DELIVERING VALUE THROUGH TECHNOLOGY

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DuPage Medical Group

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DuPage Medical Group - Vitals

- Largest independent multi-specialty group in Chicago metro area
- 370+ Physicians; 2500 employees
- \$400 million Revenue
- 40 Specialties; 45+ Sites
- 350,000 Active patients; Serve 1/3 of DuPage County (Locations in 4 counties –DuPage, Will, Kane and Cook)
- Ancillaries include Imaging; Radiation Oncology;
 Ambulatory Surgery Center; Lab; Physical Therapy;
 Infusion Therapy; Sleep labs
- Dominant Physician Group at 3 area hospitals
- Established in 1999 (from groups practicing since the '60s)

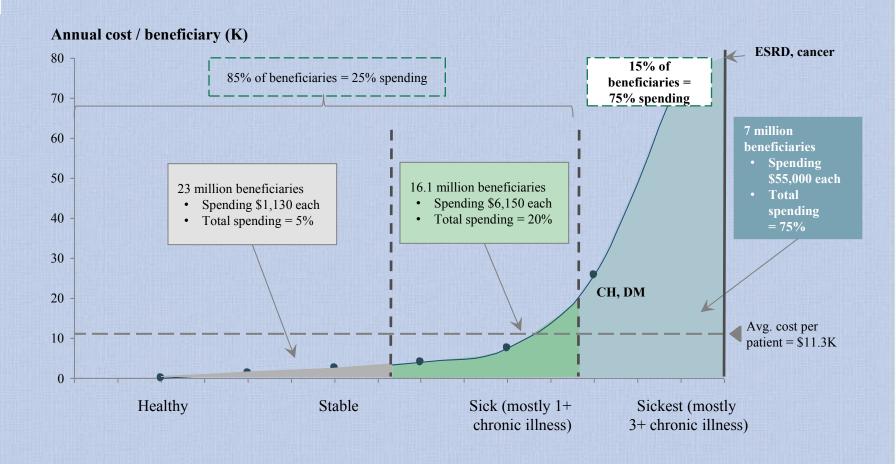
Our History — "Under one roof"

Robert McCray realized that the suburbs' growing patient base would benefit from having nearby access to a group of advanced care specialists sharing office space as well as laboratory and x-ray facilities. A place where all healthcare services would be conveniently located under one roof.

Under one "virtual" roof



Health Care Today



Source: The Boston Consulting Group

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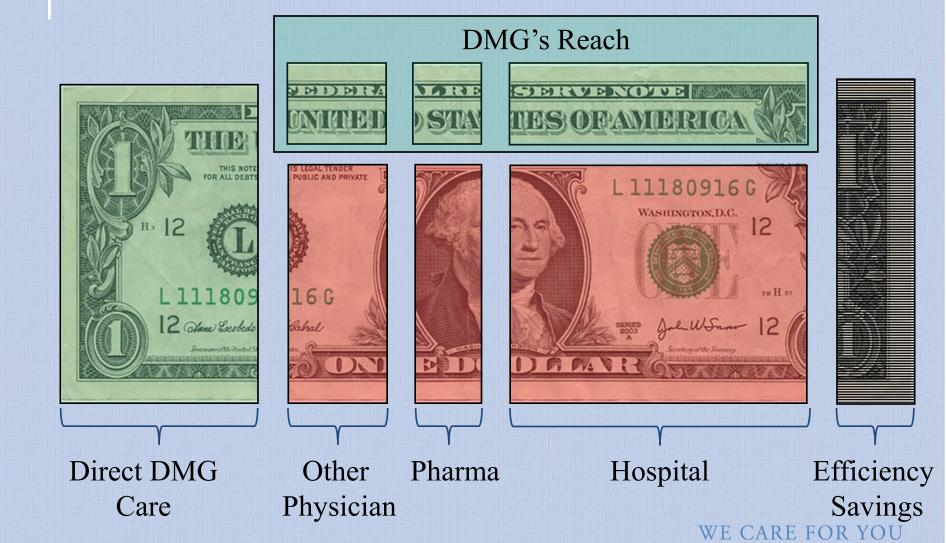
Value Driven Health Care

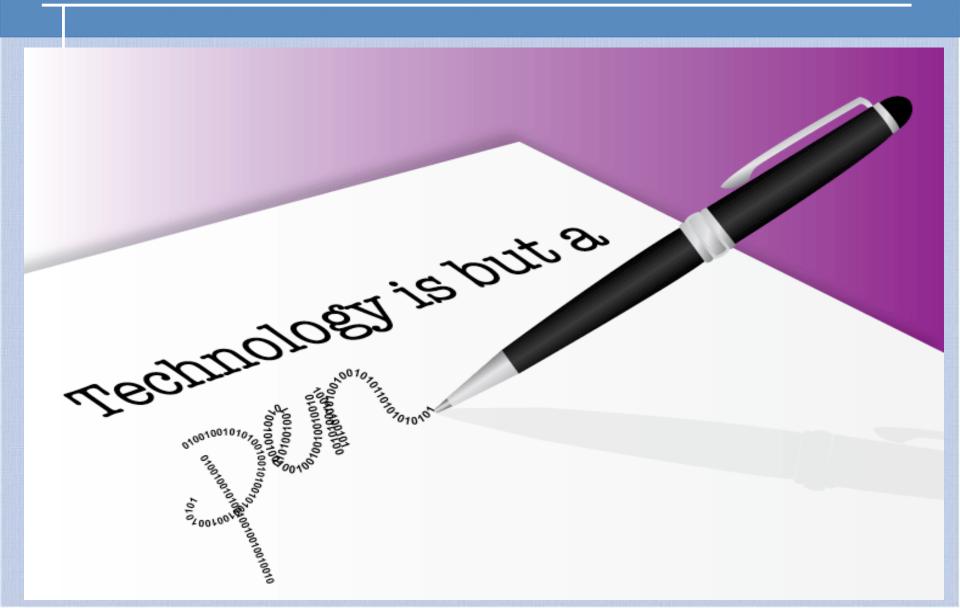
DMG's transformation to adapt to & lead the changing health care environment Focused on:

