

AUTOMATE POPULATION HEALTH MANAGEMENT TO BRIDGE GAPS IN CARE DELIVERY AND IMPROVE CARE COORDINATION

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Key Points for Presentation

- Manage the complex patients with the highest costs at the top... ***and everyone else*** to achieve clinical and financial goals
- Stratify and prioritize the total population by risk and care gaps ***continuously***
- ***Leverage automation*** to build high performance care teams, drive patient engagement and integrate actionable reporting into population health management and quality improvement workflows

Market Around Quality and Value is Here

80%

of healthcare organizations are pursuing an **Accountable Care Organization** by 2015¹

70%

of medical practices are adopting the **Patient-Centered Medical Home**²

¹ Wall Street Journal, 12/2011

² MGMA 2011 Survey

What Does “Paradigm Shift” Look Like?

Traditional View
30 Patients Per Day



New View
2500 Patient Population



Practices are responsible for total population
regardless of engagement status

Let's Have A Show of Hands...

How many of you have:

- ❑ A fully-deployed EMR?
- ❑ Achieved Patient-Centered Medical Home recognition?
- ❑ Applied for Meaningful Use incentives?
- ❑ Financial incentives (e.g., P4P) tied to quality measures?
- ❑ Chronic condition registries?
- ❑ Hired Care Managers?
- ❑ Implemented Lean Six Sigma?

But *still* have:

- ❑ No total population reports
- ❑ Quality committees without practice or provider level data
- ❑ Physicians who doubt reports
- ❑ Clinical staff who spend more hours compiling patient data than caring for patients
- ❑ Inconsistent EMR documentation processes
- ❑ P4P money left on the table

Readiness for Population Health?



Strategy and Incentives in Place...

- PCMH, ACO
- P4P, Shared Savings, Bundled Payments



...but Population Health Infrastructure is Incomplete:

- Accessible, multi-level reporting
- Ongoing risk stratification and interventions
- Bi-directional patient communications

A Real Story

The Drivers are There:



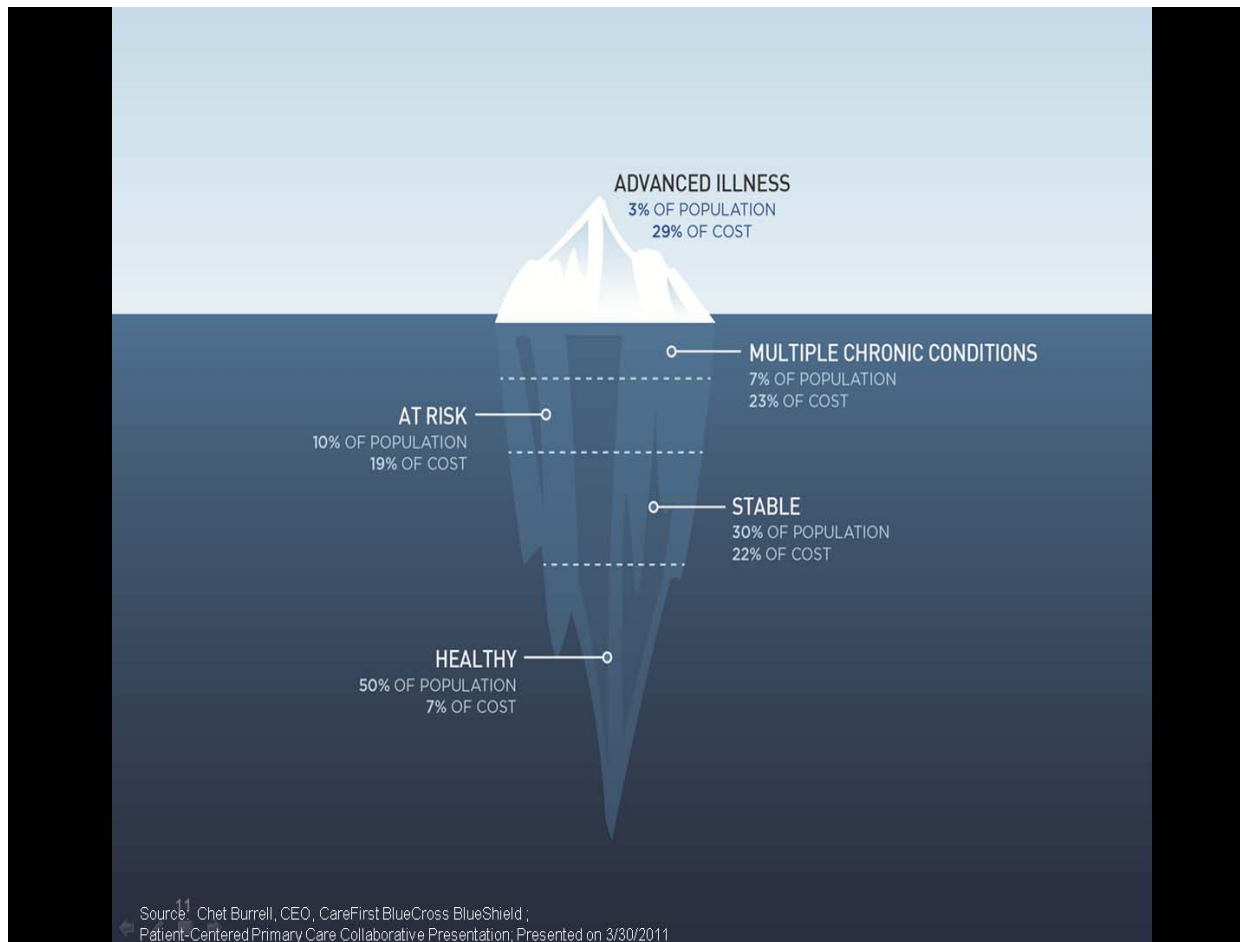
- Pioneer ACO and Commercial capitation contracts started January 2012: 40,000+ attributed patients
- Pursuing NCQA PCMH 2011
- Sophisticated EMR
- Heavy LSS investment
- Automated outreach for preventive and chronic conditions

