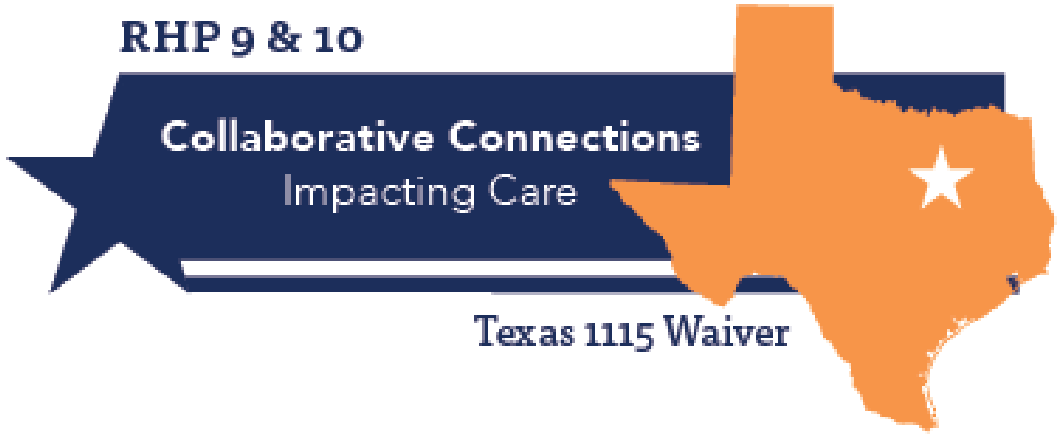
RHP 9 & 10
Collaborative Connections
Impacting Care
Texas 1115 Waiver

# Collaborative Connections Impacting Care – Day 2

Thursday, May 28, 2015

# Introduction

**Fred Cerise, MD, MPH**
**President and CEO**
**Parkland Health & Hospital System**

RHP 9 & 10
Collaborative Connections
Impacting Care
Texas 1115 Waiver

# An ACA Progress Report

# May 28, 2015

*Fred Cerise*
*Parkland Health & Hospital System*
*RHP 9 Anchor*

Parkland

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# ACA Update

- Coverage/Access
- Cost
- Quality

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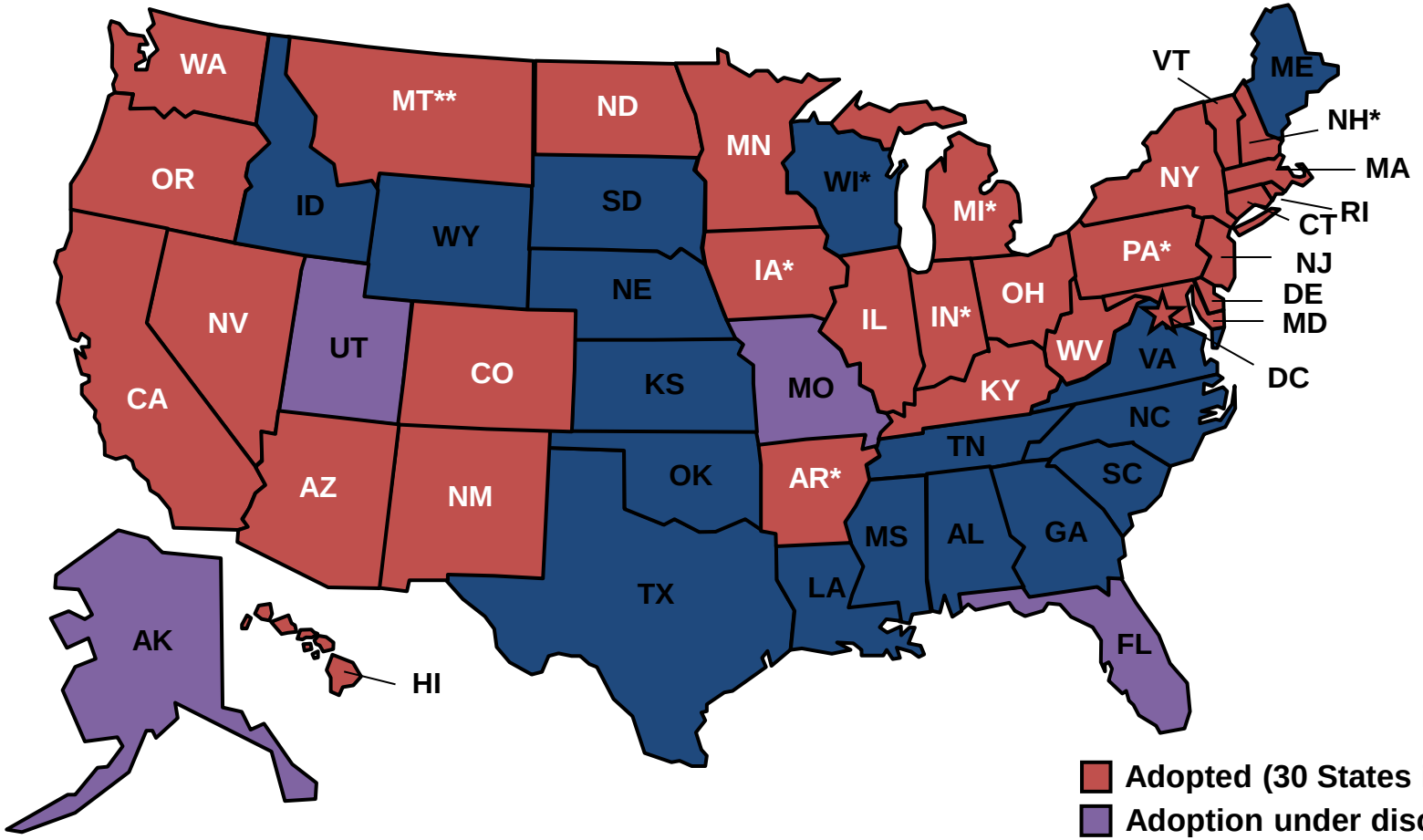
# Medicaid Expansion

