Moving Towards the Patient Medical Home: Developing a Pathway to Success

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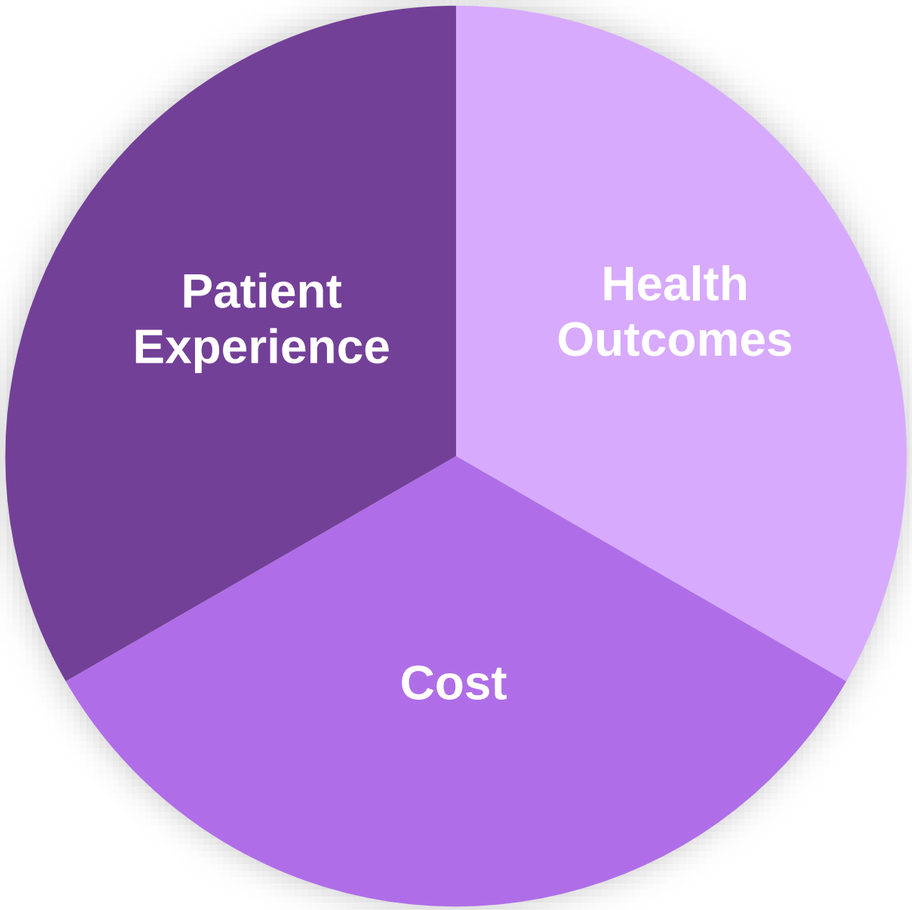
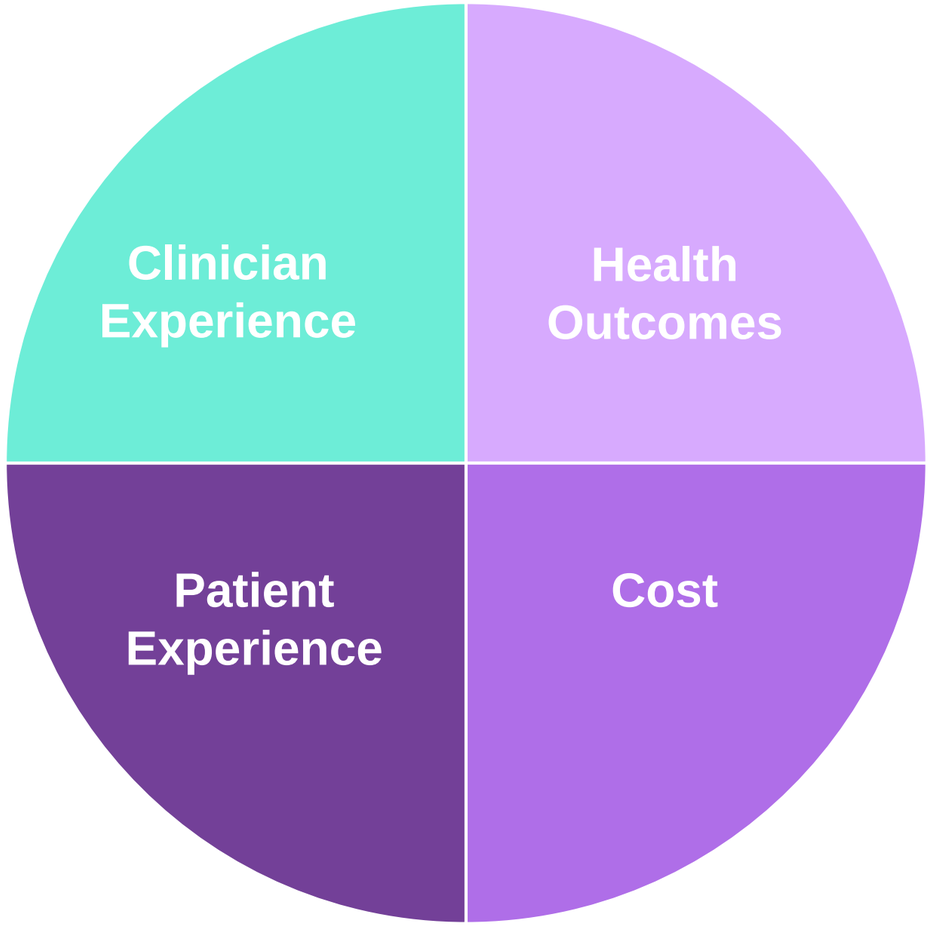
The Triple Aim



The ~~Triple~~ Quadruple Aim



DOI: 10.1377/hlthaff.2012.0359
HEALTH AFFAIRS 31,
NO. 9 (2012): 2010–2017

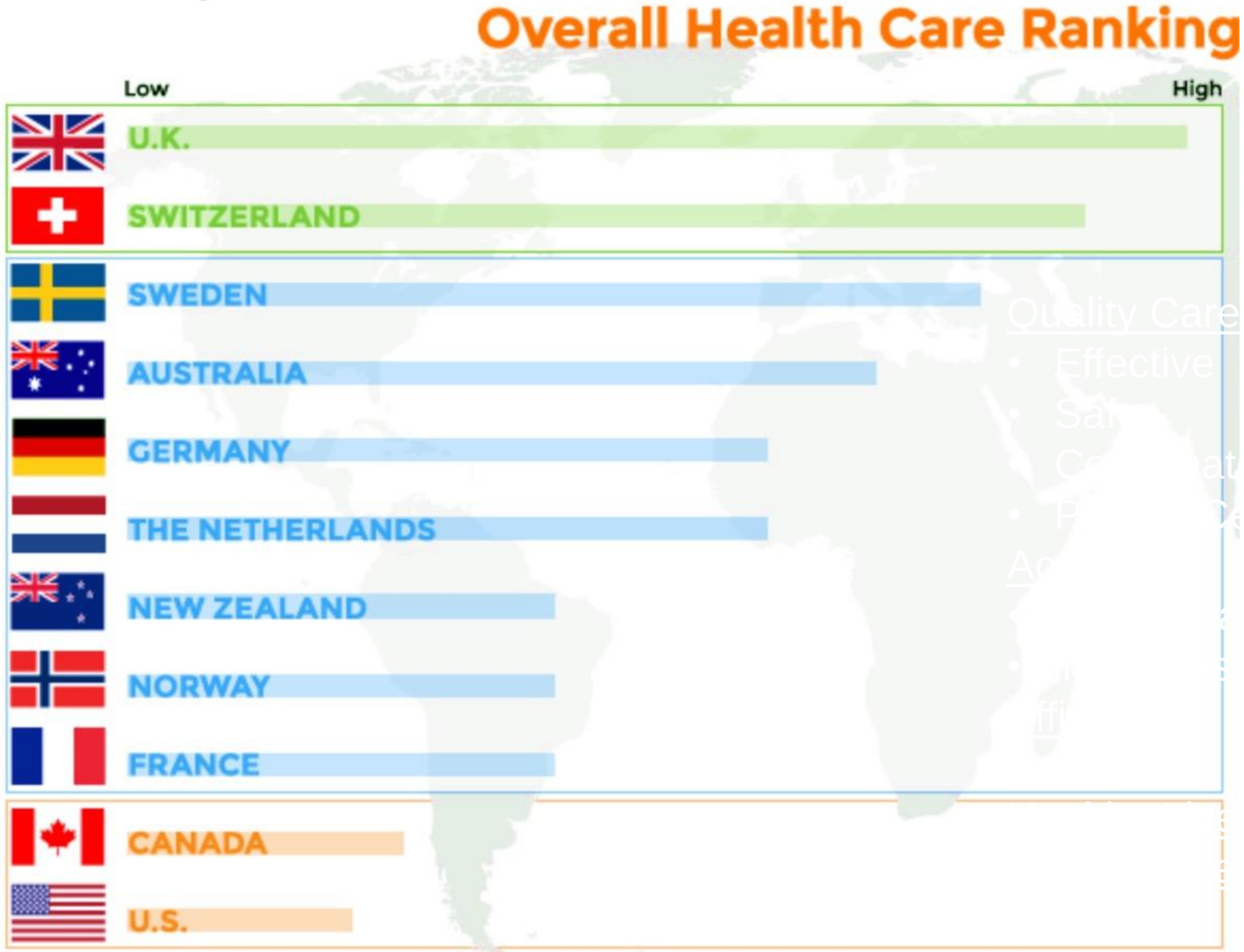
PATIENT-CENTERED MEDICAL HOMES

By Marjie G. Harbrecht and Lisa M. Latts

INNOVATION PROFILE

Colorado's Patient-Centered Medical Home Pilot Met Numerous Obstacles, Yet Saw Results Such As Reduced Hospital Admissions