...but Population Health Infrastructure is Incomplete:



- Need additional FTEs to manage high risk and high cost patients, above and below waterline
- Have limited reporting by provider and condition
- Have limited point of care actionable data
- Have limited automation capabilities to reach and monitor whole population

What Does Managing a Population Mean?



What Does a Population Look Like?

Chronic Condition Prevalence

Chronic Conditions	Prevalence Census Data *	Panel Size=2500/PCP One PCP	Panel Size=2500/PCP 10 PCP's	Panel Size=2500/PCP 100 PCPS
		2500	25000	250000
Hyperlipidemia	0.204	511	5110	51100
Hypertension	0.189	472	4720	47200
Depression	0.047	118	1180	11800
Asthma	0.073	183	1830	18300
Diabetes	0.058	145	1450	14500
Arthritis	0.152	381	3810	38100
Anxiety	0.112	279	2790	27900
Osteoporosis	0.056	140	1400	14000
COPD	0.052	131	1310	13100
CAD	0.048	120	1200	12000

*Prevalence data is from recent US Census Data. Most likely these conditions have higher current rates but used to illustrate the magnitude of conditions in different sized PCP groups.

What Does a Population Look Like?

Health Risk Prevalence

	Risk Prevalence based on self-reported HRA data of 2+ million individuals >17*	1 Physician Panel Size	10 Physicians Panel Size	100 Physicians Panel Size
Health Risk Category	Population Benchmark*	2500 patients	25,000 patients	250,000 patients
Alcohol Use	0.22	550	5,500	55,000
Injury Prevention	0.16	400	4,000	40,000
Nutrition	0.96	2,400	24,000	240,000
Physical Activity	0.48	1,200	12,000	120,000
Sexual Behavior	0.01	25	250	2,500
Skin Protection	0.34	850	8,500	85,000
Smoking	0.11	275	2,750	27,500
Stress	0.35	875	8,750	87,500
Depression Symptoms	0.12	300	3,000	30,000
Weight Mgt	0.64	1,600	16,000	160,000
•Overweight	0.33	825	8,250	82,500
•Obese	0.25	625	6,250	62,500
•Extremely Obese	0.06	150	1,500	15,000

Source: HealthMedia book of business HRA results, based on over 2 million participants, 2010