## Current Status of State Medicaid Expansion Decisions




- Adopted (30 States including DC)
- Adoption under discussion (4 States)
- Not Adopting At This Time (17 States)

NOTES: Under discussion indicates executive activity supporting adoption of the Medicaid expansion. **MT has passed legislation adopting the expansion; it requires federal waiver approval. *AR, IA, IN, MI, PA and NH have approved Section 1115 waivers. Coverage under the PA waiver went into effect 1/1/15, but it is transitioning coverage to a state plan amendment. Coverage under the IN waiver went into effect 2/1/15. WI covers adults up to 100% FPL in Medicaid, but did not adopt the ACA expansion.

SOURCE: "Status of State Action on the Medicaid Expansion Decision," KFF State Health Facts, updated April 29, 2015.
http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/

# Coverage in Expansion and Non-Expansion States

## HEALTH INSURANCE COVERAGE AND THE AFFORDABLE CARE ACT
## May 5, 2015

| | Baseline Uninsured Rate | Q1 2014 | Q3 2014 | Q1 2015 |
|---|---|---|---|---|
| | | Change in Percentage Points from Baseline Trend | | |
| Non-expansion | 23.4 | -2.5 | -4.5 | -6.9 |
| <138% of FPL | 61.8 | 2.7 | -0.9 | -7 |
| 139-400% of FPL | 22.2 | -4.7 | -7.3 | -10.1 |
| >400% of FPL | 1.9 | 0.4 | -0.6 | -1.1 |
| Expansion | 18.2 | -2.8 | -6.2 | -7.4 |
| <138% of FPL | 55.0 | -2.7 | -5.5 | -13 |
| 139-400% of FPL | 18.1 | -4.1 | -8.3 | -9.5 |
| >400% of FPL | 1.8 | -0.4 | -1.3 | -1.3 |

Source: Office of the Assistant Secretary for Planning and Evaluation (ASPE) analysis of Gallup-Healthways Well-Being Index survey data through 3/4/15. All models update the analysis from Sommers et al, *N Eng J Med* 2014. All models use nationally-representative survey weights and adjust for age, sex, race, ethnicity, employment, household income, state of residence, +/- a linear time trend; *ASPE defines states that expanded their Medicaid programs as of February 1, 2015. States include AZ, AR, CA, CO, CT, DE, DC, HI, IL, IN, IA, KY, MD, MA, MI, MN, NV, NH, NJ, NM, NY, ND, OH, OR, PA, RI, VT, WA, and WV.

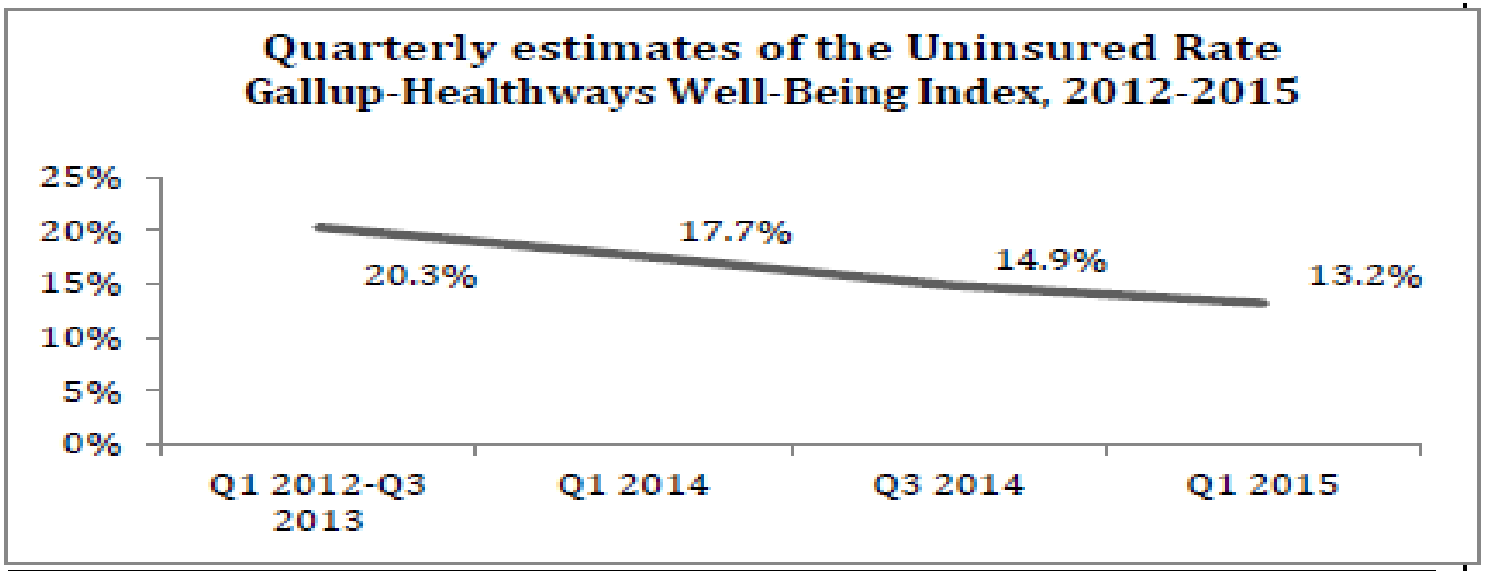
# Health Insurance Coverage by Race/Ethnicity