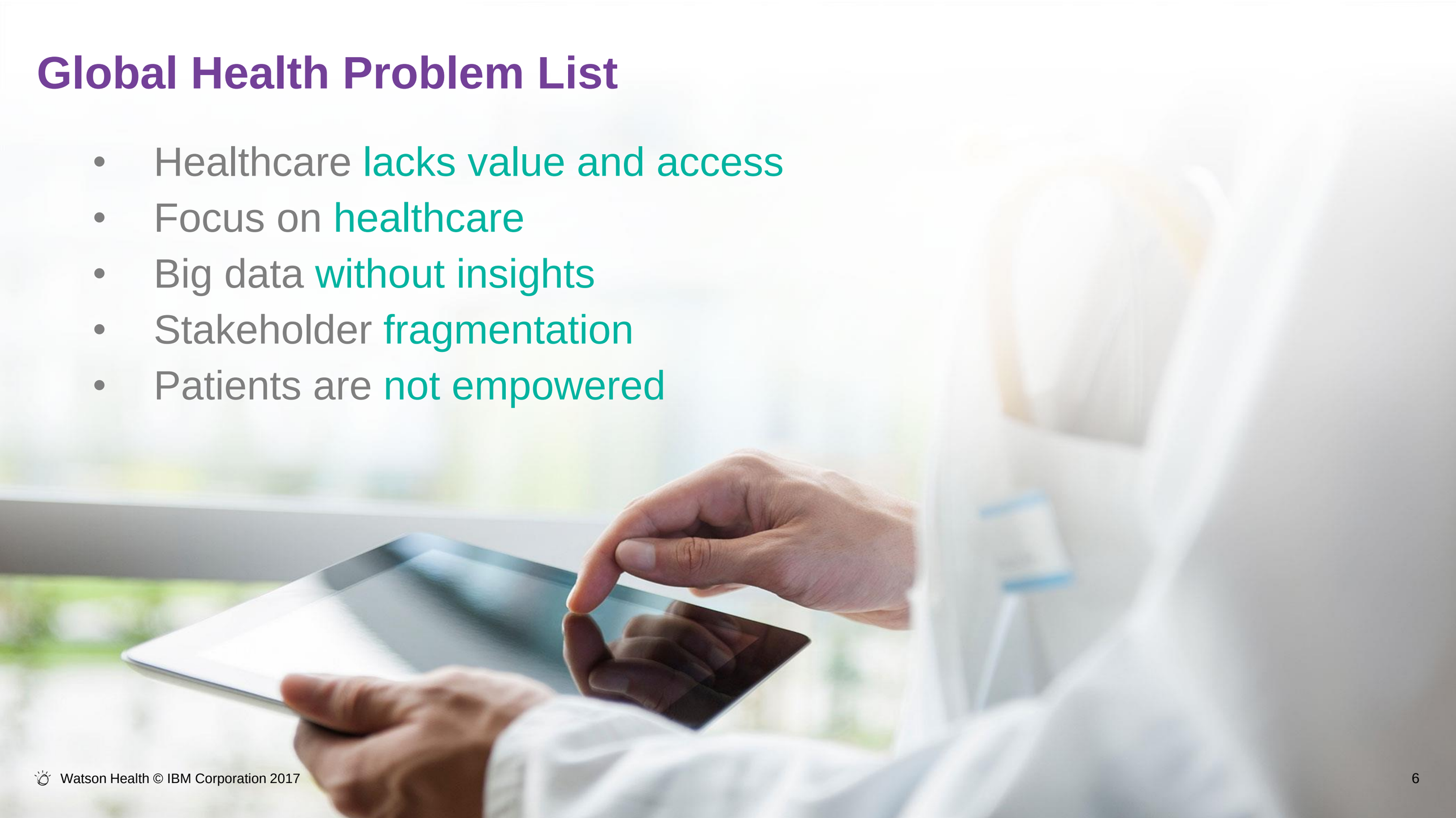
Where are we starting?



K. Davis, K. Stremikis, C. Schoen, and D. Squires, *Mirror, Mirror on the Wall, 2014 Update: How the U.S. Health Care System Compares Internationally,* The Commonwealth Fund, June 2014.

Global Health Problem List

- Healthcare lacks value and access
- Focus on healthcare
- Big data without insights
- Stakeholder fragmentation
- Patients are not empowered



By The Numbers

Every 73 days[1]

The rate medical data is expected to double every by 2020

2 billion[2]

The number of people over the age of 60 by 2050

$47 trillion[3]

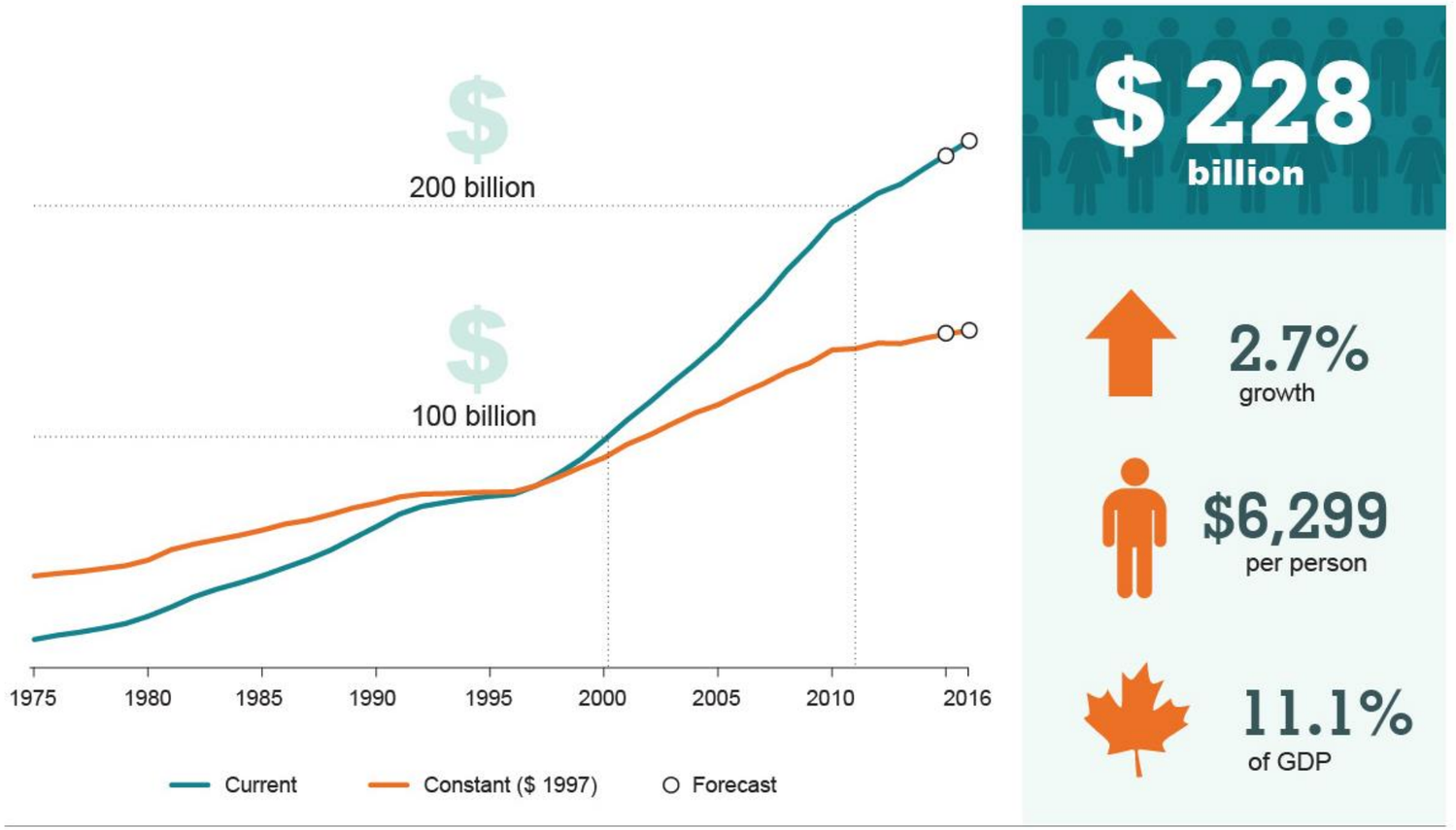
Cumulative estimated global economic impact of chronic disease between 2011 and 2030

12.9 million[4]