Layering in Automation to Touch Everyone

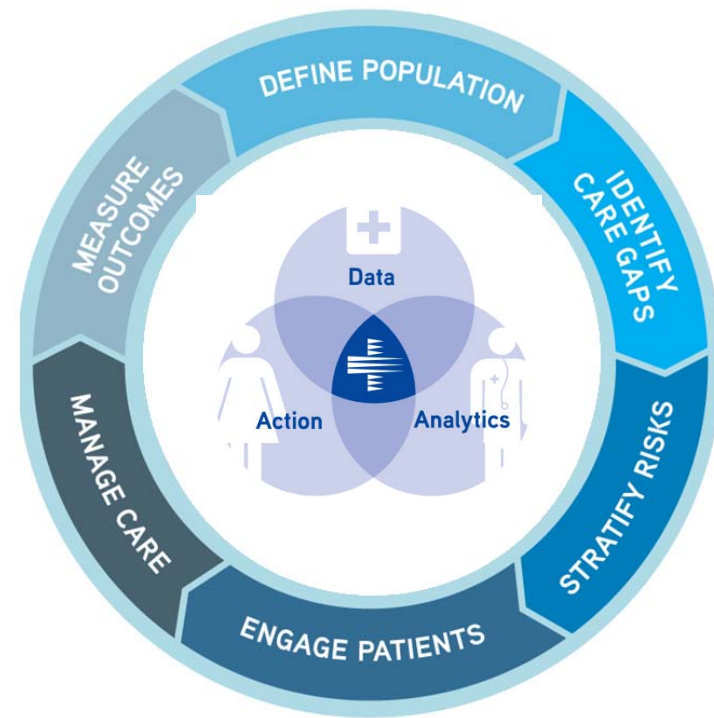
Population Size 5,000						
	No Disease (60%)			Have Disease (40%)		
Risk	Well	At Risk	High Risk	Low Risk	Mod Risk	High Risk
Risk Percentage	0.3	0.25	0.05	0.27	0.1	0.03
Patients with Risk	1500	1250	250	1350	500	150
FTE (case load)	0	0	1 Health Coach (250 cases)	1.35 LPN (1000 cases)	1 RN Care Mgt (500 cases)	1 RN Case Manager (150 cases)
Phytel	Totally Automated	Totally Automated	Automation + Telephonic coaching	Automation + Telephonic coaching + care manager	Automation + Telephonic coaching + care manager	Case Manager
Patient Intervention	Preventive alerts, HRA	Self-management tools and reminders	Telephonic coach support for highest risk/non-compliant	Continuous monitoring with alerts and activities around care gaps and preventive risks, office compliance etc.	Many more alerts and activities around care gaps and preventive risks, office compliance etc.	Same. Many more alerts and activities around care gaps and preventive risks, office compliance etc.
Care Team Intervention	Tracked; only non-compliant exceptions reported for more intervention	Tracked; only non-compliant exceptions reported for more intervention	Health Coaches provide other intervention; e.g., smoking programs, weight reduction etc.	Activity and poor outcomes for process measures being tracked; Care Manager intervention is limited	Activity and poor outcomes for process measures being tracked; need for Care Manager intervention	Needs Case Management to intervene and provide interventions (embedded and telephonic CM)

PCMH Depends on Actionable Reports *and* Automated Processes

NCQA Standards Require:

- Reports on total population by condition and provider
- Proactive reminders for all patients of needed care
- Using data at point of care
- Using data to drive continuous quality improvement process

Total Population Management



New Tools for a New Environment

FFS: Accountable for Who You See

The screenshot displays a medical software interface with a menu bar (File, A/R Management, Chart, Registration, Reporting, Schedule, System, Help) and a main window titled "Visit Information - Check-Out". The patient information section shows:

- Name: Hall, Amy (1061)
- DOB: 01/02/1975
- Age: 34
- Visit Date: 04/20/2009 - 04/20/2009
- Visit Type: Routine Office Visit
- Primary Plan: Sprint
- Secondary Plan: n/a
- Copy: \$25.00
- Copy: n/a

The charges table is as follows:

User	Code	Description	Dx Mapping	Modifiers
MH	70488	CT sinuses W/ and W/O contrast	461.0	(Add Mod)
MH	99213	OFFICE OUTPT EST15 MIN	461.0	(Add Mod)

The diagnoses table is as follows:

User	Order	Code	Description	Status
MH	1	461.0	Acute maxillary sinusitis	Mapped

Additional patient information on the left includes: Amy Hall, 34 years old, DOB: 01/02/1975, SSN: 165-45-7896, Sex: Female, Address: 3993 Highland Court, Hoover AL 35244, Home Phone: (205)235-4566, Primary Phone: (205)235-4564, Fax: CVS Pharm (205)345-4567, Balances: Patient: \$10.00, Insurance: \$580.00.