## HEALTH INSURANCE COVERAGE AND THE AFFORDABLE CARE ACT
## May 5, 2015

| | Baseline Uninsured Rate | Q1 2014 | Q3 2014 | Q1 2015 |
|---|---|---|---|---|
| | | Change in Percentage Points from Baseline Trend | | |
| Whites | 14.3 | -1.7 | -4.7 | -5.3 |
| African Americans | 22.4 | -4.5 | -7.2 | -9.2 |
| Latinos | 41.8 | -4.1 | -5.9 | -12.3 |

Source: Office of the Assistant Secretary for Planning and Evaluation (ASPE) analysis of Gallup-Healthways Well-Being Index survey data through 3/4/15. All models update the analysis from Sommers et al, *N Eng J Med* 2014. All models use nationally-representative survey weights and adjust for age, sex, race, ethnicity, employment, household income, state of residence, +/- a linear time trend.

# More Getting Covered



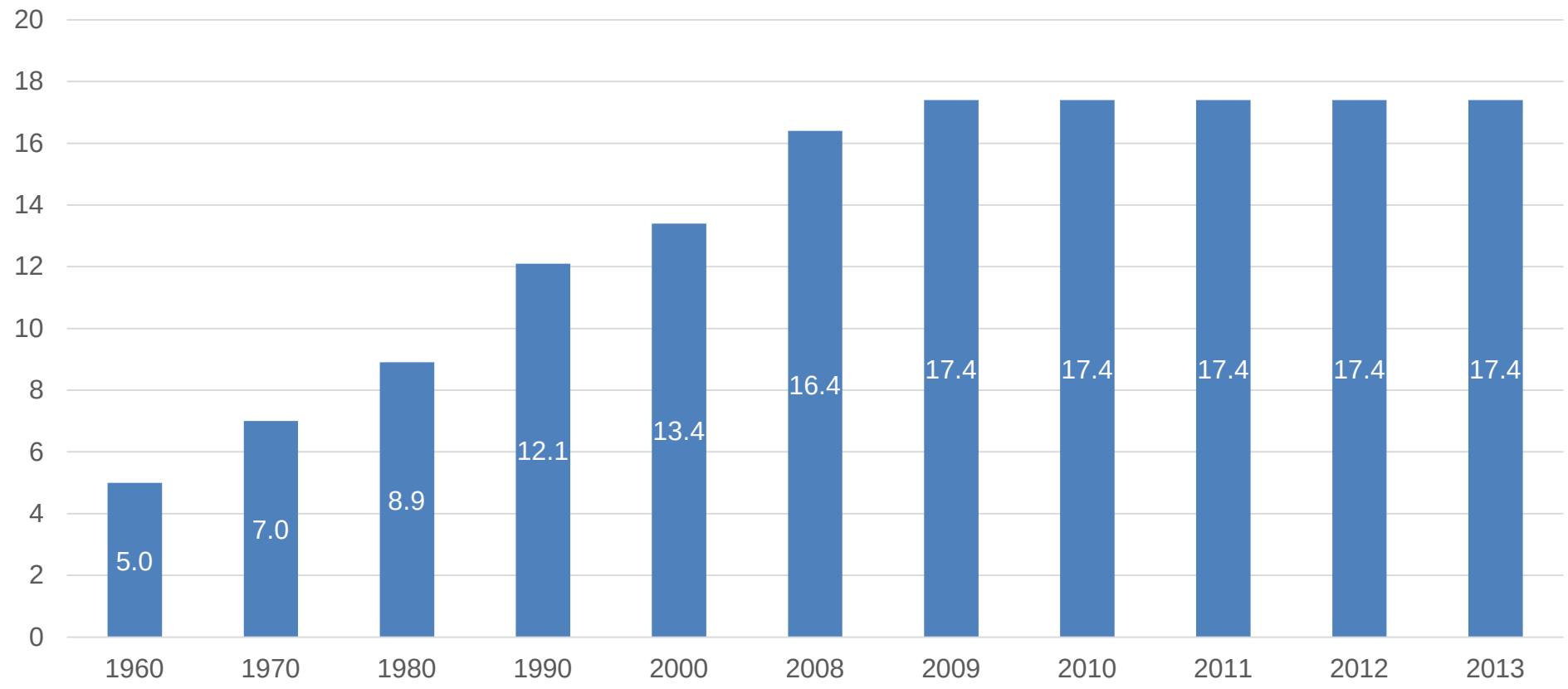

| | Q1 2014 | Q3 2014 | Q1 2015 |
|---|---|---|---|
| Number gained coverage since baseline (Q1 2012-Q3 2013) | 5,200,000 | 10,700,000 | 14,100,000 |

Source: Office of the Assistant Secretary for Planning and Evaluation (ASPE) analysis of Gallup-Healthways Well-Being Index survey data through 3/4/15.
All models update the analysis from Sommers et al, *N Eng J Med* 2014. All models use nationally-representative survey weights and adjust for age, sex, race, ethnicity, employment, household income, state of residence, +/- a linear time trend.