Global shortage of health-care workers by 2035

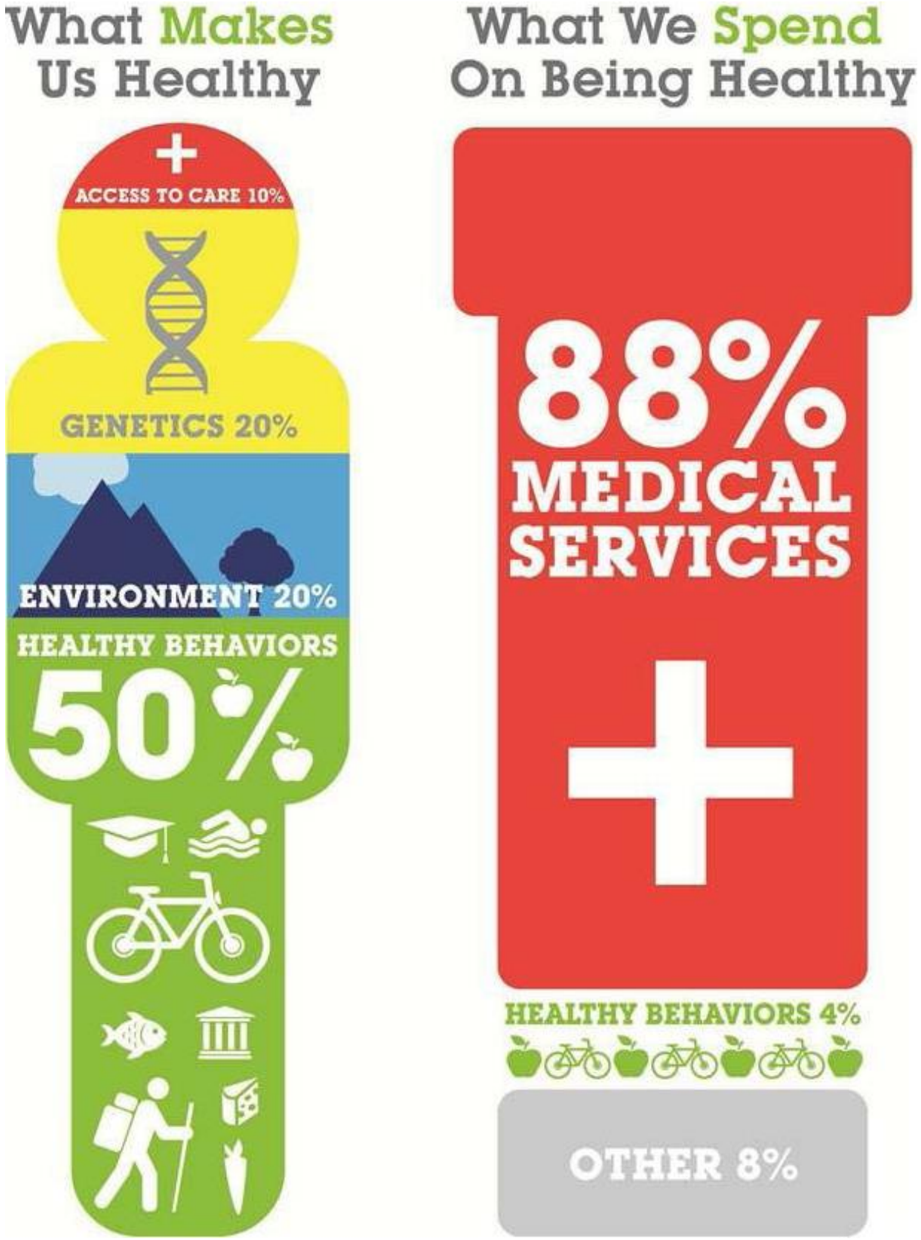
1.https://www-03.ibm.com/press/us/en/photo/46588.wss
2. http://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2015_Report.pdf
3. http://www3.weforum.org/docs/WEF_Harvard_HE_GlobalEconomicBurdenNonCommunicableDiseases_2011.pdf
4. http://www.who.int/mediacentre/news/releases/2013/health-workforce-shortage/en/

Healthcare Spending Continues To Rise



Source
National Health Expenditure Database, Canadian Institute for Health Information.

There is a mismatch between what affects health and what we spend on health



Source: Bipartisan Policy Center, “F” as in Fat: How Obesity Threatens America’s Future (TFAH/RWJF, Aug. 2013)

Physicians Are Not Happy

Physicians bearing heavy workloads as B.C. battles family doctor shortage

Number of graduating physicians in the province not enough to meet growing demand

Walk-in clinics getting slammed by doctor shortage, owner says

Young Canadians Are Suffering Through Canada's Family Doctor Shortage

EB EMILY BARON CARLOTT

Canada's doctor shortage will only worsen in the coming deca

A backlog of 176,000 British Columbians looking for a family physician in 2010 has grown to more than 200,000.

Health Media Today Become a fan

Betty

What's the Cure for Canada's Doctor Shortage?

Posted: 07/12/2013 5:25 pm EDT | Updated: 09/11/2013 5:12 am EDT

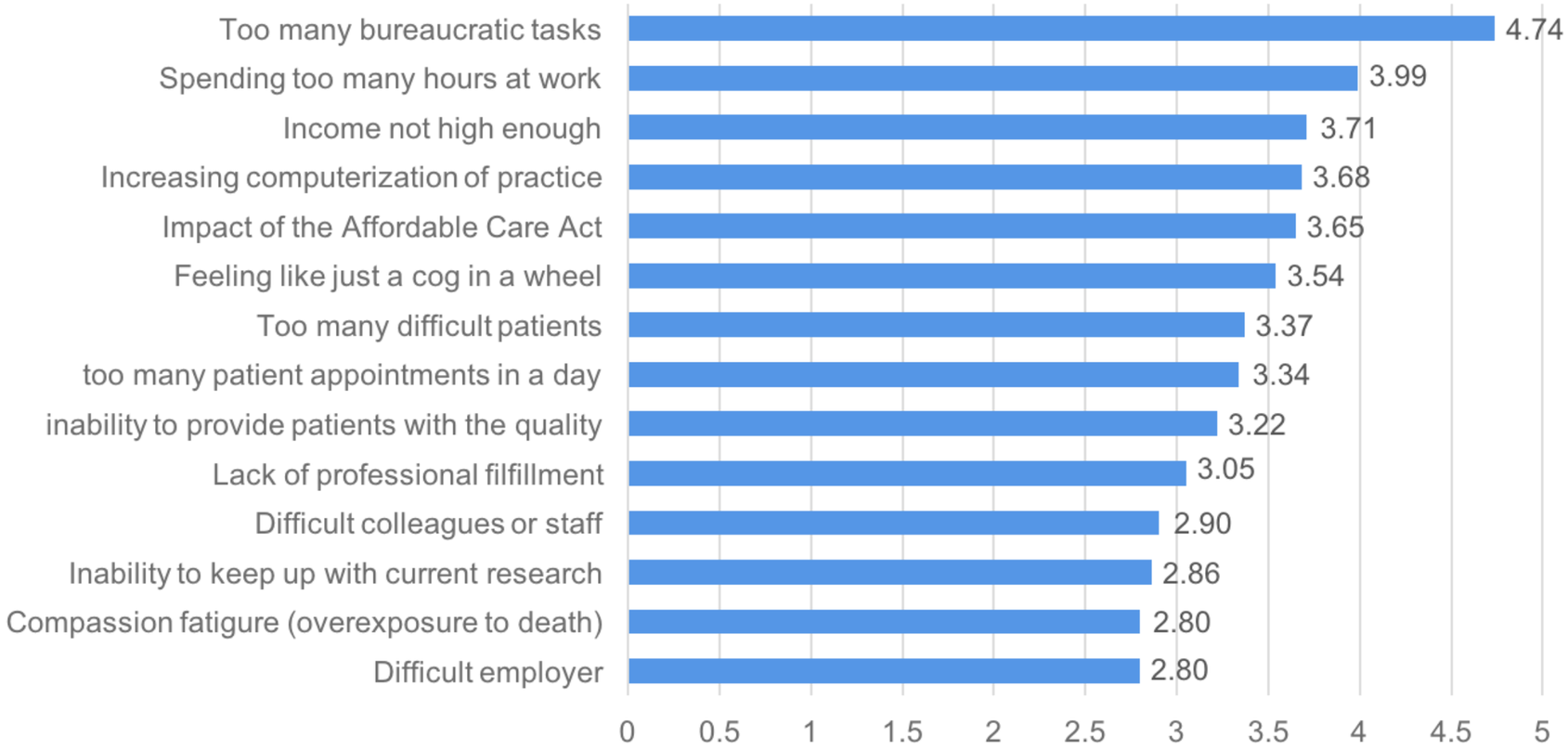
http://www.huffingtonpost.ca/health-media-today/canada-doctor-shortage_b_3586754.html
https://www.fraserinstitute.org/article/canadas-doctor-shortage-will-only-worsen-coming-decade
https://www.vice.com/en_ca/article/young-canadians-are-suffering-through-canadas-family-doctor-shortage
http://www.vancouversun.com/health/family+doctor+shortage+worsening+despite+campaign+promise/11029139/story.html
http://www.cbc.ca/news/canada/british-columbia/walk-in-clinics-patient-caps-1.3480377
http://www.cbc.ca/news/canada/british-columbia/physicians-bearing-heavy-workloads-as-b-c-battles-family-doctor-shortage-1.3859680

…Leading To Burnout

2/3 of Canadian physicians feel their workload is too demanding

1/2 feel that tiredness, exhaustion or sleep deprivation affects the care they deliver