PHM: Accountable for Your Entire Population

The screenshot displays a "Population Management System" interface. The main window shows a "Population Summary" section with a scatter plot titled "HbA1c vs Age". The y-axis represents HbA1c levels (0 to 16.5) and the x-axis represents Age (20 to 90). The plot is divided into three risk categories:

- Non-Compliant (High Risk): HbA1c > 12.5
- Non-Compliant (Medium Risk): 8.5 < HbA1c < 12.5
- Compliant: HbA1c < 8.5

The scatter plot shows a large number of data points, with a significant portion in the Non-Compliant (High Risk) and Non-Compliant (Medium Risk) categories. Below the plot is a large, dense crowd of people, symbolizing the entire population.



Automation Leverages Care Teams

5 million

=

successful automated outreach events over 18 month period

personnel hours saved

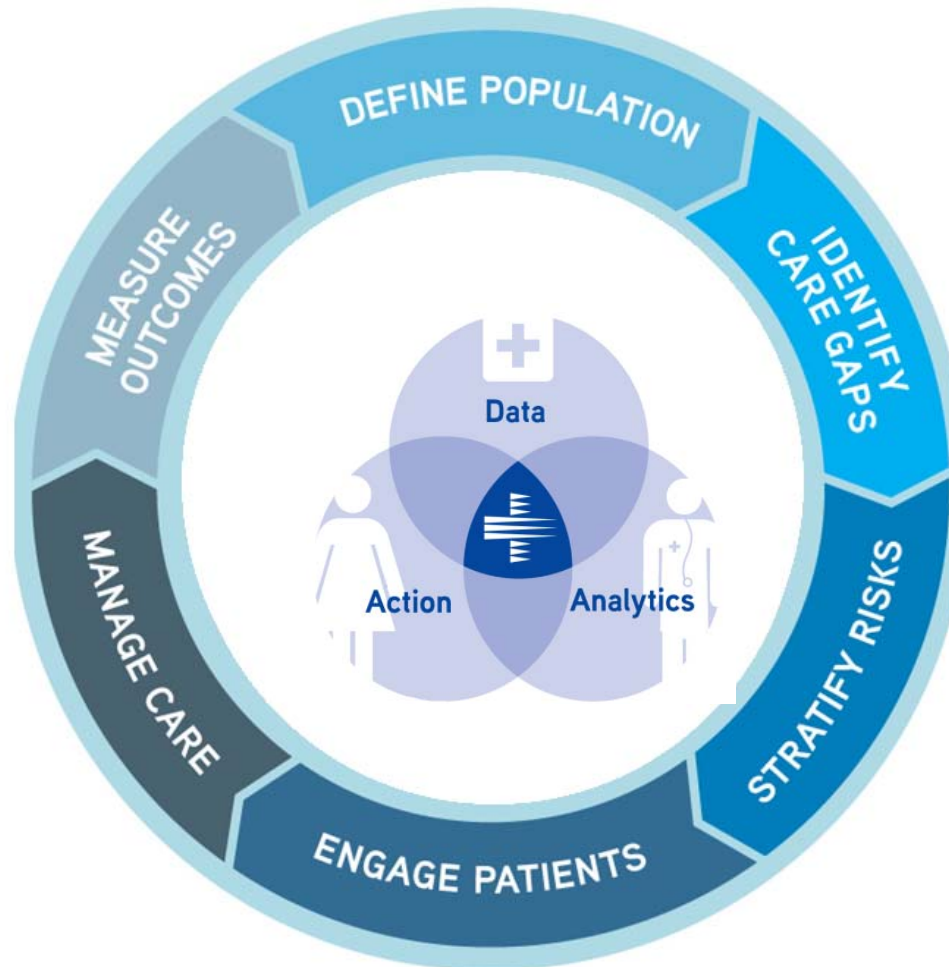
110,39

An integrated not-for-profit health care provider serving communities throughout eastern Wisconsin and northern Illinois

