

Resp: _____

Temp _____

MA Inits _____

Services	Last Date	Done	Ref	Decl
Alcohol Asmnt	DUE - 10/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tobacco Asmnt	DUE - 10/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exer Asmnt	DUE - 10/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dental Ex	1/2/2003	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retinal Ex	2/5/2003	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BASICS	DUE - 10/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SM Review	DUE - 10/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foot Ex	DUE - 06/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monofilament Ex	DUE - 10/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flu Vac	DUE - 10/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pne Vac	3/1/2003	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SDM Stage MNT Insulin 2
Orals Insulin 3
Combo Insulin 4

Self Management Goals
Home BG Goals: Between 70 and 140
▲
Nutritional: veggies for a pre-meal snack
▲
Exercise: brisk walking 20 minutes each day
▲

Labs	Last Date	Last Result	New Date	New Result	Ref	Decl
HbA1c	DUE - 10/03	8			<input type="checkbox"/>	<input type="checkbox"/>
Cholesterol	DUE - 10/03	117			<input type="checkbox"/>	<input type="checkbox"/>
HDL	DUE - 10/03	46			<input type="checkbox"/>	<input type="checkbox"/>
LDL	DUE - 10/03	68			<input type="checkbox"/>	<input type="checkbox"/>
Triglycerides	DUE - 10/03	52			<input type="checkbox"/>	<input type="checkbox"/>
BUN					<input type="checkbox"/>	<input type="checkbox"/>
Serum Creatinine	DUE - 10/03				<input type="checkbox"/>	<input type="checkbox"/>
K+					<input type="checkbox"/>	<input type="checkbox"/>
ALT (SGPT)	DUE - 10/03				<input type="checkbox"/>	<input type="checkbox"/>
Gross Proteinuria	DUE - 10/03	180			<input type="checkbox"/>	<input type="checkbox"/>
Al/Cree Ratio	DUE - 10/03				<input type="checkbox"/>	<input type="checkbox"/>
MicAI	DUE - 10/03				<input type="checkbox"/>	<input type="checkbox"/>

Notes:

Clinician Signature: _____

Encounter Note

My Clinic

Vitals	Last Visit	This Visit	H		
Date	12/12/2003				
Weight	192.8				
Height	5' 0.0"				
Pulse					
Resp Rate					
Temp					
Systolic BP	134				
Diastolic BP	66				
BMI	37.6				
Waist Circ In.					

Chronic Conditions		
Diagnosed Conditions	Dx Date	D/R
DM Type 2	1/12/00	<input type="checkbox"/>
MicAlburia	1/3/81	<input type="checkbox"/>
Neuropathy	4/3/02	<input type="checkbox"/>
Hypertension	8/15/01	<input type="checkbox"/>
Dyslipidemia	3/8/00	<input type="checkbox"/>
DepressionNOS	10/3/01	<input type="checkbox"/>

Potential Conditions	Add
Retinopathy	<input type="checkbox"/>
Nephropathy	<input type="checkbox"/>
CAD	<input type="checkbox"/>
Post-MI	<input type="checkbox"/>
PAD	<input type="checkbox"/>
MDD-recurrent	<input type="checkbox"/>
MDD-single	<input type="checkbox"/>
Insomnia	<input type="checkbox"/>
Chronic Pain	<input type="checkbox"/>

Dx Date=diagnosis date, D/R=diagnosis resolved

Medications					
Class	Name	Date	D/C	C/I	Dec
AG Inhibitor	Class	8/15/01	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biguanides	Glucophage	2/11/00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulin	Class	4/3/02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sulfonylurea	Class	1/16/02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TZD/Glitazon	Class	11/29/00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ARB	Class	7/24/02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antiplat/thrombASA	Class	1/3/02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Statins	Class	1/16/02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smoke Cess	Class	10/3/01	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other Medications to Consider					
Class	Name	Date	D/C	C/I	Dec
Beta Blocker	Class		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diuretic	Class		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ACE Inhibitor	Class		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SSRIs	Class		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D/C=discontinue, C/I=contra-indicated, Dec=decline

Laboratory Test Results				
Test	Value	Date	PRef	RefDec
HbA1c	12.2	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>
Chol	220	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>
LDL	132	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>
LDL Goal			<input type="checkbox"/>	<input type="checkbox"/>
HDL	50	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>