1/2 feel that their family and personal lives have suffered



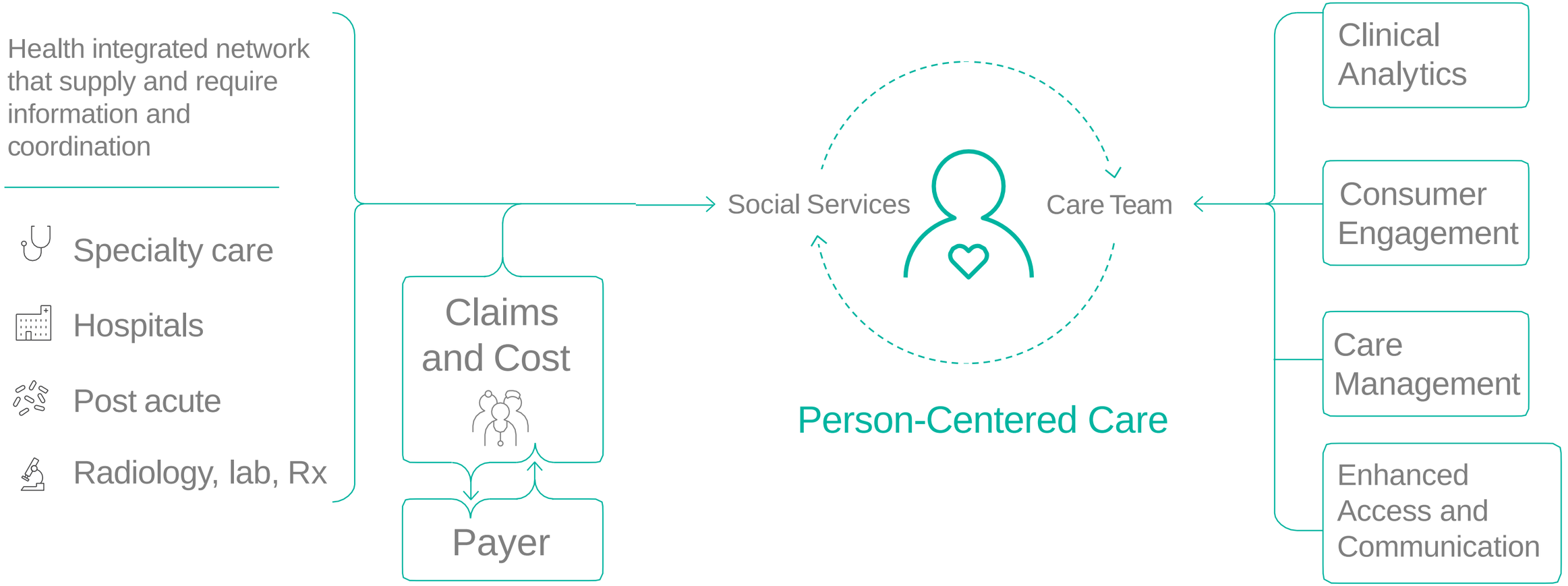
Michael Fralick MD, Ken Flegel. CMAJ 2014. DOI:10.1503/cmaj.140588

Physician Burnout: It Just Keeps Getting Worse - Medscape - Jan 26, 2015

So How Do We Fix It?

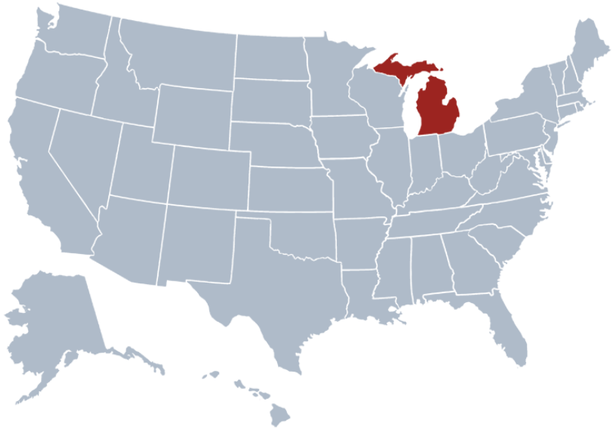
Move from a system that encourages and rewards VOLUME to one that focuses on VALUE and at its core: Patient Medical Home

A Person-Centered Care System



PCMH Results – State of Michigan BCBS Plan

- > 4,500 primary care doctors at 1,638 practices around the state in its seventh year of operation
- These practices care for more than 1.4 million BCBSM members



15% Decrease in adult ER visits

21.4% Decrease in adult ambulatory care sensitive inpatient stays

18.1% Decrease in adult primary care sensitive ER visits

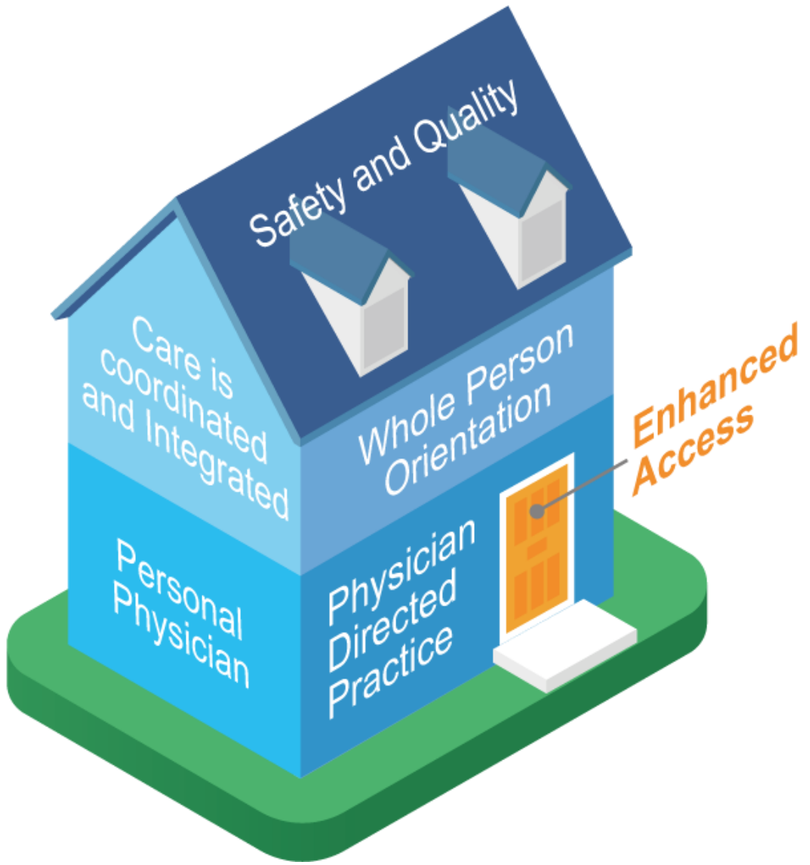
12.7% Decrease in adult high-tech radiology usage

17.2% Decrease in pediatric ER visits

22.7% Decrease in pediatric primary-care sensitive ER visits

In Prospective Studies, PMH Leads to Better Cost Outcomes

36.3	Drop in hospital days
32.2%	Drop in ER use
12.8%	Increase in chronic medication
-15.6%	Total cost
10.5%	Drop in inpatient specialty care costs
18.9%	Ancillary costs down
15.0%	Outpatient specialty down



Outcomes of Implementing Patient Centered Medical Home Interventions: A Review of the Evidence from Prospective Evaluation Studies in the US – PCPCC Oct 2012

Overall Evidence Review: PMH Gets Results

21 of 23 studies that reported on cost measures found reductions in one or more measures

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23 of 25 studies that reported on utilization measures

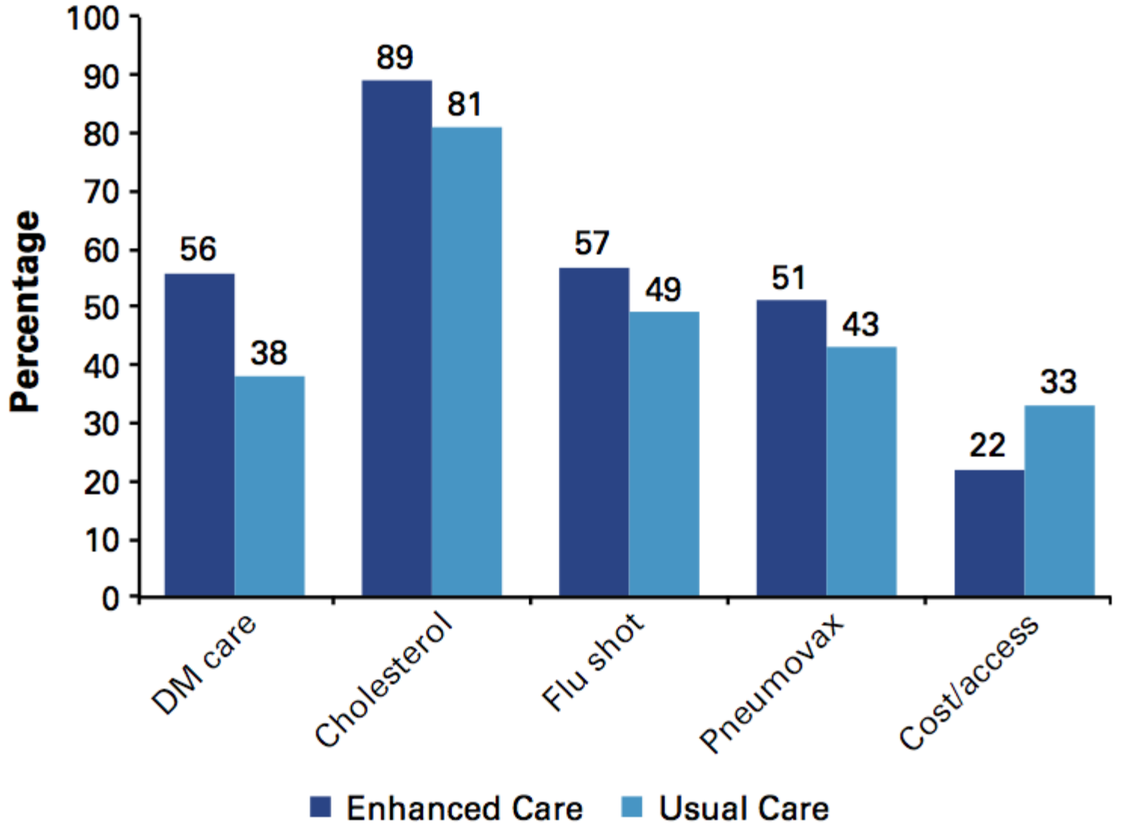
found reductions in one or more measures