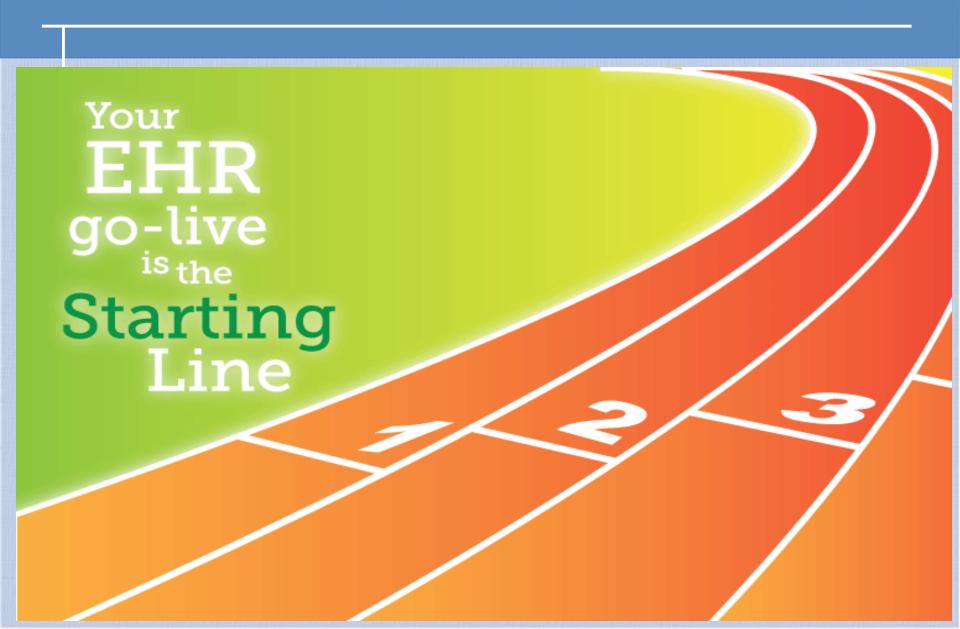
- Improving patient outcomes, experience
- Population management
- Reducing health care costs
- Streamlining business processes
- Increasing patient access to care