# The Uninsured in the U.S.


Texas
24%

# Health Spending as Share of GDP




Source: Health Affairs, January 2015

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# The Gross Domestic Product

## National health spending and gross domestic product (GDP)*

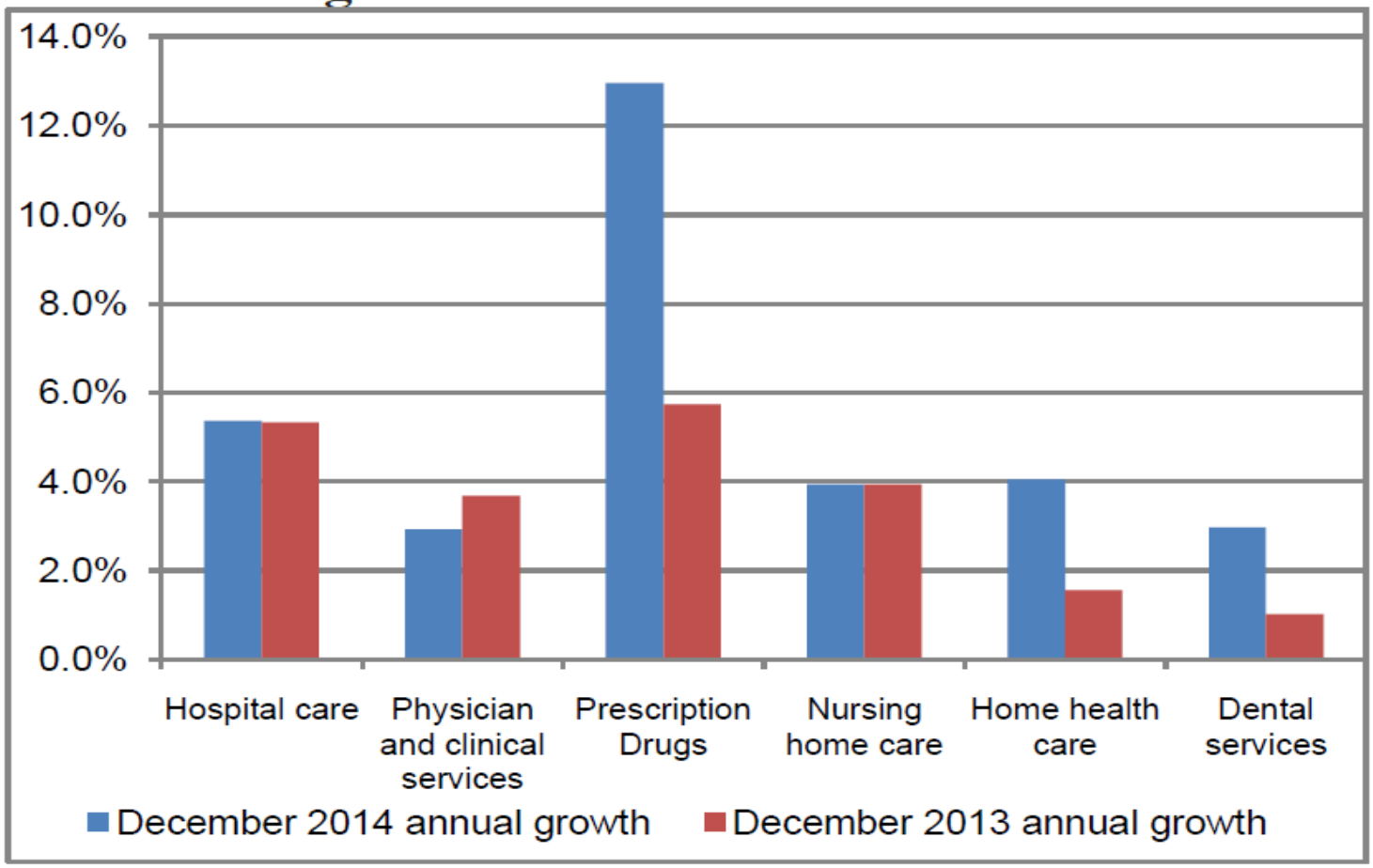
| | December 2012 | December 2013 | November 2014 | December 2014 |
|---|---|---|---|---|
| **GDP** | 16.42 | 17.09 | 17.71 | 17.74 |
| **National Health Spending (HS)** | 2.86 | 2.99 | 3.14 | 3.15 |
| **HS Share of GDP** | 17.4% | 17.5% | 17.7% | 17.8% |
| **HS Share of PGDP** | 16.5% | 16.7% | 17.1% | 17.2% |
| **Growth from Prior 12 Months** | | | | |
| **HS** | 3.3% | 4.5% | 5.2% | 5.6% |
| **GDP** | 4.3% | 4.1% | 3.4% | 3.8% |
| **HS Minus GDP** | –1.0% | 0.4% | 1.8% | 1.8% |
| **HS Minus PGDP** | –0.2% | 1.2% | 2.2% | 2.9% |

Source: Altarum monthly health spending estimates (see Methods on page 4); monthly GDP is from Macroeconomic Advisers and Altarum estimates; potential GDP (PGDP), defined as what GDP would be at full employment, is from the quarterly Congressional Budget Office estimates, converted to monthly by Altarum.

*Spending is trillions of dollars, seasonally adjusted annual rate.

