

Diabetes Electronic Management System

Chronic Disease Electronic Management System

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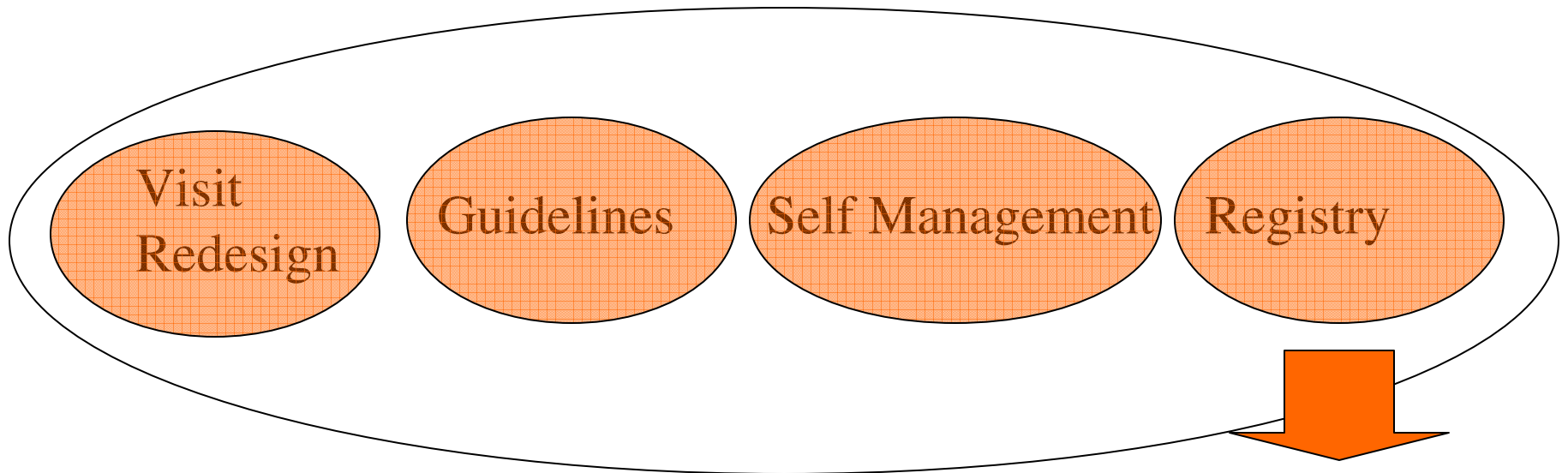
☒ 1.360.866.0544



We are in a Revolution

- ⌘ Breakthrough Series
- ⌘ Chasm Report
- ⌘ Outcomes Measurement Project
- ⌘ IOM
- ⌘ Acute Care Model
- ⌘ Collaboratives