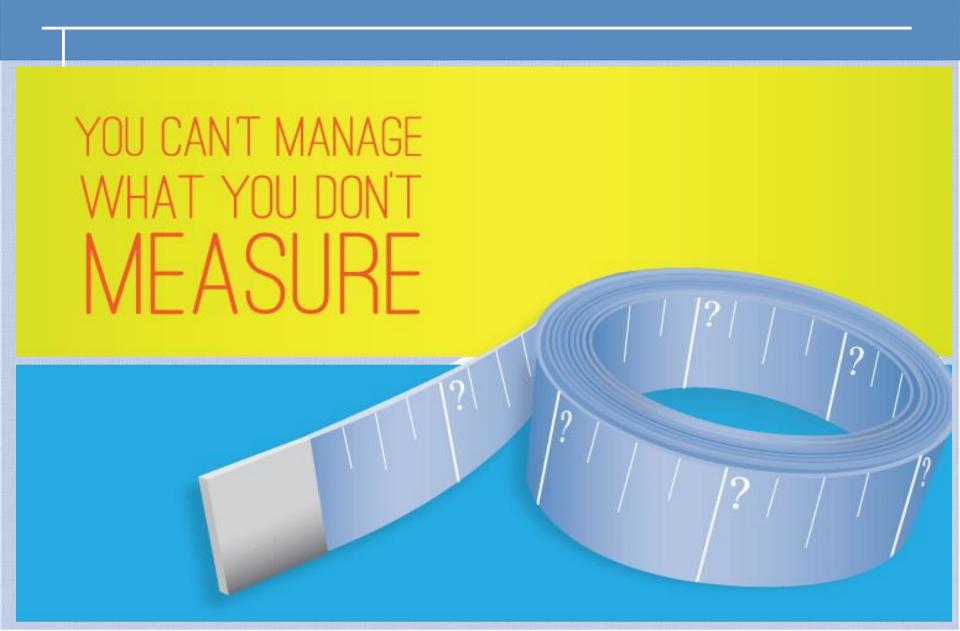


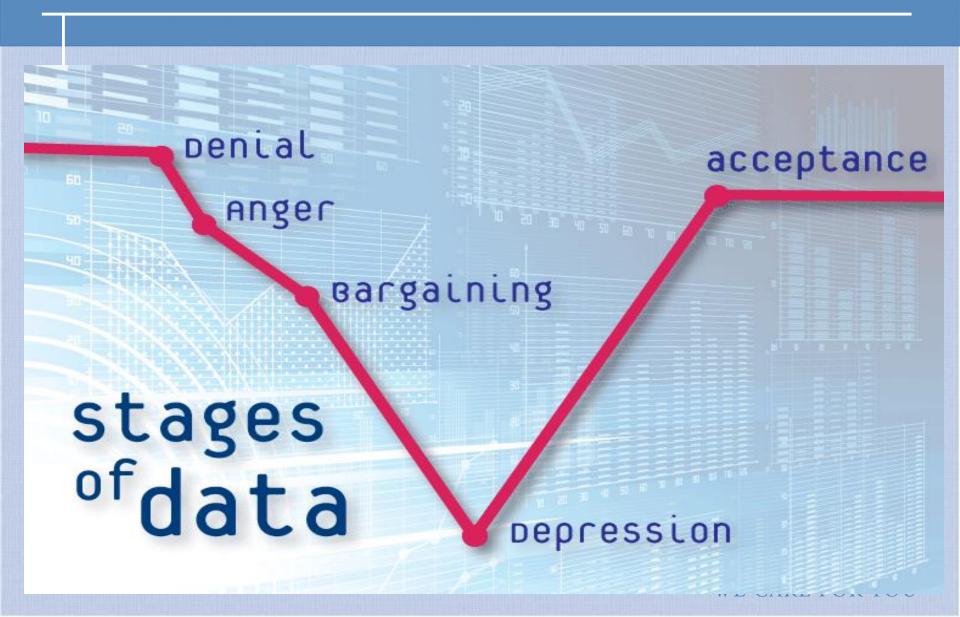
Being Good Stewards











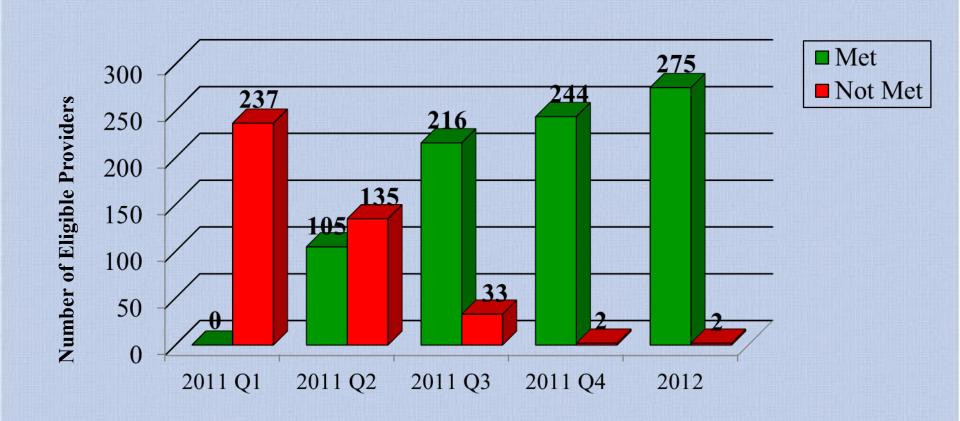
DATA → INFORMATION → ACTION







Our Meaningful Use Journey



Point to the Destination

Simple and Transparent Dashboard

DMG Meaningful Use Summary

		Order ((Physician Med	Ordered	Probler	m List	E-Presci	ribing	Active M	ed List
		Goal >	30%	Goal >=	80%	Goal > :	40%	Goal ≻=	80%
Practice Name	Prov Name	%	% Chg Q2 vs. Q1		Chg Q2 vs. Q1	%	Chg Q1 vs. Q4	%	Chg Q2 vs. Q1
	▼	▼		▼		▼	T	▼	▼
MAIN FAMILY PRACTICE	ANDERSON, JENNIFER	95.2%	-0.4%	76.1%	4.3%	7.1%	6.7%	98.5%	1.0%
MAIN FAMILY PRACTICE	BROWN, ANNA	98.9%	98.9%	80.9%	80.9%	20.0%	20.0%	97.8%	97.8%
MAIN FAMILY PRACTICE	CHENG, BARBARA	98.3%	98.3%	38.2%	38.2%	16.0%	16.0%	99.1%	99.1%
MAIN FAMILY PRACTICE	DAVIS, KAREN	97.3%	97.3%	85.2%	85.2%	28.1%	28.1%	90.7%	90.7%
MAIN FAMILY PRACTICE	SANDERS, ANDREW	96.8%	-0.6%	81.1%	1.8%	84.7%	-0.5%	99.7%	0.1%
MAIN FAMILY PRACTICE	SMITH, CHARLES	94.6%	-2.5%	78.4%	4.5%	70.0%	-10.9%	99.6%	0.0%

Script the Critical Moves

Handbook with specific, actionable instructions

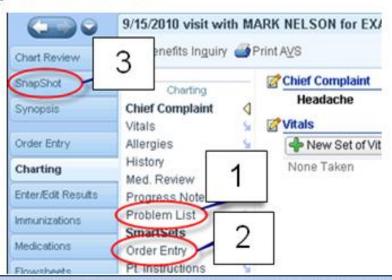
Problem List Use

<u>Measure Definition</u>: More than 80% of unique patients seen by the physician with at least one problem on their Problem List or the Problem List is marked Reviewed if no problems on the Problem List.