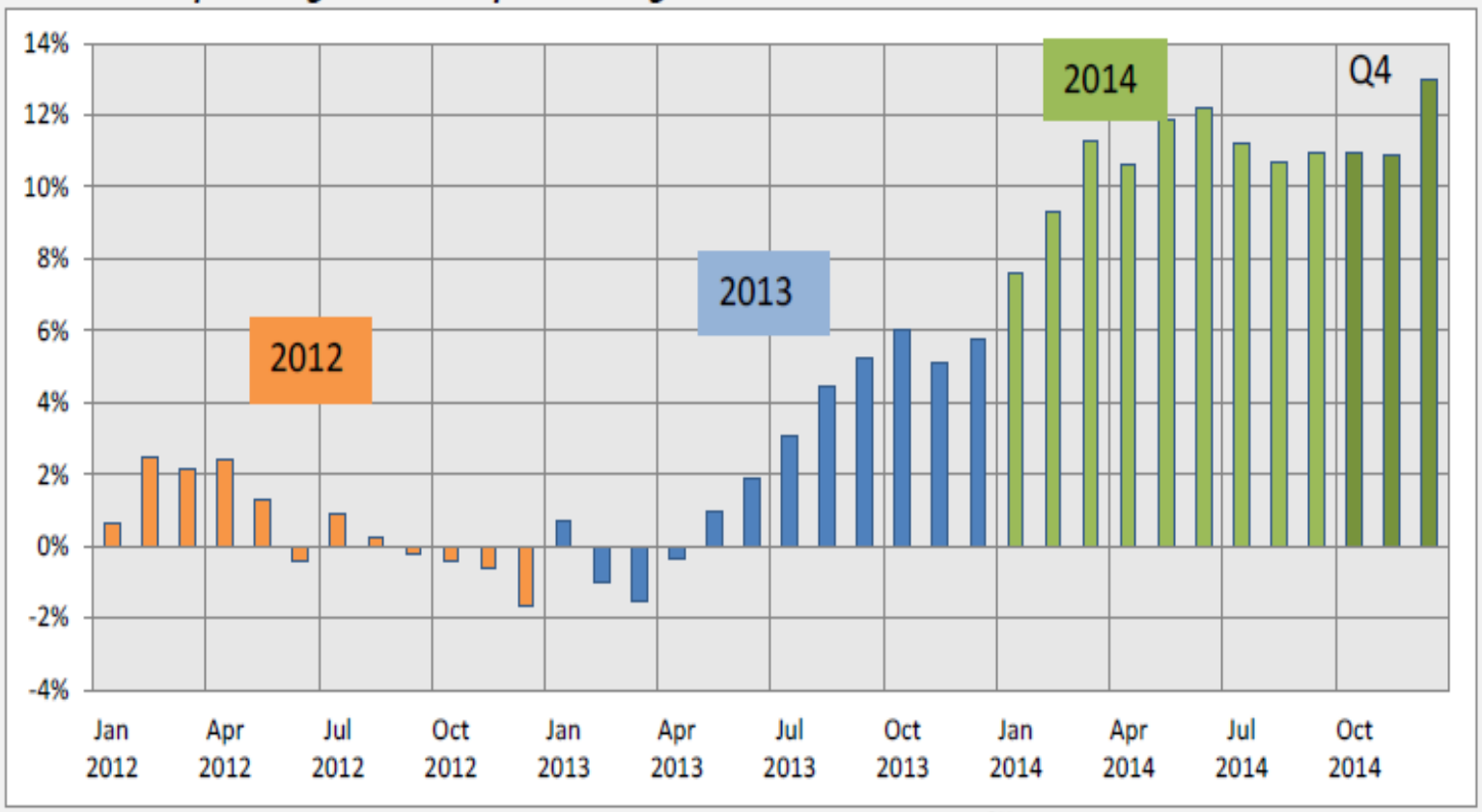
# Spending on Medications

**Exhibit 4. Health Spending Year-Over-Year Growth for Selected Categories**




Source: Altarum monthly national health spending estimates

# Specialty Drugs Spending

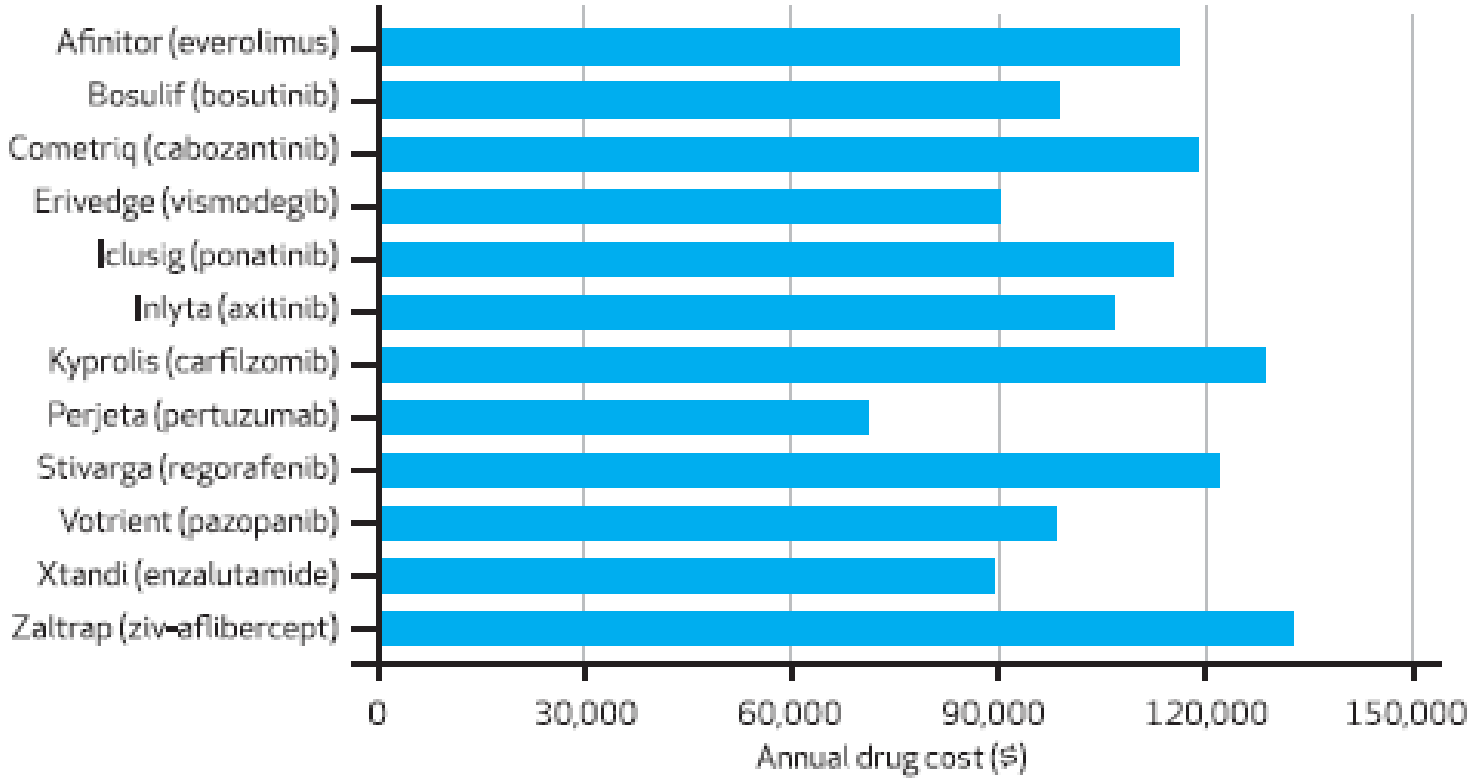