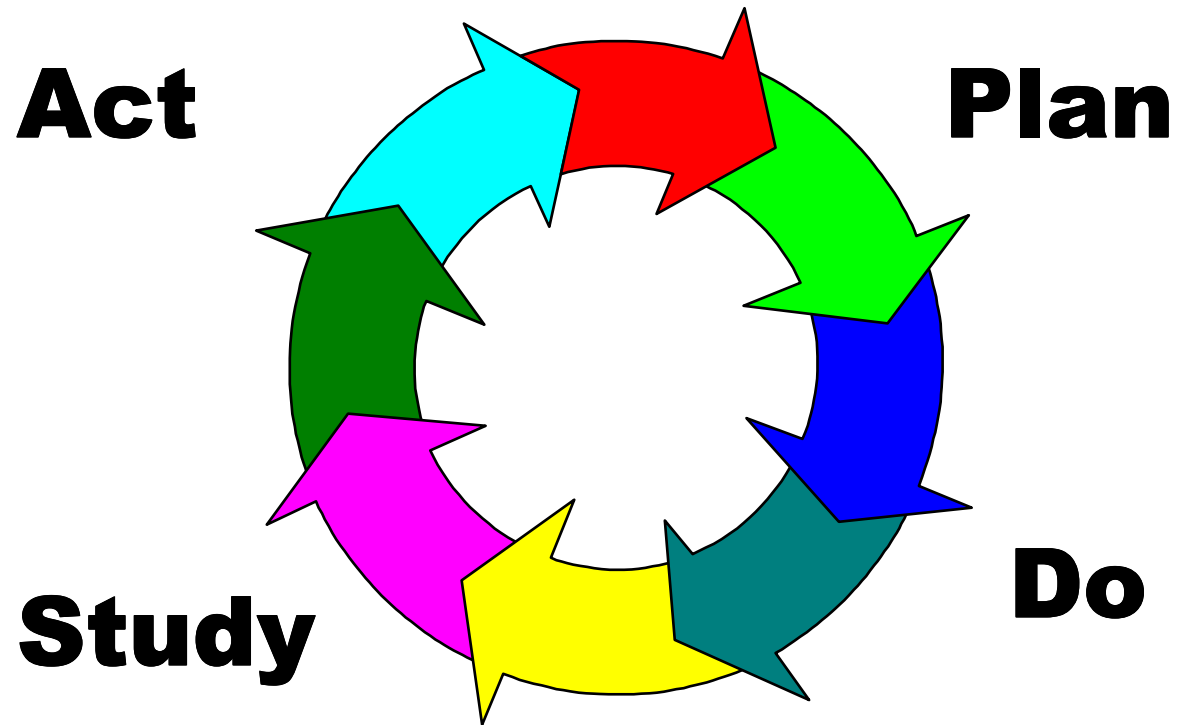
Chronic Care Model



Track your progress

Change Cycle

PDSA



Registry

⌘ Does

- ☑ Helps Provider during visit
- ☑ Assists Case management
- ☑ Allows Population Management
- ☑ Feedback on PDSA cycles

⌘ Is Not

- ☑ Electronic Record

Visit Note

- ☒ Helps Provider during visit
- ☒ Assists Case management
- ☒ Allows Population Management

ID: 2345-7

Diabetes Visit Note WVC

Last Visit		This Visit							
Date m/d/yyyy	01/01/00								
Weight (pds)	270								
BP-Sys/Dia	95 / 65								

Medications									
Insulin	<input checked="" type="checkbox"/>								
Sulfonylurea	<input type="checkbox"/>								
Glucophage	<input checked="" type="checkbox"/>								
Glitazones	<input type="checkbox"/>								
Prandin	<input type="checkbox"/>								
AG Inhibitor	<input type="checkbox"/>								
ACE Inhibitor	<input type="checkbox"/>								
Lipid agent	<input checked="" type="checkbox"/>								
ASA/ Coumadin	<input type="checkbox"/>								
BP Medication	<input checked="" type="checkbox"/>								
Clinic-Med	<input checked="" type="checkbox"/>								

Health Profile									
Cerebrovascular	<input type="checkbox"/>								
Heart Disease/CAD	<input type="checkbox"/>								
Hypertension	<input type="checkbox"/>								
Hyperlipidemia	<input type="checkbox"/>								
Nephropathy	<input type="checkbox"/>								
Neuropathy	<input type="checkbox"/>								
P. Vascular Dis	<input type="checkbox"/>								
Retinopathy	<input type="checkbox"/>								

Self monitors BG									
Exercise w/wk	0								
Smoker	unknown								
Clinic-Profile	<input checked="" type="checkbox"/>								

Refer/Ed	LastDate	P/Ref	Rovd Date	Ref	Dec
DM Educ					
NutEduc					
Retail Ex					
Smoke Ce	02/99				
Pre Vac					
Flu Vac	10/97				
Dental					
SM Goal					
Foot chr					
Foot Risk (0-3)					
Clinic-Care	01/00				

Tests	Last Value	Date	P/Ref	New Value	Ref
HbA1c	7.1	11/1/99	<input checked="" type="checkbox"/>		
MA/Cr					
Creat	1.3	01/5/97	<input checked="" type="checkbox"/>		
LFT	333	11/1/98	<input checked="" type="checkbox"/>		
Chol	155	11/1/99	<input type="checkbox"/>		
Triglyc	300	11/1/99	<input type="checkbox"/>		
HDL	53	11/1/98	<input checked="" type="checkbox"/>		
LDL	100	11/1/98	<input checked="" type="checkbox"/>		
24hrUP					
CI-Lab	9999	1/1/00			

NOTE: combination of swimming & weight watchers

Next Visit Date:

Provider:

Patient Lists

- ☒ Helps Provider during visit
- ☒ **Assists Case management**
- ☒ Allows Population Management

	chart_number	name	phone1	age	LatestVisitDate	ha1c
▶	12345	Fred Finkeltouless	(360) 123-4567	79	11/12/02	11/12/02 (7.6)
	19870	Priscilla Phitt		69	10/10/02	11/12/02 (7.0)
	92341	Franklin Fox		77	09/15/02	09/15/02 (7.6)