Actions that impact this measure:

There are three ways to access/update the Problem List:

- 1. Problem List in Charting
- Order Entry
- 3. SnapShot



Engage Hearts & Minds

Over 60 Road Shows; Over 1000 miles logged



e-Prescribing

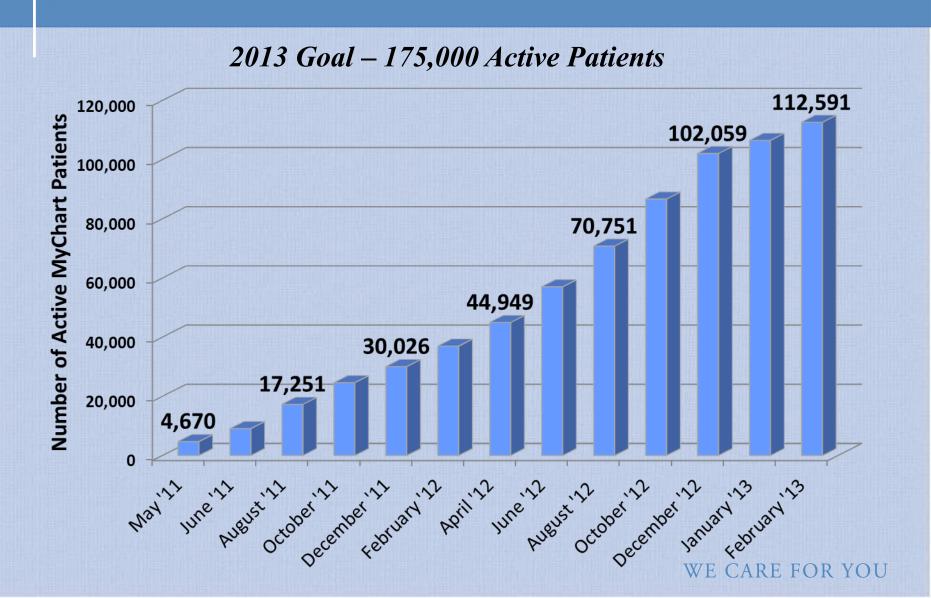


MyChart

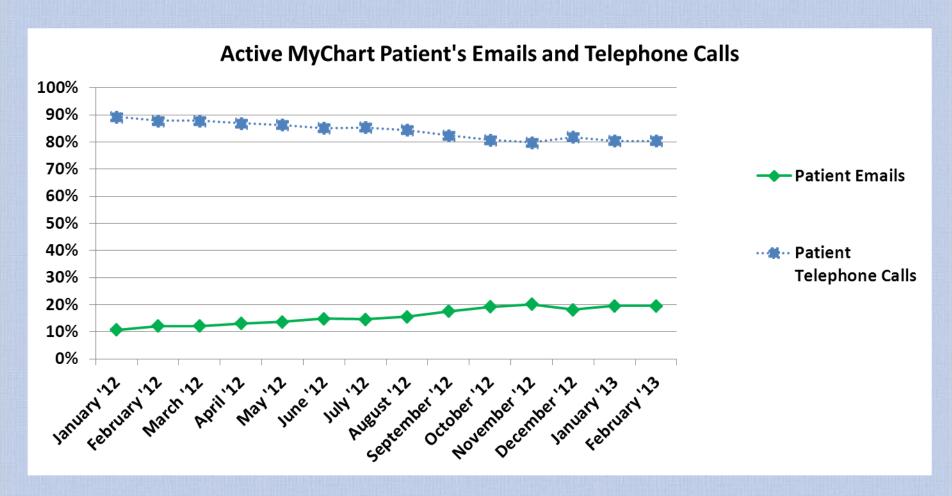


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MyChart Activation



MyChart Messages = Fewer Calls



Patient Centered Medical Home

Patient Access

- Same Day Appts
- After Hours
- Schedule Express

Care Coordination

- Discharge Summary to PCP workflow
- Illinois Health Partners

Care Management

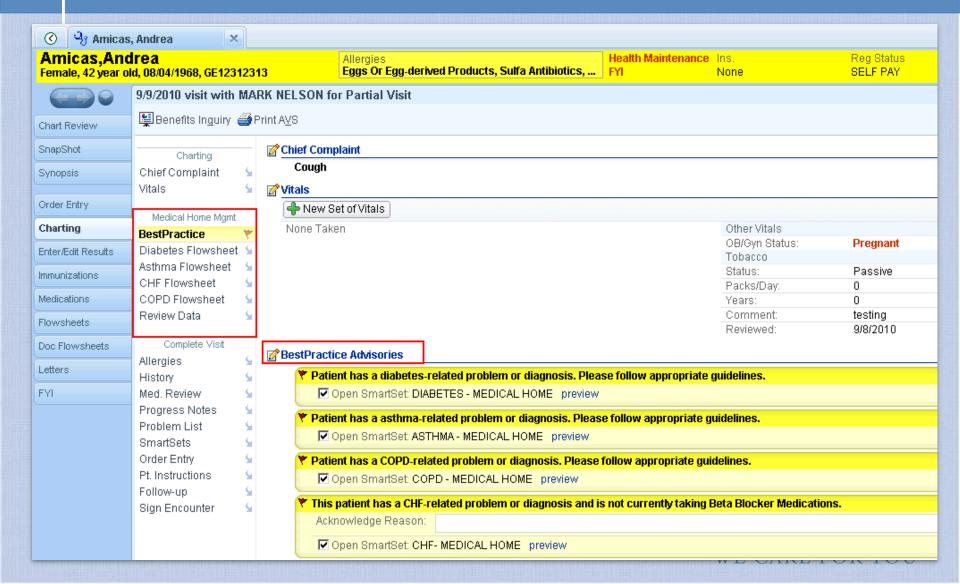
- Best Practice Alerts
- Phytel Outreach
- Inpt/ER Follow-up