Encounter Provider	[Empty]		Encounter Type	[Empty]					
Chart #	C-10348	Last	Example6	First	Susan	MI	[Empty]	Age	57
DOB	7/3/1947	Clinic	My Clinic	PCP	Dr. Care	Address	6843 Millwood Dr.		
City	Cedwick	State	TX	Zip	78537	Phone #	(512) 555-5486		
Emer Contact	[Empty]		Emer Contact #	[Empty]		Sex	Female		
Race	Hispanic		Language	Spanish		Homeless	Not Homeless		
Migrant	Not Migrant		Fed Pov Lvl	[Empty]		Insurance	Other		
Insurance Name	Commerical		Case Manager	[Empty]					

Laboratory Test Results				
Test	Value	Date	PRef	RefDec
Triglyc	188	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>
MIAlCr	108.7	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>
Potassium	4.1	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>
Creat	0.6	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>
TSH			<input type="checkbox"/>	<input type="checkbox"/>
ALT	11	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>
AST	10	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>

PRef=previous referral, Ref=referral, Dec=declined

Consults and Education				
Cons/Edu	Date	PRef	Ref	Dec
Foot Exam	7/3/02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DM Edu	6/3/02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrit Edu	6/3/02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retinal Exam	5/28/00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CVD Educ		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EtoH/Drug Tx		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CSD FU		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depression Scrn	12/3/01	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ment Health		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ca S-D Making		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pt Mammo Rsits		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pt Pap Results		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wt Mgt Plan		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dental Exam		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCPDentalCnsl		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advise QuitTab	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SM Goal Set	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other Diagnostic Tests				
Test	Result	Date	PRef	RefDec
Echo			<input type="checkbox"/>	<input type="checkbox"/>
EKG			<input type="checkbox"/>	<input type="checkbox"/>
CardioStress Tes	Negative	5/8/02	<input type="checkbox"/>	<input type="checkbox"/>
Pap Smear	LSIL	4/19/03	<input type="checkbox"/>	<input type="checkbox"/>
Mammogram	2-Negati	10/24/02	<input type="checkbox"/>	<input type="checkbox"/>
Colposcopy	CIN1	8/9/03	<input type="checkbox"/>	<input type="checkbox"/>
ColonCaScreen	Colonos	3/12/03	<input type="checkbox"/>	<input type="checkbox"/>

Vaccinations and Immunizations				
Vac/Imm	Date	PRef	Ref	Dec
Hep B vac #1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPV23		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flu Vac	12/12/03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IPV/IOPV #1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Risk Factors				
Family History	Status	Y	N	U
FamHxPhysAbuse		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FamHxTrauma		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behaviors				
SM BG	current	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smoking		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SubstanceAbuse	never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TobaccoETS		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C=current, P=past, N=never, Y=yes, N=no, U=unknown

Other Measures				
Test	Value	Date	PRef	RefDec
Exercise wk	7	11/20/02	<input type="checkbox"/>	<input type="checkbox"/>
LVEF	50	5/8/02	<input type="checkbox"/>	<input type="checkbox"/>
CurrentFunction			<input type="checkbox"/>	<input type="checkbox"/>
Current PHQ			<input type="checkbox"/>	<input type="checkbox"/>
NewEpiFunction			<input type="checkbox"/>	<input type="checkbox"/>
New Epi PHQ			<input type="checkbox"/>	<input type="checkbox"/>

Other Notes	
SM Goal Desc	
Meter Type:	
Encount Note: private	
CSD FU Desc: private	
Dep Tx Plan:	
Reminders	
Colon Cancer Screen	1
No Self Management G	1
Abnormal Pap Requirin	3
Fasting Lipid Panel not	3
Pap Smear Results Not	3

HUMBOLDT DIABETES PROJECT

Diabetic Eye Exam Referral and Report

HDP#: _____

3100 Edgewood Road Eureka, CA 95501

(707) 443-4553

hdp@hdfnmc.com

Date:			Referred by:		
Referred to:					
Patient Name:					
DOB:	Gender:	Home Phone:			
Address:			Phone: _____ Fax: _____		
			Referring Provider Signature:		
Reason for Referral:					

Findings:

<input type="checkbox"/> <u>NO RETINOPATHY</u> <p style="text-align: center;"><u>Treatment Recommended</u></p> <input type="checkbox"/> Recheck in 1 year	<input type="checkbox"/> <u>EARLY NON PROLIFERATIVE DIABETIC RETINOPATHY (NPDR)</u> <input type="checkbox"/> Microaneurysms <input type="checkbox"/> Sparse Blot and Dot <input type="checkbox"/> Lipid <p style="text-align: center;"><u>Treatment Recommended</u></p> <input type="checkbox"/> Ophthalmology Consult <input type="checkbox"/> Angiogram <input type="checkbox"/> Laser-Focal Grid <input type="checkbox"/> Follow-up Appointment <p style="text-align: center;"><u>Status</u></p> <input type="checkbox"/> Stable <input type="checkbox"/> Improving <input type="checkbox"/> Worse	<input type="checkbox"/> <u>NPDR MODERATE TO SEVERE</u> <input type="checkbox"/> Clinically Sig. Macular Edema <input type="checkbox"/> Nerve Fiber Layer Infarct (Cotton Wool Patch) <input type="checkbox"/> Venous Abnormality <input type="checkbox"/> Intraretinal Microvascular Abnormality <p style="text-align: center;"><u>Treatment Recommended</u></p> <input type="checkbox"/> Ophthalmology Consult <input type="checkbox"/> Flourescein Angiogram <input type="checkbox"/> Laser-Focal / Pan Retinal Photocoagulation (PRP) <input type="checkbox"/> Follow-up Appointment <input type="checkbox"/> Retinal Consult <p style="text-align: center;"><u>Status</u></p> <input type="checkbox"/> Stable <input type="checkbox"/> Improving <input type="checkbox"/> Worse	<input type="checkbox"/> <u>PROLIFERATIVE DIABETIC RETINOPATHY</u> <input type="checkbox"/> Neovascular Optic Nerve Head <input type="checkbox"/> Neovascular Retinal Surface <input type="checkbox"/> Vitreous Hemorrhage <input type="checkbox"/> Traction - Retinal Detachment <p style="text-align: center;"><u>Treatment Recommended</u></p> <input type="checkbox"/> Ophthalmology Consult <input type="checkbox"/> Flourescein Angiogram <input type="checkbox"/> Laser-Focal / Pan Retinal Photocoagulation (PRP) <input type="checkbox"/> Vitrectomy <input type="checkbox"/> Retinal Detachment Surgery <input type="checkbox"/> Endoscopic Laser <p style="text-align: center;"><u>Status</u></p> <input type="checkbox"/> Stable <input type="checkbox"/> Improving <input type="checkbox"/> Worse
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Follow-up Recommended Return: _____ Days _____ Month(s) _____ Year(s) Alert Risk: Minimal Moderate High

Clinician Name: _____ Signature: _____ Date: _____

Fax Back to:	AND	Humboldt Diabetes Project (707)443-2527
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Decision Support and Provider Education

- Multiple presentations: group, 1:1
- Clinician/staff training: 200 attendees over 3 days for *Staged Diabetes Management* (International Diabetes Center)
- Web site (www.hdnfmc.com) as a source of information: *Humboldt Diabetes Project*
- SDM “Quick Guides”: pocket-sized algorithms

Self-management Support

- Patient “activation” requires major system redesign
- Goal: offer education to all chronically ill patients
- Depression (>30%) often underlying cause of poor outcomes, and treating it (behaviorally) works better than SSRIs; amenable to group setting
- *Health Education Alliance*: business model/community resource
- *“Take Charge”*: peer-education support groups organized by Community Health Alliance
- IPA mental health providers: chronic disease groups

“Why wouldn’t a person with diabetes do everything in their power to live long and feel well?”

Why Do Our Patients Struggle?

(“strong” endorsements by physicians)

poor self-discipline	53.2%
poor will-power	50.0%
not scared enough	36.9%
not intelligent enough	16.3%

Polonsky, Boswell and Edelman, 1996



"I was able to get in one last lecture about diet and exercise."

Handwritten signature or scribble on a white strip of paper.

STOP OVERTREATING, STOP DRINKING,
STOP STAYING OUT LATE, STOP
FIGHTING, STOP WORRYING STOP
EATING SWEETS, STOP GAMBLING...