The Patient-Centered Medical Home's Impact on Cost and Quality . Annual Review of Evidence 2014-2015 Published February 2016

PCMH Effect on Quality

Massachusetts experience:

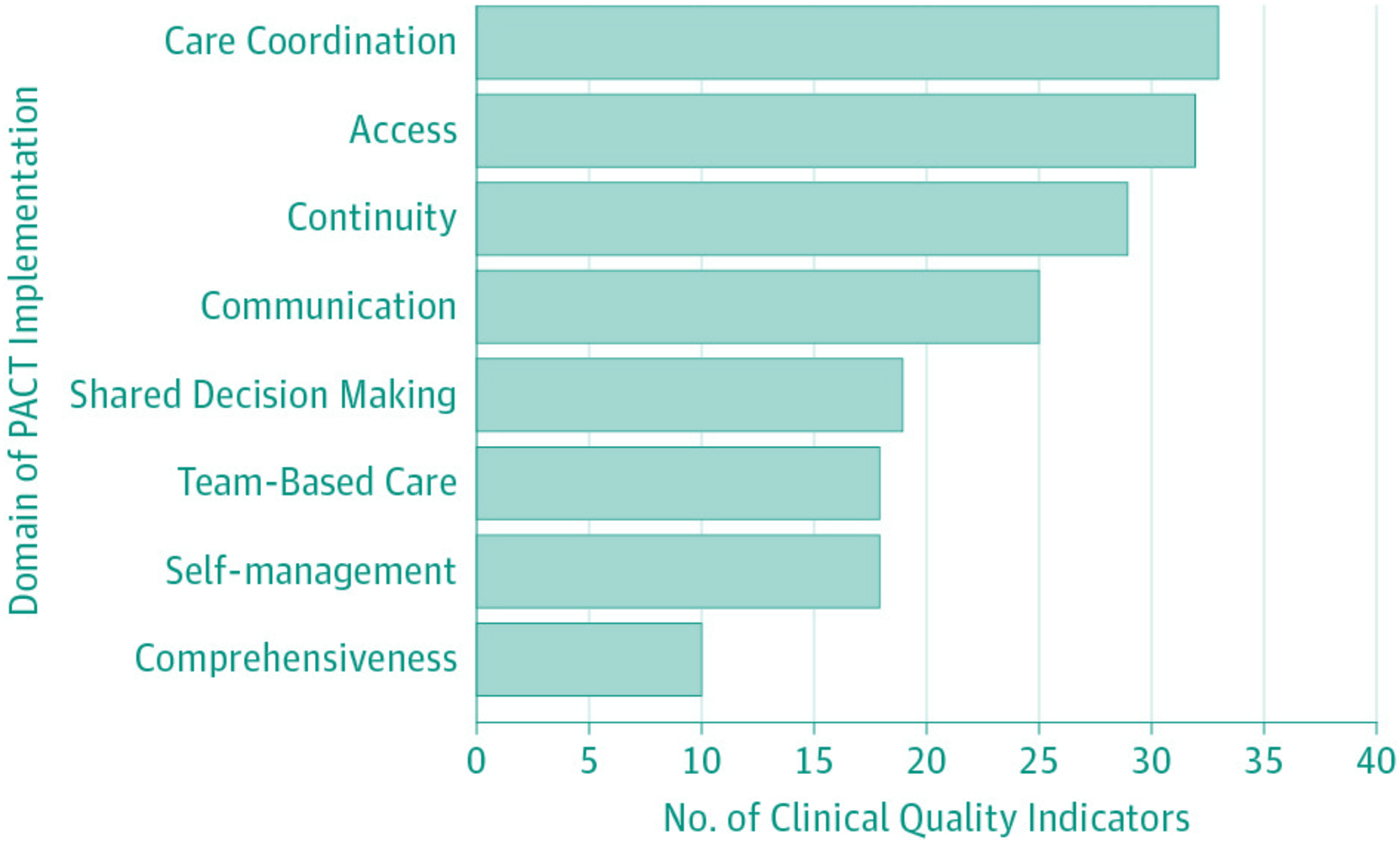
Comparing outcomes in primary care with EHR vs. practices with enhanced primary care.



Adjusted Rates for Quality Processes Controlling for Race, Sex, Income, Education, and Insurance Status

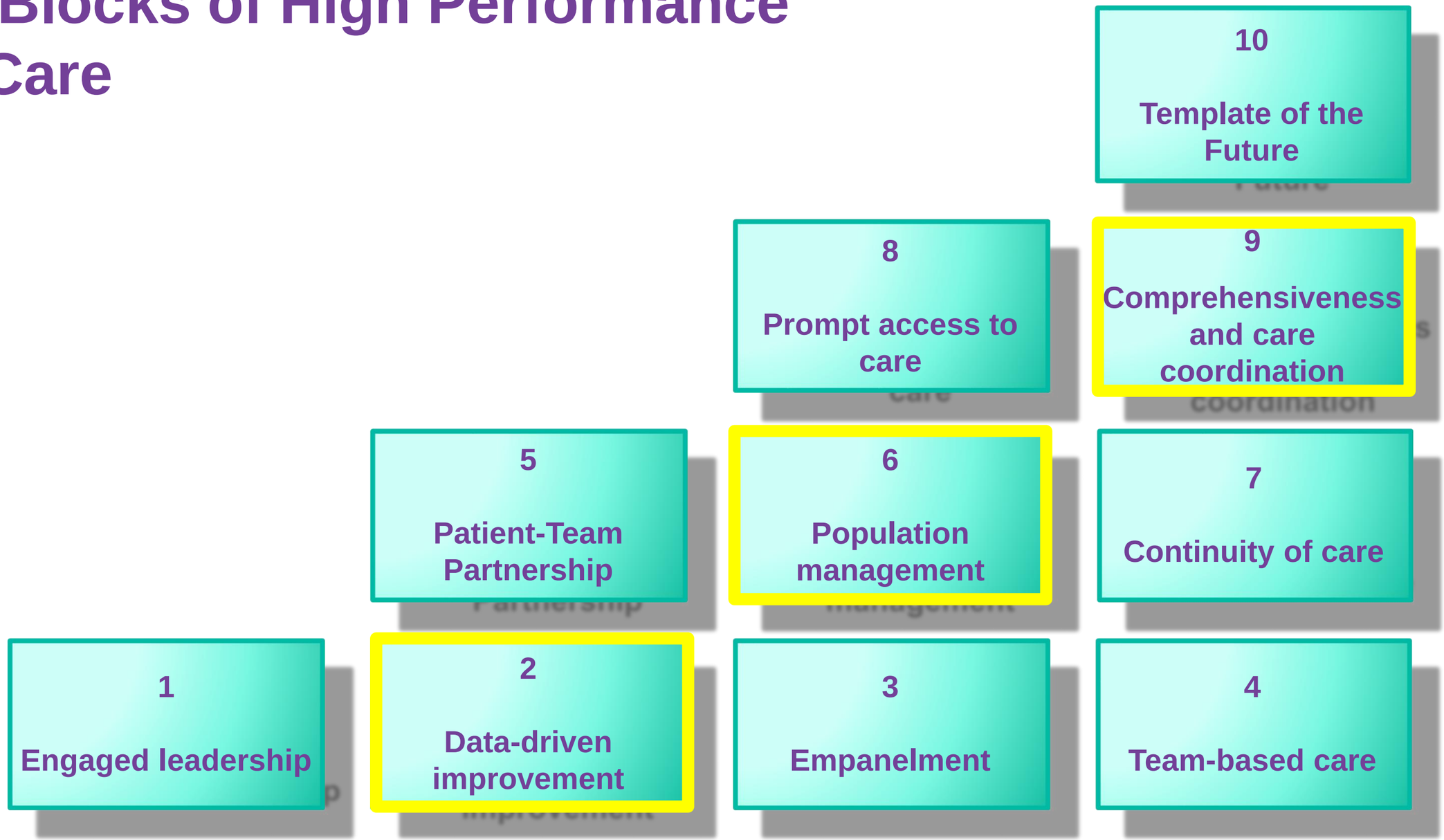
Britton et al. Enhanced Primary Care and Impact on Quality of Care in Massachusetts. *Am J Manag Care. 2016;22(5):e169-e174*

Components of the Medical Home Most Directly Tied to Quality



Clinical Quality and the Patient-Centered Medical Home. Karin Nelson, et al.
JAMA Intern Med. Published online May 1, 2017. doi:10.1001/jamainternmed.2017.0963

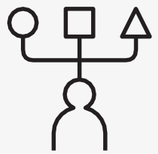
Building Blocks of High Performance Primary Care



Bodenheimer et al. Ann Fam Med **March/April 2014** vol. 12 no. 2 **166-171**

Enabling Providers on Their Path to PMH

Close and Address Gaps in Care



Proactive Patient Outreach

- What is my population profile?
- Where are my gaps in care?
- Who should I engage?

Risk and Quality Analytics

Performance Management

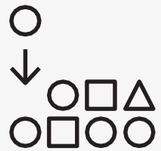
- Who is at risk?
- How can we improve?
- What is my practice variation?

Enabling Providers & Patients to Work Together

Population Health

- How is my chronic care population?
- What is the health status over time?