Communication

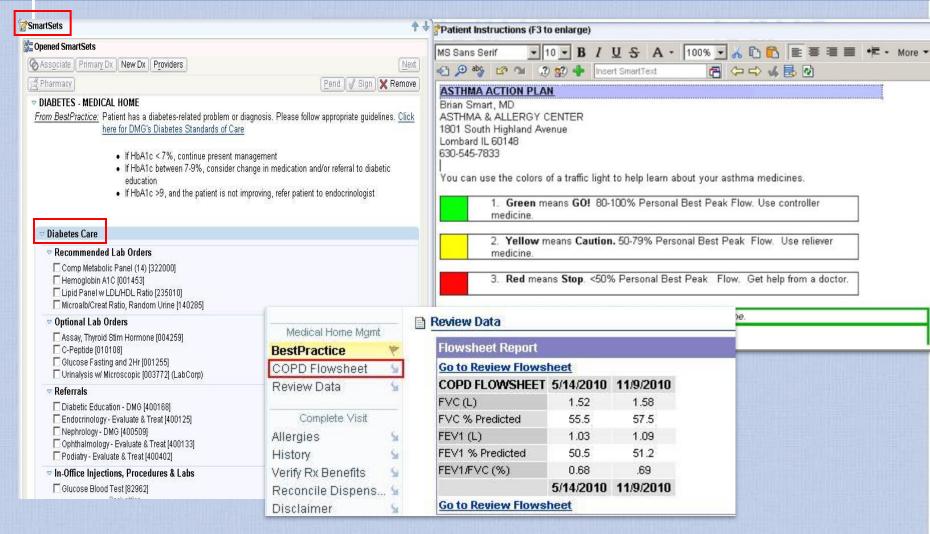
- Dashboards
- Quality Reporting
- NCQA Recognition

21 DMG primary care practices (111 doctors) achieved Recognition as a Medical Home!

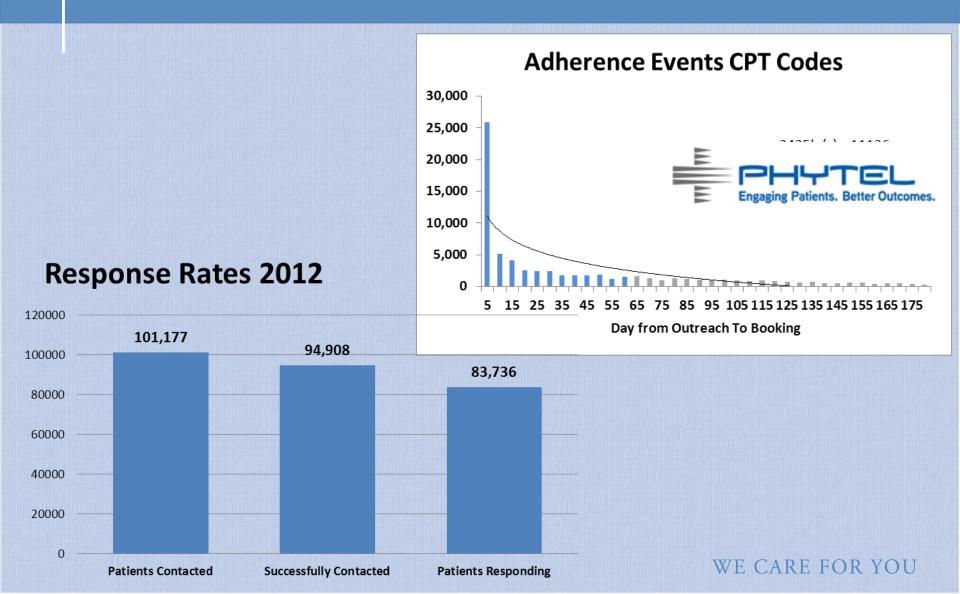
EMR Pathways



Evidence-based Tools



Telephonic Outreach for Care Gaps



Dashboards



Adult PCP - Clinical Process and Outcome Dashboard Q4, 2012 (10/1/2012 - 12/31/2012)

				PROCESS counter)		OUTCOME atient)	DIABETES MANAGEMENT (Per Patient)						
PRACTICE/PHYSICIAN NAME	ENCOUNTERS	UNIQUE PATIENTS	BP RECORDED		BP MANAGED (<=140/90)		PATIENTS PERFORMED MANAGED PERFORMED MA				LDLC MANAGED (<=100)		



Physician Operations Dashboard December-2012 (12/1/2012 - 12/31/2012)

PRACTICE/PHYSICIAN NAME	HOURS WORKED			SCHEDULE UTILIZATION					CHARGE LAG (HOSPITAL)	
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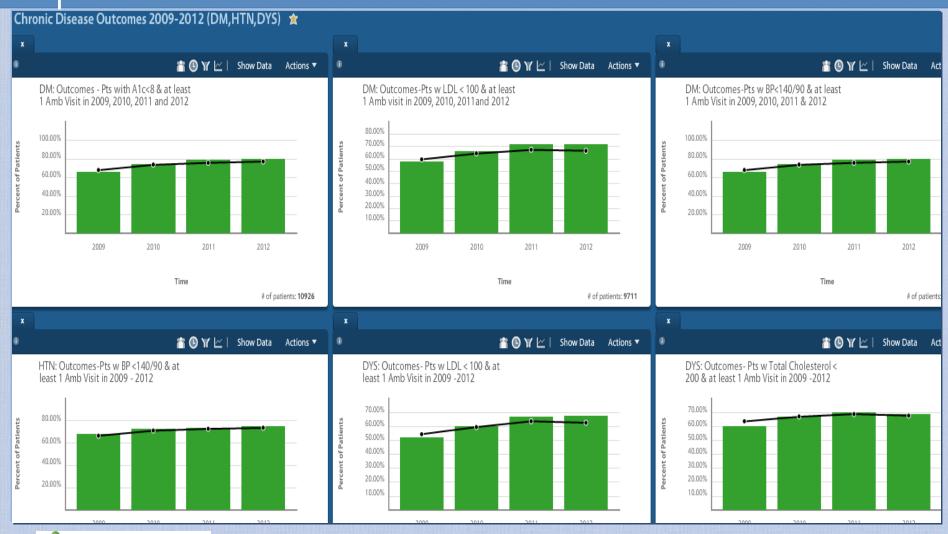