Fig. 42 – Sample User-Defined Intervention List

Summary Report

- ☒ Helps Provider during visit
- ☒ Assists Case management
- ☒ **Allows Population Management**

Special DM Report DL01-03 to 12/31/03

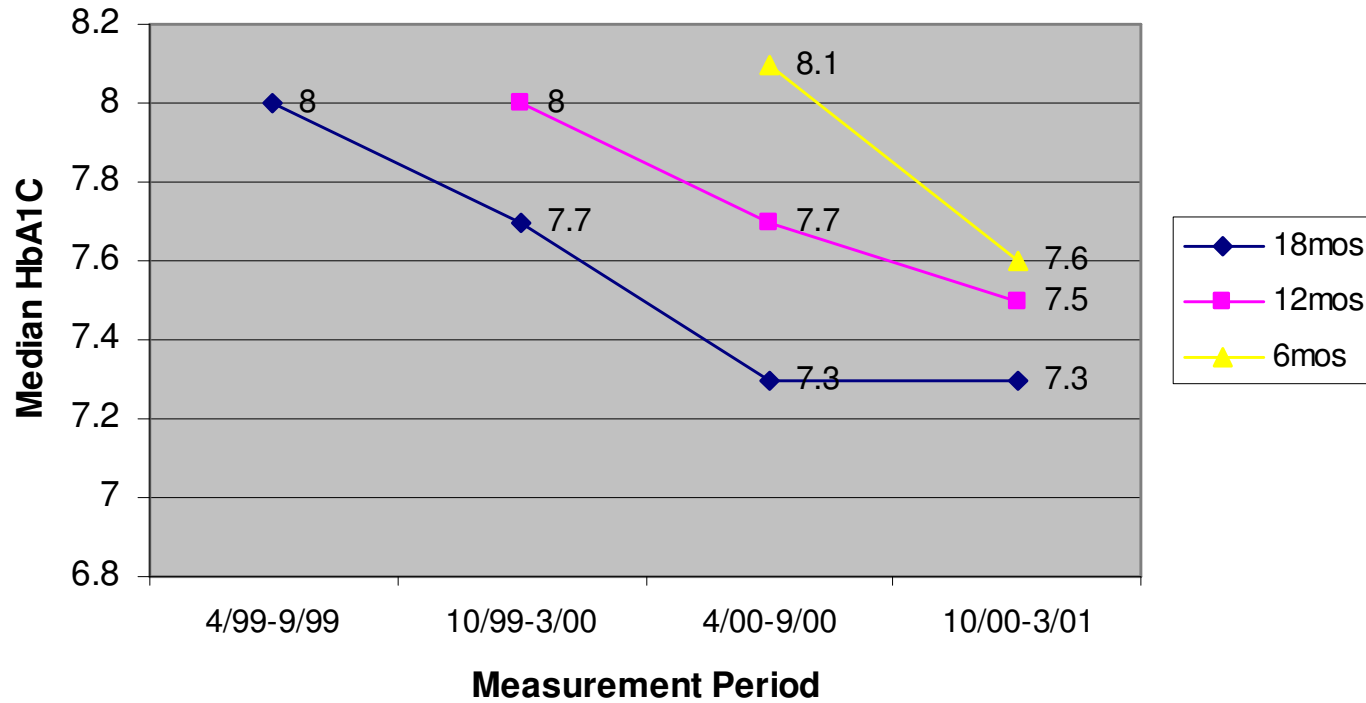
All PCPs

Demographics		Special Measures	
Demographics			
State			
Phys Court	1	100.0%	
Phys of U/S/ST	1	100.0%	
Gender			
Gender Male	1	100.0%	
Gender Female	0	0.0%	
Ethnicity			
Race/White	1	100.0%	
Race/Asian	0	0.0%	
Race/Black	0	0.0%	
Age			
Age 0-17	1	100.0%	
Visits			
Eligible Visits			
EP	0	0.0%	
EP w/ Standard xSU	0	0.0%	
Health Conditions			
Comorbidities			
DM	1	100.0%	
Hypertension	0	0.0%	
Hyperlipidemia	0	0.0%	
Medications			
ASA			
EP Med	0	0.0%	
Lipid/STAT	0	0.0%	
Services			
Eyes/Refraction			
Foot care	0	0.0%	
Stroke Assessment	0	0.0%	
Retinopathy/Referral for test	0	0.0%	
Lab			
HbA1C			
HbA1C	0	0.0%	
HbA1C > 7	0	0.0%	
HbA1C > 8	0	0.0%	
Lipid			
LDL	0	0.0%	
LDL > 100	0	0.0%	
LDL > 110	0	0.0%	