*Source: Unpublished data from Altarum Health Sector Economic Indicators℠.*

# New Oncologic Agents

**EXHIBIT 1**

**Annual Cost Of Oncologic Drugs Approved By The Food And Drug Administration In 2012**



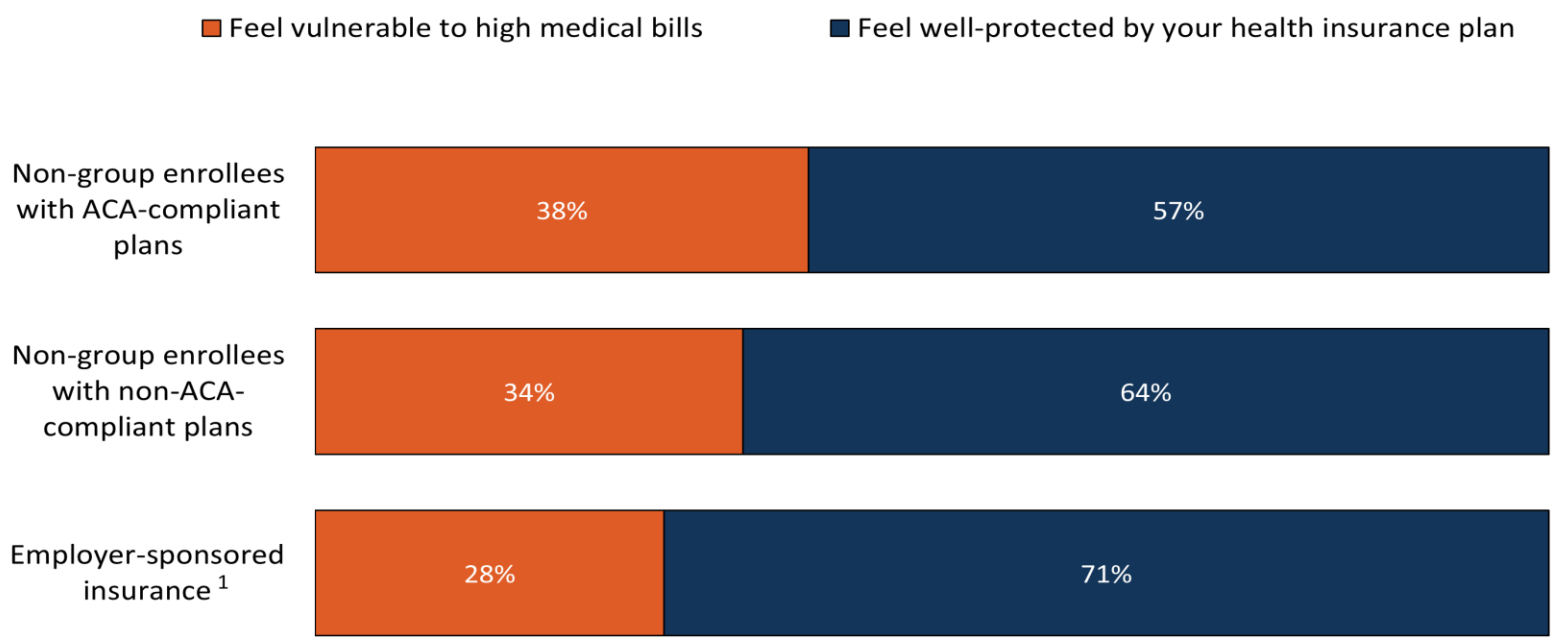

**SOURCE** Authors' analysis.

Hirsch, Balu, Schulman. Health Affairs, October 2014