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PHM Operational Construct:

Automation is Essential



Data Management and Registry

Population Management System

Search Patients Go

Patients Appointments Outreach Population Insight Care Management PQRS Transition Reports

Registry Report Patient Management Campaigns

Population Group: Group 1, Group 2

Care Manager Work List: All Yes No

Payer: BCBS, Medicare

Group: Medical Center, Westside Provider: 17 Providers

Registry Report

Diabetes Non-compliant Operational HbA1c < 7

Export Print

Update Results Reset

Bulk Action

<input type="checkbox"/>	Patient	Priority	HbA1c	HbA1c Date	Next Outreach	Last Visit	Next Visit
<input checked="" type="checkbox"/>	Doe, John	●	9.5%	02/14/2011		02/28/2011	
<input checked="" type="checkbox"/>	Change, Mike	●	9.16%	02/26/2011	09/26/2011	03/11/2011	6/20/2011
<input checked="" type="checkbox"/>	Sale, Kevin	●	9.35%	01/12/2011	11/15/2011	02/04/2011	7/20/2011
<input checked="" type="checkbox"/>	Turnage, Marian	●	9.0%	06/14/2011	04/03/2011	07/14/2010	
<input checked="" type="checkbox"/>	Bemis, Jo	●	9.25%	03/02/2011	09/26/2011	03/02/2011	08/03/2011
<input checked="" type="checkbox"/>	Kinsella, Lawrence	●	9.59%	01/12/2011	12/01/2011	01/12/2010	
<input checked="" type="checkbox"/>	Voigt, Lucy	●	8.5%	04/02/2011	10/03/2011	04/02/2011	09/15/2011
<input checked="" type="checkbox"/>	Stiltner, Steve	●	10.25%	05/23/2011	09/26/2011	03/23/2010	
<input checked="" type="checkbox"/>	Aranda, Ana	●	9.29%	06/03/2011	11/15/2011	02/03/2011	
<input checked="" type="checkbox"/>	Appleton, Randy	●	9.75%	06/20/2011	10/03/2011	12/21/2010	10/03/2011

Define Population



Identify Care Gaps

Population Management System Search Patients Go

[Patients](#)
[Appointments](#)
[Outreach](#)
[Population Insight](#)
[Care Management](#)
[PQRS](#)
[Transition](#)
[Reports](#)

[Condition Dashboard](#)
[Population Benchmarks](#)
[Comparison](#)
[Population Summary](#)
[Patient List](#)
[Care Opportunity](#)