High-touch Care Management & Coordination



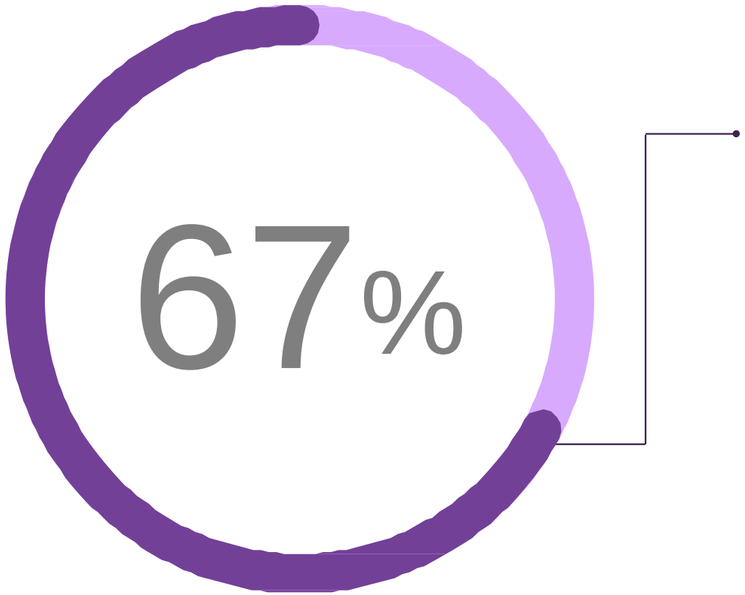
Care Management

- What care coordination activities should I take?
- What is the ideal care plan?
- What social determinants exist?

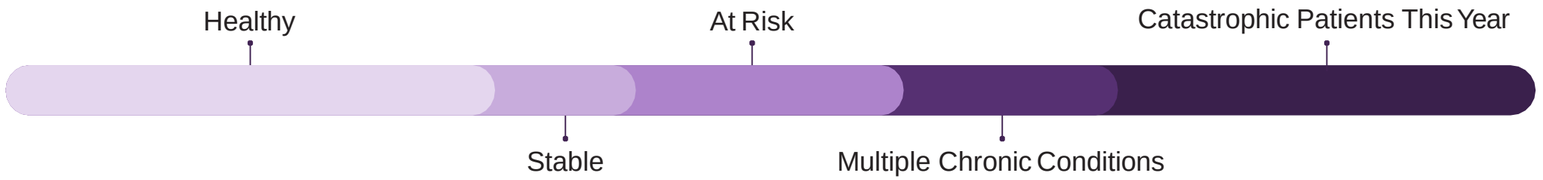
Using Data to Manage a Population

	40-60%	20-25%	5-15%	2-3%
Patient Stratification	**HEALTHY**	**AT RISK**	**CHRONIC**	**CATASTROPHIC**
				
Care Delivery	Encourage healthy lifestyles	Intervene on risk and keep from becoming chronic	Prevent disease progression and avoid unnecessary complications	Manage benefits, controls costs, provide dignity through end of life
	Fully Automated	**Blended Automated with Health Coaches**	**Blended Automated with Care Managers**	**Case Management**

Intervening with the Right Patients at the Right Time



Catastrophic Patients This Year That Were Not Catastrophic Last Year



Source: Healthcare Risk Adjustment and Predictive Modeling by Ian Duncan

Data-Driven Improvement

Catastrophic

Individuals with >9 A1c and no office visits are sent a text message to call care manager

Chronic

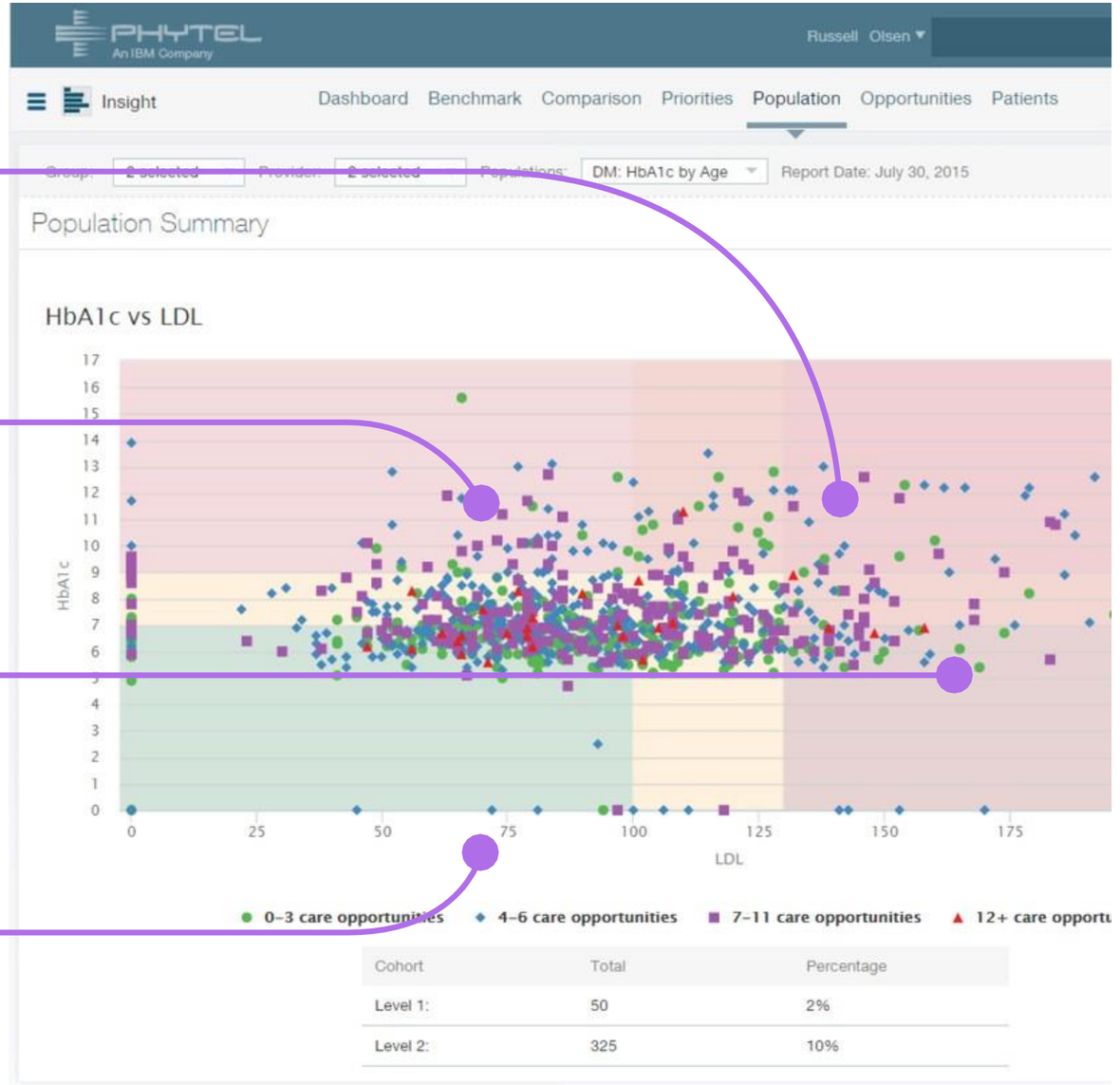
Individuals with >9 and BMI >35 are sent an automated invitation to a group visit with diabetes dietician

At risk

Individuals between A1c 7 and 9 are sent to an automated message to encourage enrollment in diabetes self-management courses

Healthy

Diabetics with <7.0 are sent an email message emphasizing the importance of nutrition and exercise to maintain low A1c levels with a link to a mobile app to track their progress



Population Health Management: Patient Engagement as an Enabler

Studies show that patients who are less engaged in their own health incurred 21% higher costs[1]

Aging population is growing
~23% of Canadians could be seniors by 2031[2]
Seniors now outnumber children in Canada[3]

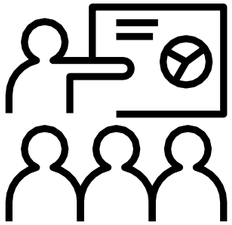
Chronic conditions drive 75% of national healthcare spending[4]
38% of the population has at least one chronic condition[4]

Impact on patient non-compliance
50% of patients are not getting recommended care[5]

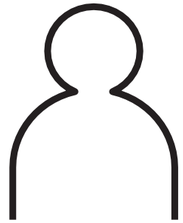
1. http://content.healthaffairs.org/content/32/2/216.full
2. http://www.cbc.ca/news/politics/2016-census-age-gender-1.4095360
3. http://www.phac-aspc.gc.ca/publicat/hpcdp-pspmc/36-8/assets/pdf/ar-04-eng.pdf
3. http://www.aha.org/content/00-10/071204_H4L_HighestQualityCare.pdf
4. https://www.brookings.edu/research/improving-quality-and-value-in-the-u-s-health-care-system/
5. McGlynn, et al. N Engl J Med 2003; 348:2635-2645June 26, 2003DOI: 10.1056/NEJMsa022615