WHAT DID
THE DOCTOR
SAY?



I DON'T
KNOW...



I
STOPPED
LISTENING



Why Do Our Patients Struggle?

- Almost no one is unmotivated to live a long and healthy life.
- The rewards for good diabetes care are
 - *relatively subtle*
 - *mostly long-term*
- *“If you do everything perfectly, you can expect to feel...nothing!”* What a concept to motivate a person to strive hard on a daily basis!

Unachievable Self-Care Plans

- Unclear
 - *“I’m supposed to start exercising.”*
- Unrealistic
 - *“My doctor told me to lose 10 lbs before the next visit.”*
 - *“Taking care of my diabetes means I’m supposed to eat perfectly and never cheat.”*

The Overarching Approach

A person with a chronic disease must:

- **BELIEVE THEY CAN CONTROL OUTCOMES** (have hope). The patient must feel self-management is worthwhile.
- **KNOW WHAT TO DO**. The patient must have a clear and achievable plan for self-management

...to succeed at self-management

HUMBOLDT DIABETES PROJECT

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Jane Doe
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Eureka, CA 95501

Friday, July 25, 2003

Patient Progress Summary

This summary is being provided to you to better enable you to manage your diabetes. Please take every opportunity to discuss with your health care provider what your personal goals are for the management of your diabetes.

Test/Type of Treatment	How Often?	Standard Goal	My Goal	Date Last Done	Last Result
Blood Pressure Test <i>to check for high blood pressure</i>	Every visit	Systolic: <130 Diastolic: <80		5/10/2003	Systolic: 120 Diastolic: 75
Blood test for HbA1c <i>to check your avg blood sugar over the prev. 2-3 mos.</i>	Every 3 months	less than 7%		4/1/2003	8
Blood tests for HDL "good" cholesterol LDL "bad" cholesterol <i>to check for risk of heart disease</i>	Every 12 months	HDL: greater than 40 LDL: less than 100		10/1/2002	HDL: 46 LDL: 68
Urine test for protein level <i>to check for signs of kidney damage</i>	One every 12 months				
Gross Protein		Negative		10/1/2002	
Urine Albumin/Creatinine Ratio		less than 30			
Microalbumin		0			
Dental Exam <i>to check for tooth decay and gum disease</i>	Every 6 - 12 months			1/2/2003	
Eye Exam <i>to check for eye damage caused by diabetes</i>	Every 12 months				
Foot Exam <i>to check for poor blood circulation and nerve damage</i>	Every 12 months			3/1/2003	
Flu Vaccine <i>to help prevent the flu</i>	Every Fall			10/1/2002	
Pneumonia Vaccine <i>to help prevent pneumonia, meningitis and sepsis</i>	Every 6 years			3/1/2003	
BASICS Diabetes Education <i>to learn self management methods</i>	Every 12 months				

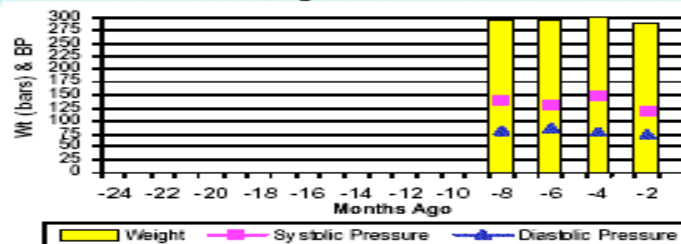
Self Management Goals

Exercise: brisk walking 20 minutes each day

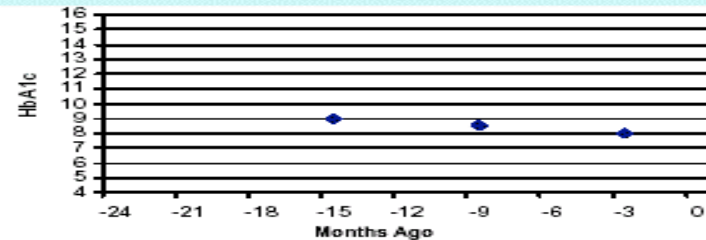
Blood Glucose: Between 70 and 140

Nutrition: veggies for a pre-meal snack

Your Weight and Blood Pressure



Your HbA1c



Results

- 26 independent primary care offices clinically integrated: guidelines, practice patterns, information, *involved*: NCQA Recognition for Diabetes
- Progress Note, Patient Summary
- 200 at clinician training!
- Systems approach adopted by IPA organization
- Quality-driven strategy accepted as “sound”
- Community-wide focus: new partnerships