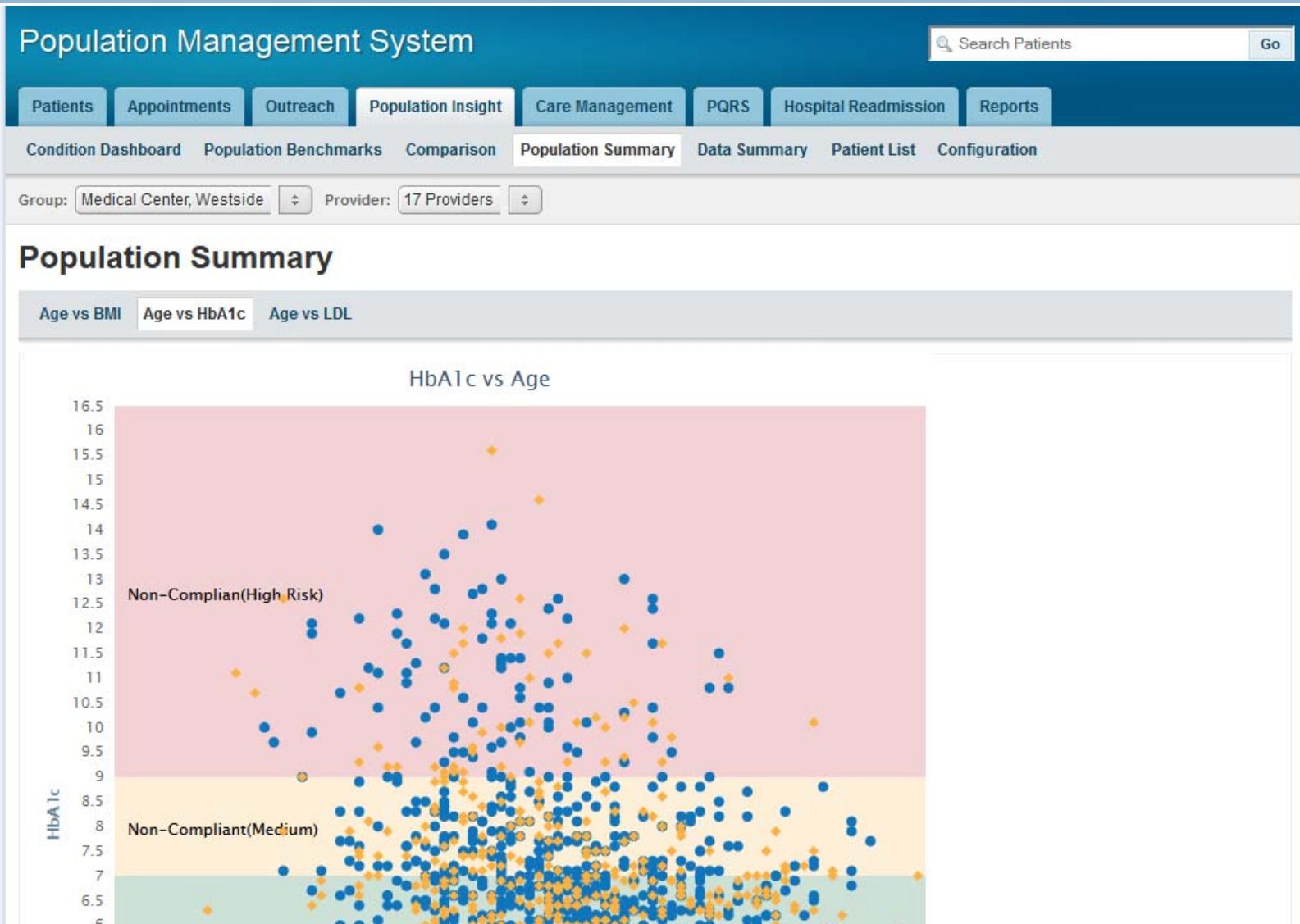
Payors:
 Quality Initiative:
 Groups:
 Providers:
 Conditions:
 Denominators:
 Measures:

Care Opportunity [View/Update Results](#) [Export](#)

[Select Columns](#)

Group	Provider	Patient Name	Practice Id	No. Care Opps.	Payor	Age	Gender	Phone	Care Opportunity	Last Value	Date	Conditions
Westside	Paige, Harry	Doe, John	HIR12387	1	BCBS Illinois	45	Male	(879)432-1211	HbA1c Poor Control	8%	10/19/2011	Diabetes, Hypertension...
Westside	Paige, Harry	Huntz, John	123432	2	BCBS Illinois	39	Male	(411)432-1011	LDL-C Poor control, No HbA1c test in the past 12 months.	131	10/19/2011	HTN, HPL, CAD
Westside	Paige, Harry	Hart, Jim	HIR09387	1	Aetna	43	Male	(215)432-9823	No HBA1c test in the past 12 months.	8.9 %	10/19/2010	DM, HTN, HPL, CAD
Westside	Grant, Allen	Hunt, Ethan	CG4532	3	Cigna	39	Male	(532)432-1211	Abnormal BP	140/90	11/20/2011	HTN

Stratify Risks



Engage Patients

Population Management System

Search Patients Go

[Patients](#)
[Appointments](#)
[Outreach](#)
[Population Insight](#)
[Care Management](#)
[PQRS](#)
[Hospital Readmission](#)
[Reports](#)

[Registry Report](#)
[Visit Prep](#)
[Campaigns](#)

Population Group:

Care Manager Work List:

 All

 Yes

 No

Payer:

Group:
 Provider:

Registry Report

HbA1c in last 12mo

HbA1c < 7

HbA1c > 9

LDL in 12mo

LDL < 100

Microalbumin in 12mo

Nephropathy Screening in 12mo

BMI < 30

BP in 12mo

BP < 130/80

Bulk Actions

- Email**
 Only patients with an email address will be sent the info.
- Phone**
 Only patients with a valid phone number will be contacted.
- Text**
 Only patients who have opted in to text messaging will be contacted.
- Letter**
 Only patients with a valid mailing address.