Fig. 32 – Special DM Report generated from template shown at Fig. 31

Impact on Quality

HbA1C By Period Measured and Cohort



C/DEMS Features

⌘ Three MSAccess Files

- ☑ Data Entry Program

- ☑ Reports

- ☑ Linked Data File

⌘ Downloaded from www.cdems.com
as self extracting zip files

Data Entry

Data Types

- ⌘ Demographics
- ⌘ Visit Information
- ⌘ Health conditions
- ⌘ Medications
- ⌘ Services
- ⌘ Labs

Actions

- ↻ Enter
- ↻ Edit
- ↻ Print

Reports



⌘ Summary Report

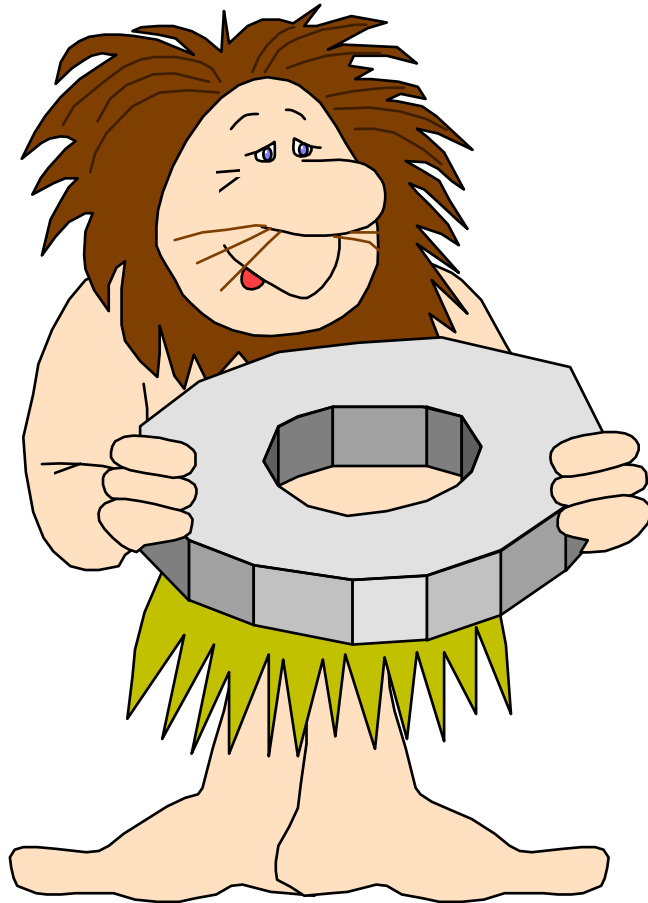
- ☑ Custom

- ☑ Hard coded

⌘ Patient Case Management List

⌘ User Specific Queries

What is Cool

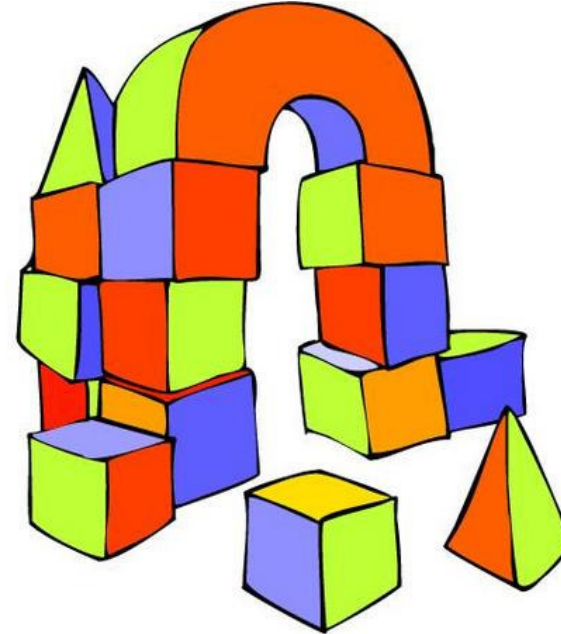


- ⌘ User can customize
- ⌘ Program Morphs
- ⌘ Clinic based
- ⌘ User driven features
 - ☑ Lab interface
 - ☑ Multi-print
 - ☑ Open Source
 - ☑ Report Wizards