NCQA Diabetes Physician Recognition Program Mandatory Measures for Adult Patients

Clinical Measures (Required)	Criteria	Points
HbA1c Poor Control >9.0%	20% of patients in sample	10.0
HbA1c Control <7.0%	40% of patients in sample	5.0
Blood Pressure Control <140/90 mm Hg	65% of patients in sample	10.0
Blood Pressure Control <130/80 mm Hg	35% of patients in sample	5.0
Eye Examination	60% of patients in sample	10.0
Smoking Status and Cessation Advice or Treatment	80% of patients in sample	5.0
Complete Lipid Profile	85% of patients in sample	5.0
LDL Control <130 mg/dl	63% of patients in sample	7.5
LDL Control <100 mg/dl	36% of patients in sample	2.5
Nephropathy Assessment	80% of patients in sample	10.0
Foot Examination	80% of patients in sample	10.0

Humboldt Diabetes Project Data

	October, 2003	October, 2004	January, 2007
Measure	<i>Results</i> (n=802)	<i>Results</i> (n=778)	<i>Results</i> (n=4330)
HbA1c control: >9% (poor control)	7.7%	6.9%	5.2%
HbA1c control: <7% (good control)	52%	55%	59%
Patients with BP <140/90	62%	59%	67%
Patients with BP <130/80	32%	33%	37%
Patients with LDL<130	60%	73%	78%
Patients with LDL <100	32%	44%	49%

Change in HbA1c Percentages

	Baseline		Study End	
	N	Average	N	Average
All study participants	338	7.1	338	6.9
Starting A1c < 7	177	6.1	177	6.5
Starting A1c 7 to 9	134	7.7	134	7.2
Starting A1c > 9	27	10.5	27	8.2

Patient Summary SF-12

	Baseline	Follow-up	National Average
Physical Functioning	41.7	43.4	41.9
Role Physical	41.1	43.7	43.0
Bodily Pain	41.1	42.8	44.4
General Health	40.3	44.1	41.3
Vitality	43.9	46.8	46.0
Social Functioning	44.3	46.6	44.8
Role Emotional	41.4	45.0	44.8
Mental Health	46.1	48.7	47.8
Physical Component	40.6	42.6	41.5
Mental Health Comp.	45.4	48.8	47.3

Patient Survey

How do you rate your understanding of overall diabetes care? (check one box)

	Poor	Fair	Good	Very Good	Excellent
B	5%	27%	34%	25%	7%
F	1%	8%	30%	44%	18%

In the last year, have you received one or more reminders from your health care provider to come in for a visit related to your diabetes?

	No	Yes	Not Sure
B	46%	46%	9%
F	23%	74%	3%

Patient Survey (2)

In general, would you say your health is: (check one box)

	Excellent	Very Good	Good	Fair	Poor
B	4%	19%	37%	30%	10%
F	5%	27%	42%	22%	4%

How effective do you believe your health care provider is in managing your diabetes?

	Not effective at all	Not very effective	Somewhat effective	Effective	Very effective
B	1%	3%	18%	45%	34%
F	<1%	1%	13%	44%	41%

Clinician Survey

How effective do you believe you are in caring for your diabetic patients?

	Not effective at all	Not very effective	Somewhat effective	Effective	Very effective
Baseline	-	3%	32%	57%	8%
F/U	-	-	27%	56%	17%

Compared to a year ago, how effective are you in caring for your diabetic patients?

	Less effective	Somewhat less effective	Same	Somewhat more effective	More effective
F/U	-	-	27%	41%	33%

Note: The sum of the categories may not add to 100% due to rounding.

Conclusions

- Chronic/Planned Care Model works
- Empowered, activated patients *partnering with* prepared practice teams requires significant change on both sides of the partnership
- Registries are the quickest route to improvement if employed at the point-of-care, at the time-of-care; *but technology is a tool, not an answer.*

*“If not us, then who?
If not now, then when?”*