<input type="checkbox"/> Patient	Priority	HbA1c	HbA1c Date	Next Outreach	Last Visit	Next Visit
<input checked="" type="checkbox"/> Doe, John	●	9.5%	02/14/2011		02/28/2011	
<input checked="" type="checkbox"/> Change, Mike	●	9.16%	02/26/2011	09/26/2011	03/11/2011	6/20/2011
<input checked="" type="checkbox"/> Sale, Kevin	●	9.35%	01/12/2011	11/15/2011	02/04/2011	7/20/2011
<input checked="" type="checkbox"/> Turnage, Marian	●	9.0%	06/14/2011	04/03/2011	07/14/2010	
<input checked="" type="checkbox"/> Bemis, Jo	●	9.25%	03/02/2011	09/26/2011	03/02/2011	08/03/2011
<input checked="" type="checkbox"/> Kinsella, Lawrence	●	9.59%	01/12/2011	12/01/2011	01/12/2010	
<input checked="" type="checkbox"/> Voigt, Lucy	●	8.5%	04/02/2011	10/03/2011	04/02/2011	09/15/2011

Manage Care

Population Management System

Search Patients Go

Patients Appointments Outreach Population Insight Care Management PQRS Hospital Readmission Reports

Registry Report **Visit Prep** Campaigns

Sort By: Time

Care Manager Work List:
 All
 Yes
 No

Group: Medical Center, Westside Provider: Casey, Ben MD, Anne, Clark

Visit Preparation

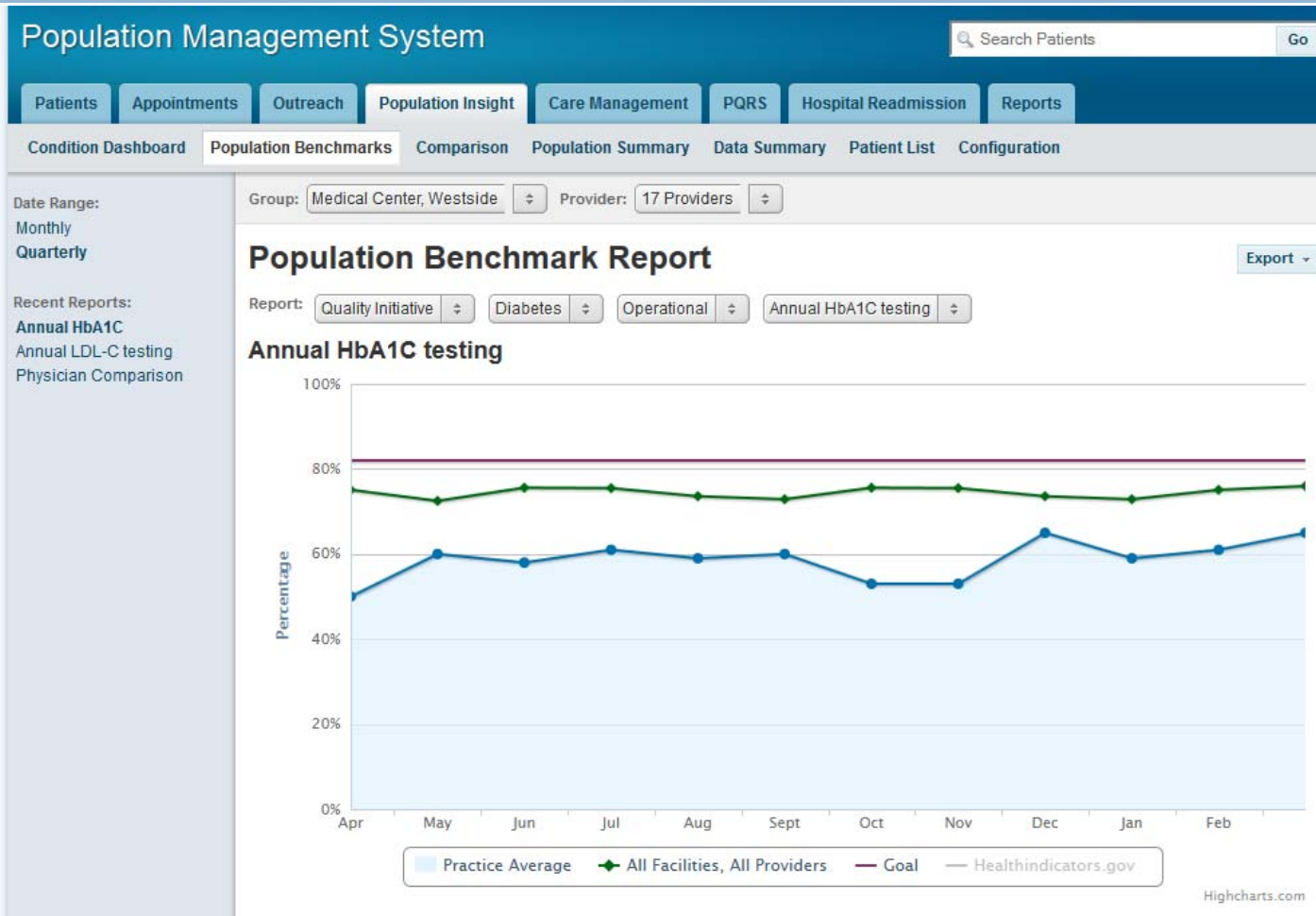
From: July 13, 2011 To: July 20, 2011 Priority: All