Biggest Obstacles to Patient Engagement at Provider Level

Overworked Physicians

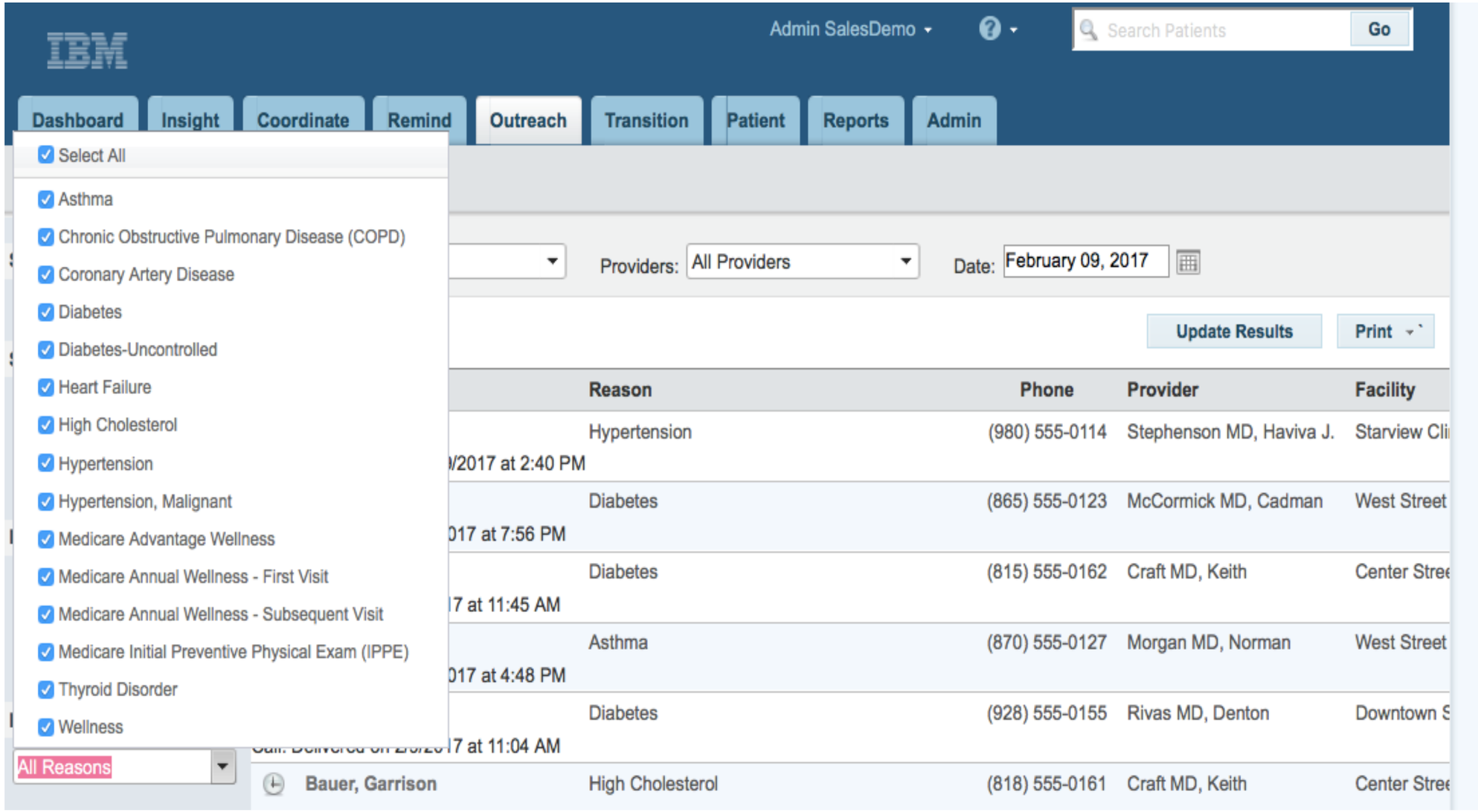


Insufficient Provider Training

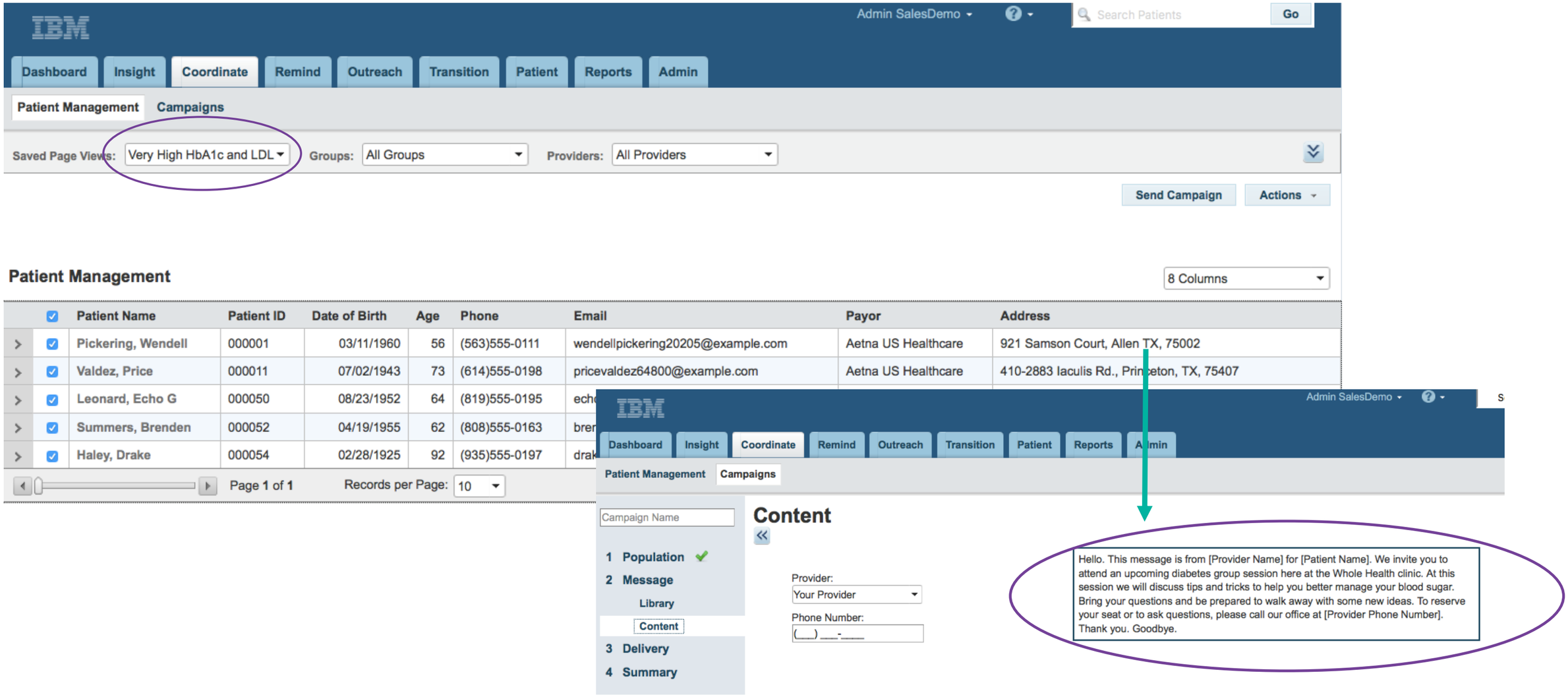


Clinical Information Systems that Fail to Adequately Track Patients

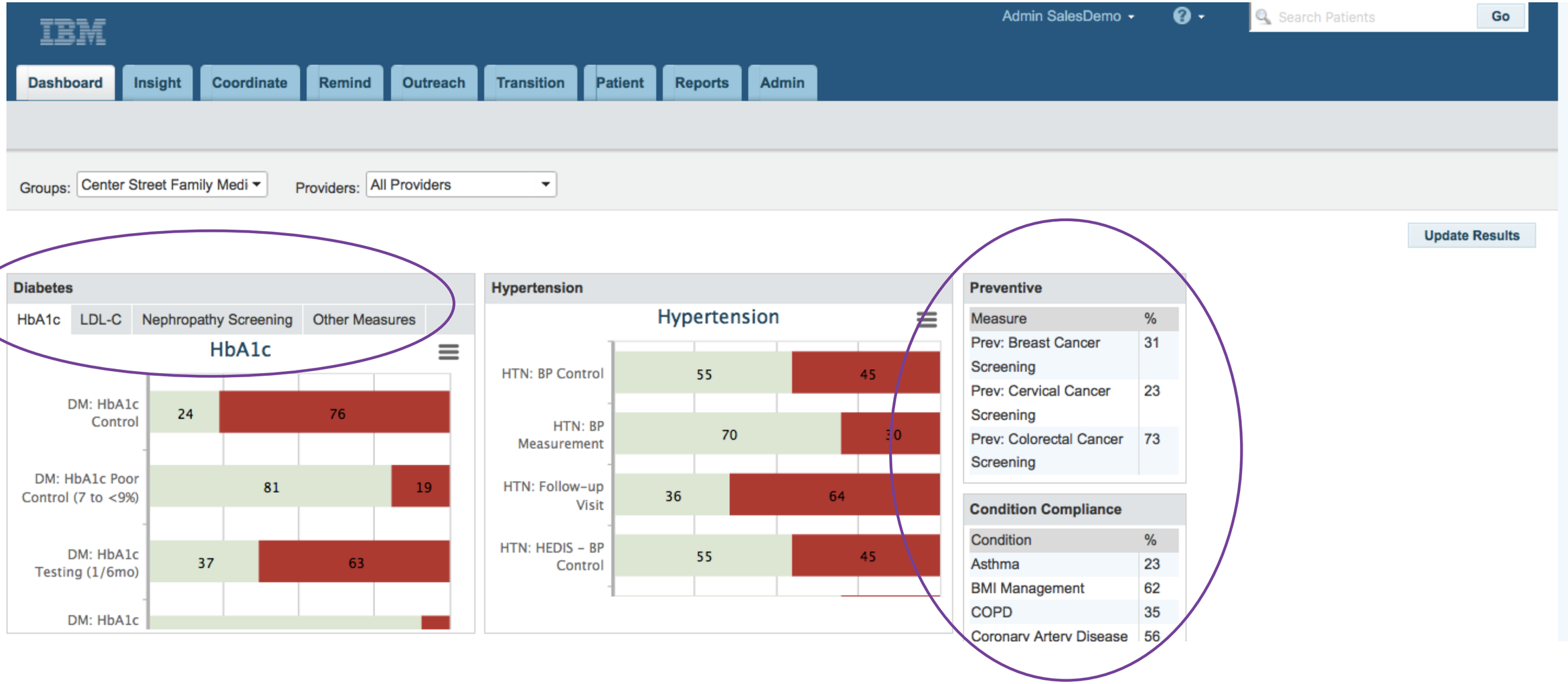
Automated Patient Engagement



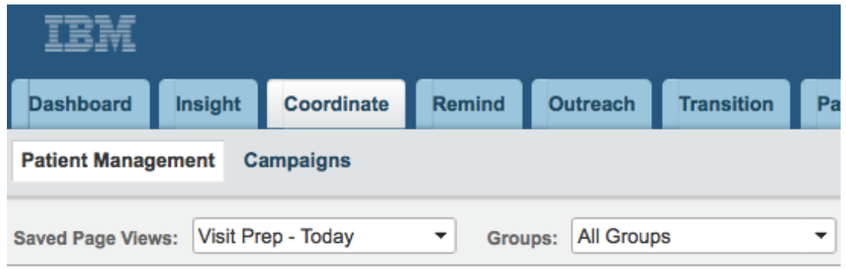
Targeting Campaigns for Population Health Management



Visualize Quality Metrics

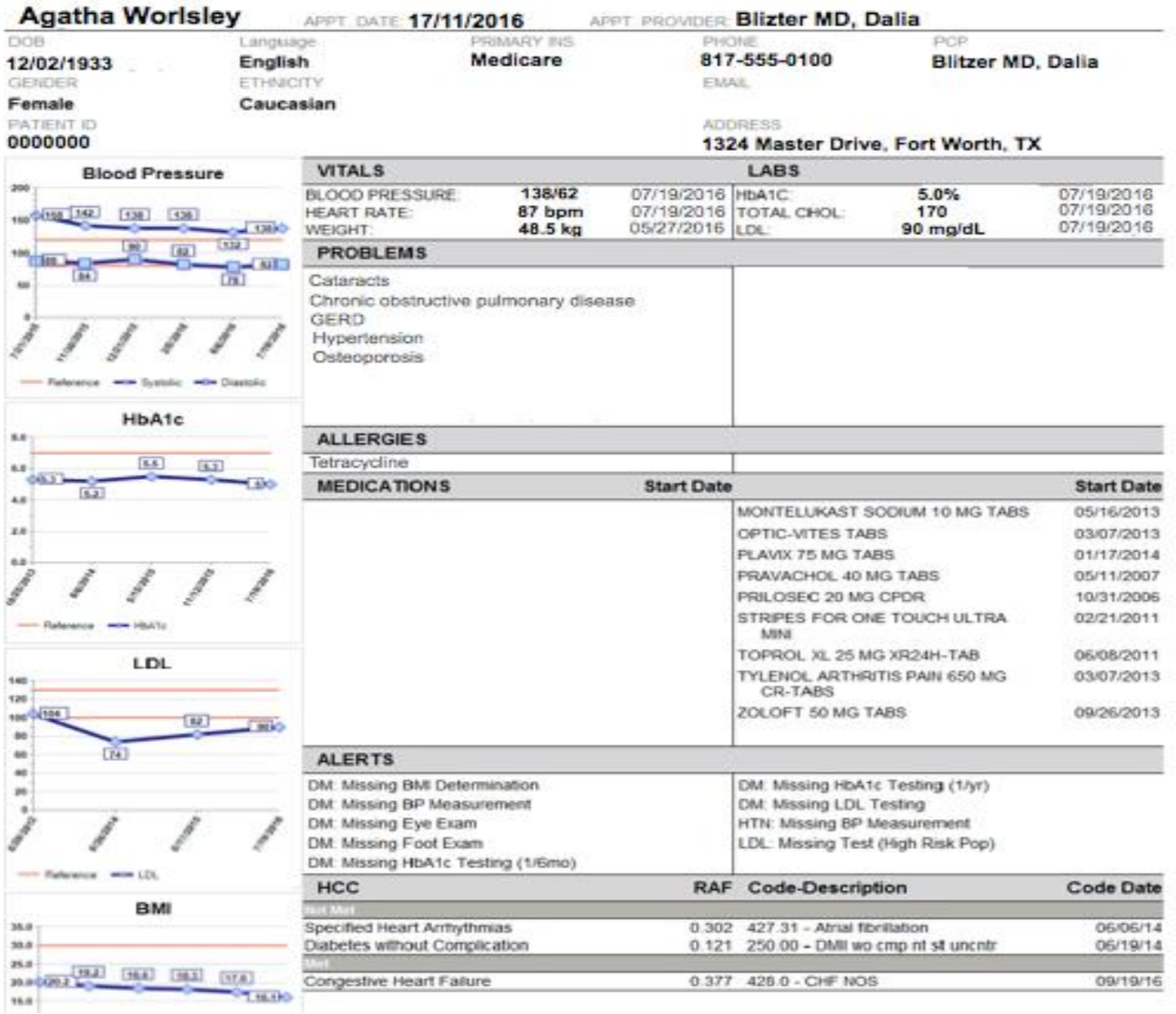


Comprehensiveness & Care Coordination



Patient Management

	Appointment Date/Time	Patient Name	Date of Birth	Appointm
Appointment Provider: Wilcox MD, Adara				
	2/9/2017 9:00:00 AM	Worlsley, Agatha	02/12/1933	OFFICE V
	2/9/2017 9:30:00 AM	Spire, Donald	09/23/1951	OFFICE V
	2/9/2017 10:00:00 AM	Lee, Loretta	03/07/1941	OFFICE V
	2/9/2017 11:15:00 AM	Valdez, Price	07/02/1943	NEW PATI
	2/9/2017 12:15:00 PM	Sparks, Aurora	06/22/1961	OFFICE V
	2/9/2017 1:15:00 PM	Joyner, Danielle	06/13/1951	PHYSICAI
Appointment Provider: Craft MD, Keith				
	2/9/2017 10:00:00 AM	Reese, Amena	02/04/1965	NEW PATI
	2/9/2017 1:00:00 PM	Gillespie, Lenore	01/24/1964	OFFICE V



Benefits of Care Management

Admission/ Readmission

- Avg. Admissions decreased 20.6%
- Avg. Readmissions decreased 10%

Emergency Department Utilization

- Average ED utilization rates dropped 21.5%

Cost of Care

- Average per capita expenditures dropped 13.1%

The COMMONWEALTH FUND

Caring for High-Need, High-Cost Patients: What Makes for a Successful Care Management Program?

Clemens S. Hong, Allison L. Siegel, and Timothy G. Ferris

Quality of Care

- “Mortality was 63% lower in the intervention group vs. controls”
- “Decreased body-mass index by 59.1%, improved HbA1c 66.7% and improved in LDL by 31.6%”

Provider Experience

- “86% of PCPs reported the program allowed them to provide more comprehensive care”
- “87% of practices reported improved chronic disease care”

Quality of Life/Patient Experience

- “SF-36 scores improved in four of eight scales”
- “SF12 physical functioning and mental functioning increased by 15% and 16%”

http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2014/aug/1764_hong_caring_for_high_need_high_cost_patients_ccm_ib.pdf

Intelligent Care Management

Orlando Health – saving time for care managers

Orlando Health Physician Associates' Care Coordination Team faced a number of challenges in providing care to patients transitioning out of hospital:

- Care Managers had to access multiple systems to see the relevant information for a patient
- Workflow was cumbersome, with no guidance on steps to follow