# People are Still Worried

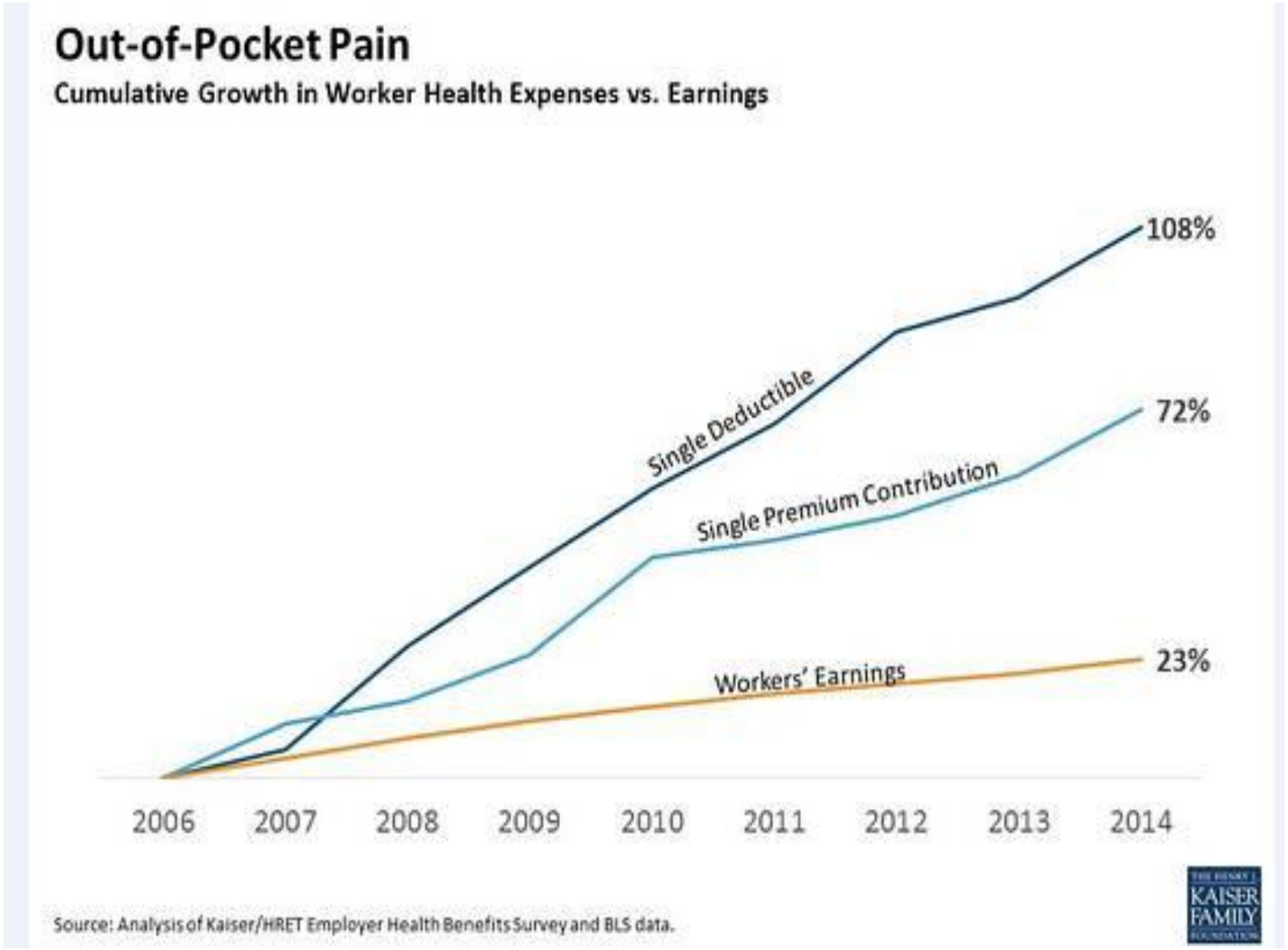
## Many Non-Group Enrollees Report Feeling Vulnerable To High Medical Bills

In general, do you feel well-protected by your health insurance plan, or do you feel vulnerable to high medical bills?