Export Print

<input type="checkbox"/>	Time	Patient	Priority	Appt. Type	Alerts & Recommendations	
Casey, Ben MD						
<input checked="" type="checkbox"/>	8:00am	Doe, John	●	Follow Up Visit (FUV)	HbA1c test	Print
<input checked="" type="checkbox"/>	10:00am	Barker, Wendy	●	Annual Phy.	BP Reading	Print
<input checked="" type="checkbox"/>	3:45pm	Black, Frank	●	Follow Up Visit (FUV)	Lipid Panel	Print
<input checked="" type="checkbox"/>	4:00pm	Smith, Howard	●	Annual Phy.	Lipid Panel	Print
Clark, Anne						
<input checked="" type="checkbox"/>	10:00am	Werner, Wolfgang	●	Non Fasting Lab (NFL)		Print
<input checked="" type="checkbox"/>	11:00am	Smith, Harry	●	HBA1c Test		Print
<input checked="" type="checkbox"/>	11:30am	Hollander, Sally	●	Annual Phy.		Print

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Measure Outcomes

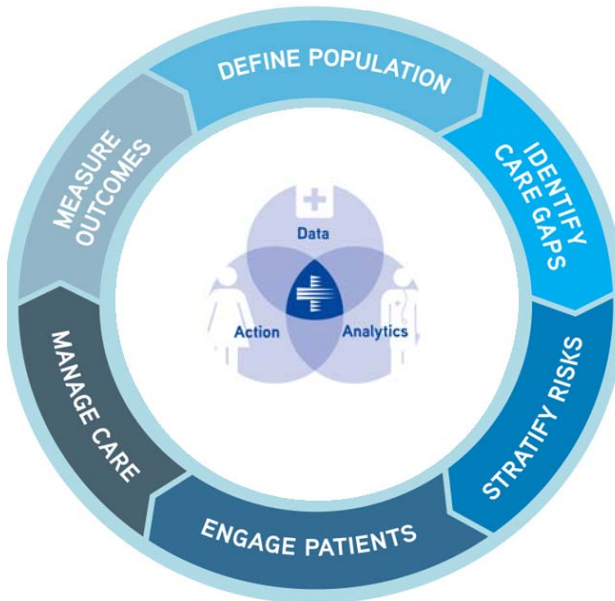


Compare Outcomes



Automation and Quality Data Are Fundamental to Medical Home

Total Population Management



- Supports Practice Transformation
- Helps Achieve PCMH, MU and ACO Readiness
- Improves Quality Outcomes
- Increases Revenue for Appropriate Services

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