- Led to more time preparing for and conducting outreach calls and assessments

"Using [this solution] has helped us Lean our process and eliminate unnecessary waste. The unintended outcome is that after using the product for 2 months we have seen an increase in productivity of our Care Managers and it has actually given them back 2 hours of their day."

Suzanne Gruszka, RN
Sr. Director, Health Services
Orlando Health Physician Associates

Our Mission

We, Watson Health, aspire to improve lives and give hope by delivering innovation to address the world’s most pressing health challenges through data and cognitive insights.

Thank you

@DrLisaLatts

@IBMWatsonHealth

Lisa Latts MD

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Table 1. The 10 Goals of the Patient Medical Home Model

1. Patient centered	Provide services that are responsive to patients' and their families' feelings, preferences, and expectations
2. Personal family physician	The most responsible provider of a given patient's medical care
	Every person in Canada should have a personal family physician
3. Team-based care	Offer a broad scope of services carried out by teams or networks of clinicians; inclusive of nurses, peer physicians, and others
4. Timely access	Timely access to appointments in the practice
	Advocate for and coordinate timely appointments with other health and medical services required
5. Comprehensive care	Provide a comprehensive scope of family practice services by working collaboratively with other professionals
	Address public health needs
	Taking population health effects into account
6. Continuity	Offer continuous care over time and in different settings
	Advocate on the patients' behalf for continuity of care throughout the health care system
	Preserve constant relationships and continuous medical information for patients
7. Electronic records and health information	Maintain electronic medical records
8. Education, training, and research	Serve as a model place for training students, residents, and other health professionals
	Carry out and/or encourage staff to be involved in primary care research
9. Evaluation	Carry out ongoing evaluation as part of the commitment to continuous quality improvement
10. System support	Internal support through governance and management structures
	External support by stakeholders, the public, and other medical and health professionals and their organizations across Canada

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All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics may vary by customer.