Pediatric Clinical Process and Outcome Dashboard Q4, 2012 (10/1/2012 - 12/31/2012)

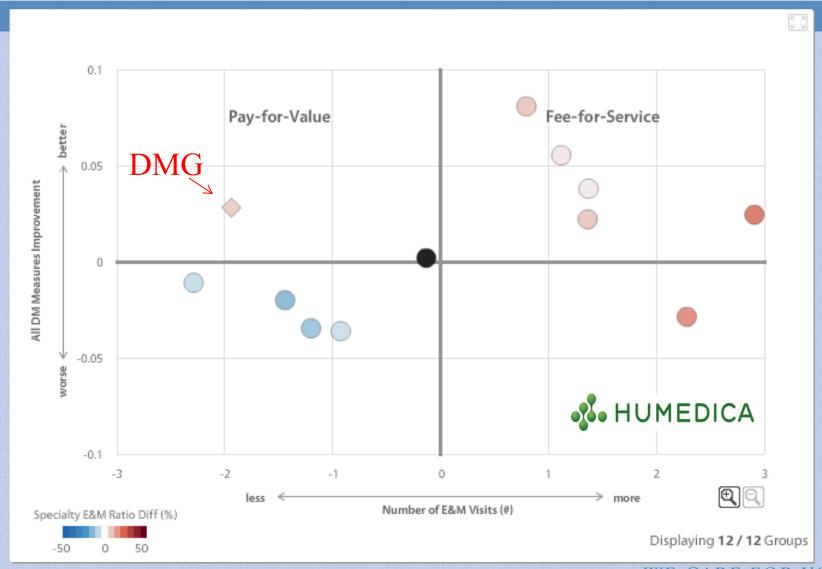
Quality · Efficiency · Access

			WEIGHT ASSESSMENT & MANAGEMENT ASTHMA MANAGEMENT (AGE 5-17) IMMUNIZATIONS (AGE 2-4) (AGE 2-17)									INFAN	IT ENC									
PRACTICE NAME/ PHYSICIAN NAME	ENC	UNIQUE PATIENTS	BMI-%TILE ON FILE	BMI- %TILE<=85	PATHWAY USED					PATIENT COUNTS	DTaP (4)	IPV (3) M	MR Hi	iB (3) I	Hep B (3)	VZV (1)	PCV (4)	HepA (2)	RV (2- 3)	Flu (2)	PPD RATE	PAT COUNT S

Clinical Outcomes



Diabetes – Outcomes vs. Cost



Process Outcomes

3

3

2





Reduce ED Visits

- ED use is the leading cause of health spending growth
- ED visits are often non-emergent and avoidable
- 64% of ED visits for DMG patients occurred during business and After Hours Care hours

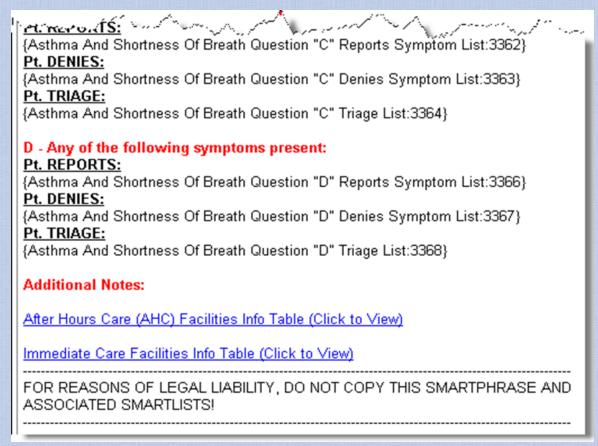
Focus on 33 protocols:

- Account for >36% of DMG's ED volume (144 unique Dx codes)
- Aligned with BC/BS HMO's focus list to reduce ED visits

	DMG ED Triage Protocol List									
ICD-9 Prefix	ICD-9 Prefix Desc									
Grand Total	% of All DMG ED Visits Represented by Triage Protocols	36.10%								
789	OTHER SYMPTOMS INVOLVING ABDOMEN AND PELVIS	4.94%								
780	GENERAL SYMPTOMS	2.74%								
784	SYMPTOMS INVOLVING HEAD AND NECK	1.80%								
724	OTHER AND UNSPECIFIED DISORDERS OF BACK	1.47%								
845	SPRAINS AND STRAINS OF ANKLE AND FOOT	1.41%								

ED Triage Protocols in the EMR

 Based on protocol responses, patient directed to DMG After Hours or Immediate Care (or ER if necessary).