Inside CDEMS

Building blocks

- ⌘ tkpSetUp (controls how visit note looks and what is stored)
- ⌘ tkpCrosswalk (maps internal codes to displayed labels)



Crosswalk and Setup

Examples:

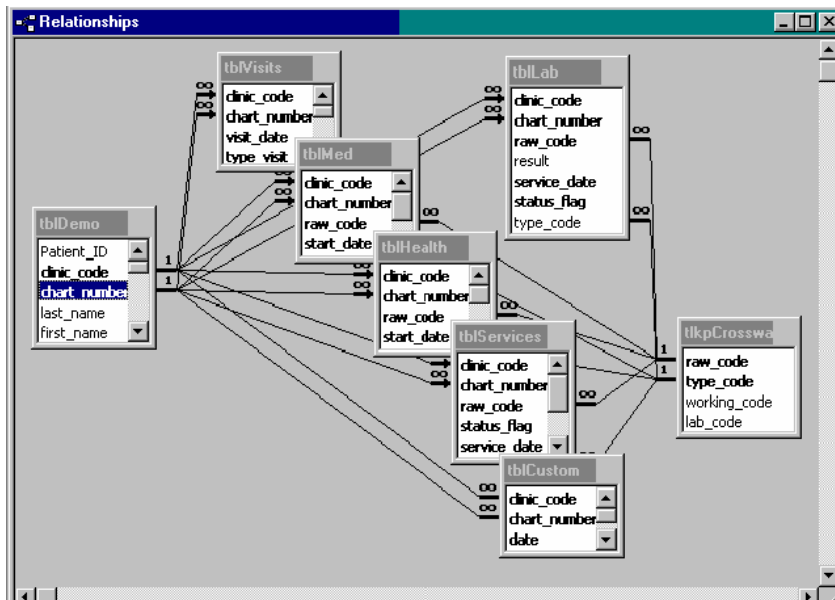
	health_status	type_field	related_field
▶	Asthma	Dx	Asthma
	Asthma	Dx	COPD
	Asthma	Dx	Smkr in Home
	Asthma	Dx	Diet Triggers
	Asthma	Dx	Envir Triggers
	Asthma	Dx	Sedentary
	Asthma	Dx	Obesity
	Asthma	Lab	T4
	Asthma	Lab	TSH
	Asthma	Lab	Triglyceride
	Asthma	Lab	LDL
	Asthma	Lab	IgE
	Asthma	Lab	Cholesterol
	Asthma	Lab	HDL
	Asthma	Rx	Thyroid Med
	Asthma	Rx	Cortizone
	Asthma	Rx	Decongestant
	Asthma	Rx	Steroid
	Asthma	Service	Beh Counsling
	Asthma	Service	Hosp E Visit
	Asthma	Service	Home Assess
	Asthma	Service	Nutr Educ
	Asthma	Service	LVEF

	type_code	working_code	raw_code
./	Dx	Asthma	Asthma
	Dx	CHF	CHF
	Dx	COPD	COPD
	Dx	CVD	CVD
	Dx	Depression	311
	Dx	Diet Triggers	Diet Triggers
	Dx	DM-1	250.01
	Dx	DM-2	250.00
	DX	DM-2	250.05
	Dx	DM-CF	DM-CF
	Dx	DM-O	DM-O
	Dx	DM<20	steroid-ind
	Dx	DM<20	CFRDM
	Dx	Envir Triggers	Envir Triggers
	Dx	Family Hx CHD	Family Hx CHD
	Dx	Heart	Heart
	Dx	HTN	HTN
	Dx	Hyperlipidemia	272
	Dx	Hypothyroid	Hypothyroid
	Dx	Lipidemia	Lipidemia
	Dx	Nephropathy	Nephropathy
	Dx	Neuropathy	Neuropathy
	Dx	Obesity	Obesity
	Dx	Osteopathy	Osteopathy
	Dx	Post-MI	Post-MI
	Dx	PVD	PVD

Record: 1 of 108

Relationships

Cascading referential integrity



- ☑ Maintain primary keys
- ☑ Enforces data validity

Where are we?

- ⌘ National awards
- ⌘ Currently 70,000+ Wa pts in C/DEMS
- ⌘ Current Challenges:
 - ☒ Vista MS Access 2007
 - ☒ EMRs
 - ☒ Web based registries