Top 15 "Frequent Flyers"

Top 15 ED Use Patients w/ Detail by Practice by Physician

Hospitals Included: CDH, Edward & Good Samaritan

Period 2 (P2): 4/1/2012 to 8/31/2012 vs. Period 1 (P1): 11/1/2011 to 3/31/2012

te: Due to hospital data limitations, no ED visits resulting in an inpatient admission are included for Good Samaritan Hospital

			ED	ED				ED Visit Time vs.		
			Visits	Visits	Chg P2	ED	ED Visit	DMG Operating	Admit	
Patient Name + D	ОВ	Gen	(P2)	(P1)	vs. P1	Facility	Date	Hours	?	Discharge Dx
1-19	61	F	1			EDW	7/18/12	M-F 8am-6pm		Respiratory Abnorm Nec
1-19	61	F	1			EDW	7/18/12	M-F 8am-6pm	OBV	Shortness Of Breath
1-19	61	F	1			EDW	7/11/12	M-F 10pm-8am		Acute Pancreatitis
1-19	61	F	1			EDW	7/9/12	M-F 10pm-8am		Abdominal Pain, Epigastric
1-19	61	F	1			EDW	4/29/12	Sun (AHC) 11am-4pm		Headache
1-19	61	F	1			EDW	4/24/12	M-F 10pm-8am		Headache
										Mgrn Unspecified W Intractable Mgrn W/O
1-19	61	F	1			EDW	4/20/12	M-F 10pm-8am	OBV	Status Migrainosus
1-19	61	F	1			EDW	4/17/12	M-F 8am-6pm		Cluster Headache Syndrome, Unspecified
1-19	61	F	1			EDW	4/6/12	M-F 10pm-8am		Cluster Headache Syndrome, Unspecified
1-19	61	F		1		EDW	3/22/12	M-F 8am-6pm		Bronchitis Nos
1-19	61	F		1		EDW	3/19/12	M-F 8am-6pm		Edema

- Physician-specific patient lists distributed quarterly
- Includes:
 - ED visit date & facility
 - Visit time (business hours, after hours, non-business hours)
 - Discharge Diagnoses

Initial ED Use Reductions Observed

- Overall ED use

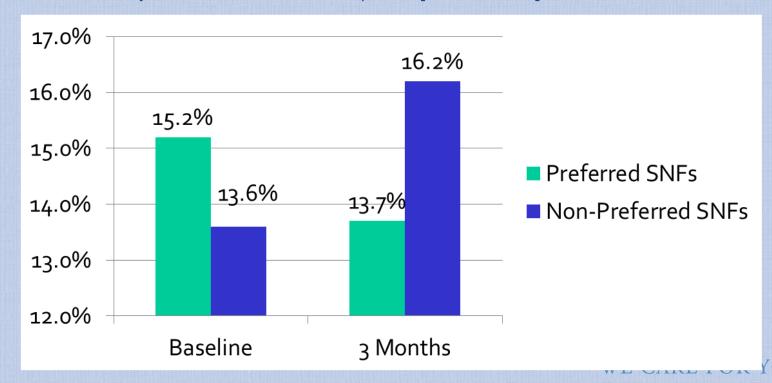
 3.5% (Jun-Nov 2012 vs. Dec 2011-May 2012):
 - ↓ 616 ED visits
 - Estimated savings of \$1.5M in medical expenditures
 - All despite a net increase of 30 MDs during the reporting period

SNF Preferred Partner Program

- 10 Preferred Partners selected in 2 hospital service areas
- Criteria:
 - NP staffing to supplement PCP encounters
 - Standard documentation
 - Clinical pathways
 - Care transitions
 - NP documentation
 - Palliative assessment & education
- Un-blinded reporting to drive accountability and progress

SNF Preferred Partner Program

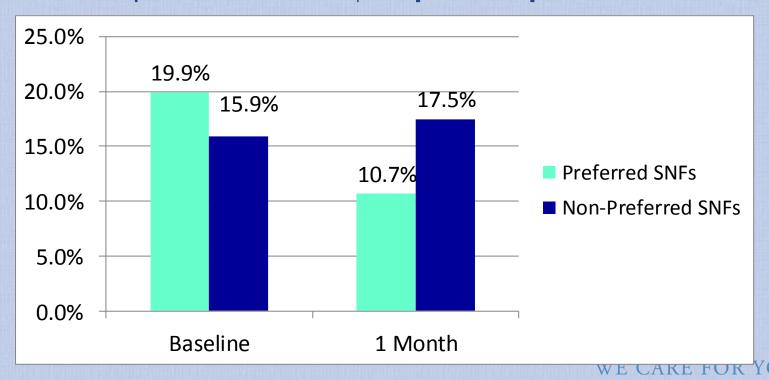
- Hospital service area #1 30-day readmits initial results (first 3 months):
 - Preferred SNFs: 1.5 percent points to 13.7%
 - Non-preferred SNFs: ↑2.6 percent points to 16.2%



SNF Preferred Partner Program

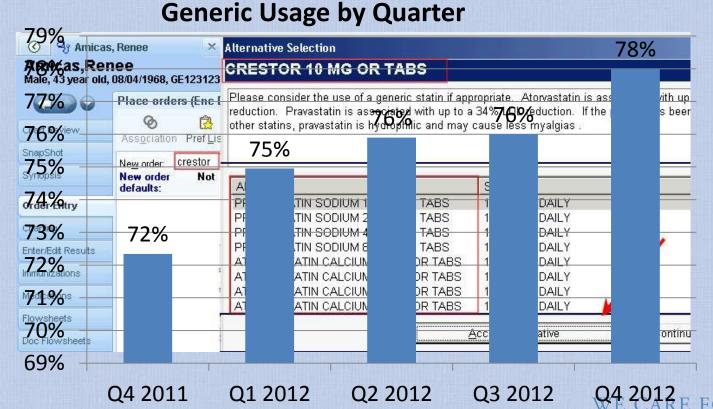
- Hospital service area #2 30-day readmits initial results (first month):
 - Preferred SNFs: \$\square\$9.2 percent points to 10.7%
 - Non-preferred SNFs:

 1.6 percent points to 17.5%



Generic Usage

- Generics can provide equivalent effectiveness at less cost
- EMR Alternative Alerts implemented in January 2012
- Physicians receive quarterly dashboard with usage rate & patient lists



New Care Model: High-Risk Patients



- Identify the sickest patients
- Provide holistic, coordinated care
- Utilize the EHR to monitor patient health status and outcomes R YOU

Staffing – Specialized Training

- Clinical Manager
- APN
- 2 Health Coaches
- 2 Medical Receptionists
- 1 Physical Therapist
- 1 Lab Tech
- 1 X-ray Tech
- 1 Social Worker

Trained in:

- Cardiac care, renal care, geriatrics, pulmonology, diabetes, COPD
- Social Service resources
- Age/Dementia Sensitivity
- Motivational Interviewing
- 40 hrs. Chronic Care





Patient Identification



Predictive Modeling

- Clinical Risk Factors: data mining EMR for selected high-risk factors
- Social/Mental Risk Factors: John Hopkins Telephone Assessment
- Hospital/ER Admissions Data: data mining ER and inpatient admissions data
- Co-Morbidity Factors: Utilizing Charlson Co-Morbidity Index from Humedica

Referrals

Primary Care and Specialists, Hospitalists

Holistic, Coordinated Care

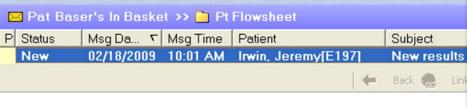
- On January 15 Dr. Krouse saw a patient with an HbA1c of 16.9
- Staff worked with him for 6 hours administering insulin and obtained stat labs to get real time results
- Patient was able to go home, with pharmacist calling to monitor blood sugar and insulin
- Patient also had a 4 in. abscess on his neck that General Surgeon treated him for urgently

Without BCC: patient would have been in the ER for ~6 hours followed by a 3-4 day hospital stay

Monitor Status & Outcomes in EHR

Home Monitoring (Numera)

- •Blood Glucose, BP, Weight
- •Readings uploaded, interface to EMR into flowsheets





Patient Entered Flowsheet

The patient has submitted new Blood Pressure Monitoring data as shown below.

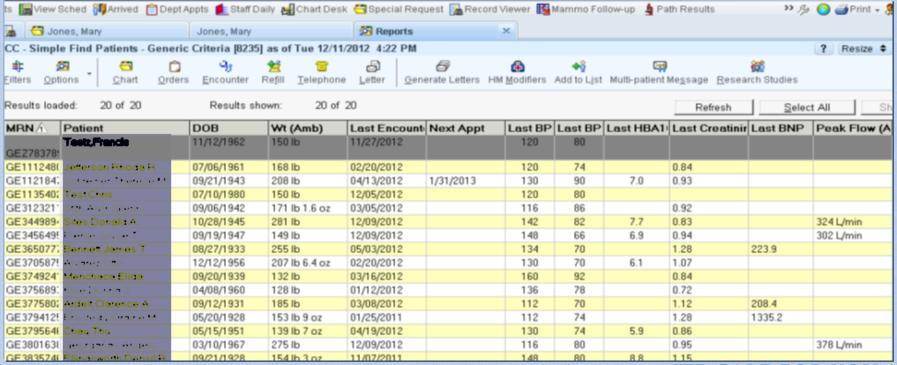
Recent patient entered flowsheet data

Time Taken	Time Submitted	Systolic (mmHg)	Diastolic (mmHg)	Pulse (beats/min)
02/18/09 9:33 AM	02/18/09 10:01 AM	122	79	63
02/18/09 9:01 AM	02/18/09 10:01 AM	120	82	64
02/17/09 7:53 PM	02/17/09 2:55 PM	125	85	64
02/17/09 8:33 AM	02/17/09 2:55 PM	118	81	68
02/16/09 12:43 PM	02/17/09 2:49 PM	126	84	65
02/16/09 11:32 AM	02/17/09 2:49 PM	121	82	69

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Reporting Workbench - BCC

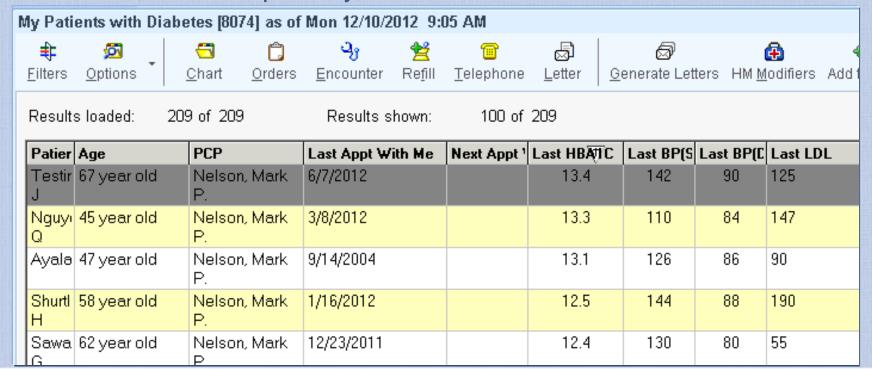
- Reporting tool within EMR
- Real-time data
- Take action: view chart, schedule appointment, place orders, etc.
- Designated criteria: Weight, BP, Labs, Peak Flow, etc.



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Reporting Workbench: Primary Care

- Expanding to a broader community: IM, FM
- Initial reports focused on disease states: diabetes, pre-diabetes, hypertension, asthma, obesity, etc.
- Include health plan-required metrics
- Establish protocols for staff follow-up: schedule appointment, enter orders, refer to specialty, etc.



Questions?

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