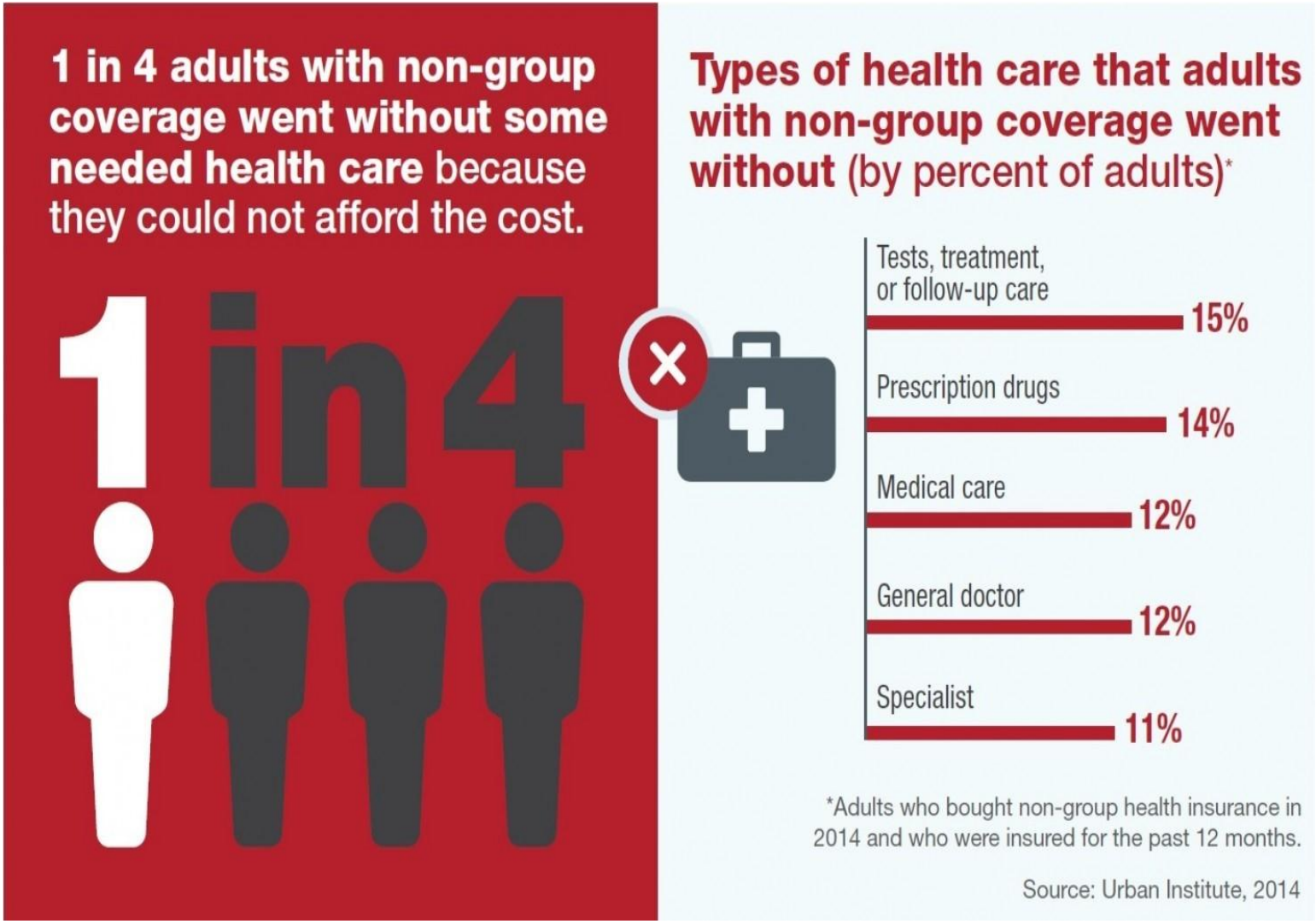



NOTE: Don't know/Refused and Just got my plan/too soon to tell (Vol.) responses not shown
SOURCE: Kaiser Family Foundation Survey of Non-Group Health Insurance Enrollees, Wave 2 (conducted February 18-April 5, 2015); [1] Kaiser Family Foundation Health Tracking Poll (conducted March 6-12, 2015)

# Earnings vs. Health Expenses

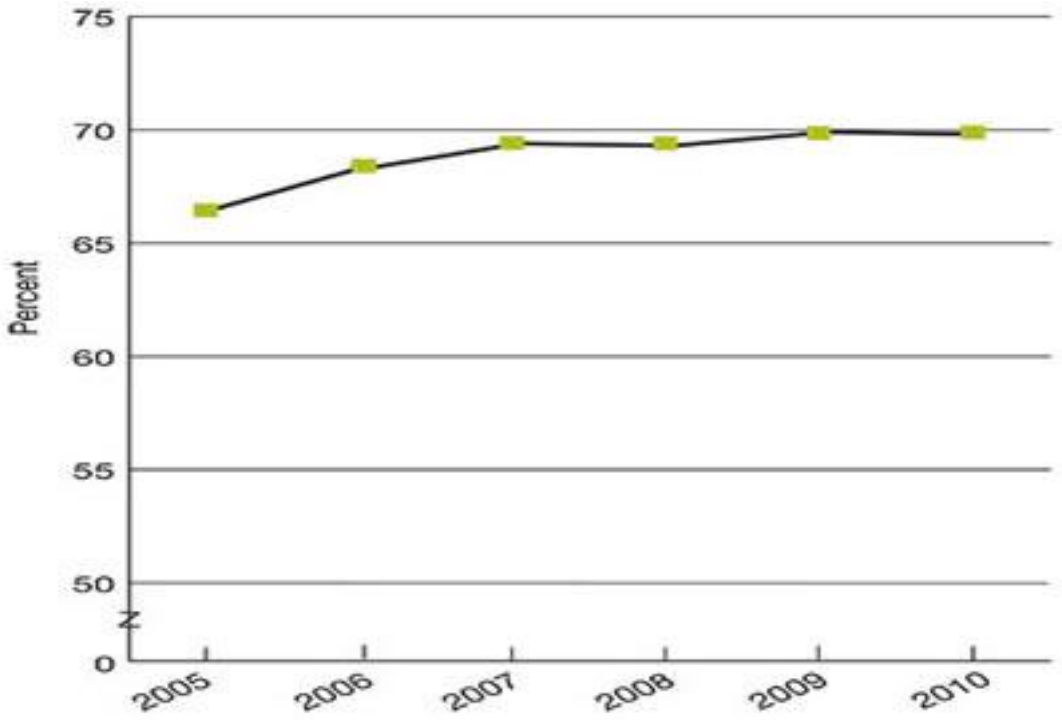


# Coverage Doesn't Translate to Care



# Quality of Care is Improving… but not very fast

Average proportion of recommended care across a panel of quality care metrics 2006-2010




Source: AHRQ Quality Report, 2013

# CMS Innovations Portfolio: Testing New Models to Improve Quality

**Accountable Care Organizations (ACOs)**

- Medicare Shared Savings Program (Center for Medicare)
- Pioneer ACO Model
- Advance Payment ACO Model
- Comprehensive ERSD Care Initiative

**Primary Care Transformation**

- Comprehensive Primary Care Initiative (CPC)
- Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration
- Federally Qualified Health Center (FQHC) Advanced Primary Care Practice Demonstration
- Independence at Home Demonstration
- Graduate Nurse Education Demonstration

**Bundled Payment for Care Improvement**

- Model 1: Retrospective Acute Care
- Model 2: Retrospective Acute Care Episode & Post Acute
- Model 3: Retrospective Post Acute Care
- Model 4: Prospective Acute Care

**Capacity to Spread Innovation**

- Partnership for Patients
- Community-Based Care Transitions
- Million Hearts

**Health Care Innovation Awards**

**State Innovation Models Initiative**

**Initiatives Focused on the Medicaid Population**

- Medicaid Emergency Psychiatric Demonstration
- Medicaid Incentives for Prevention of Chronic Diseases
- Strong Start Initiative

**Medicare-Medicaid Enrollees**

- Financial Alignment Initiative
- Initiative to Reduce Avoidable Hospitalizations of Nursing Facility Residents

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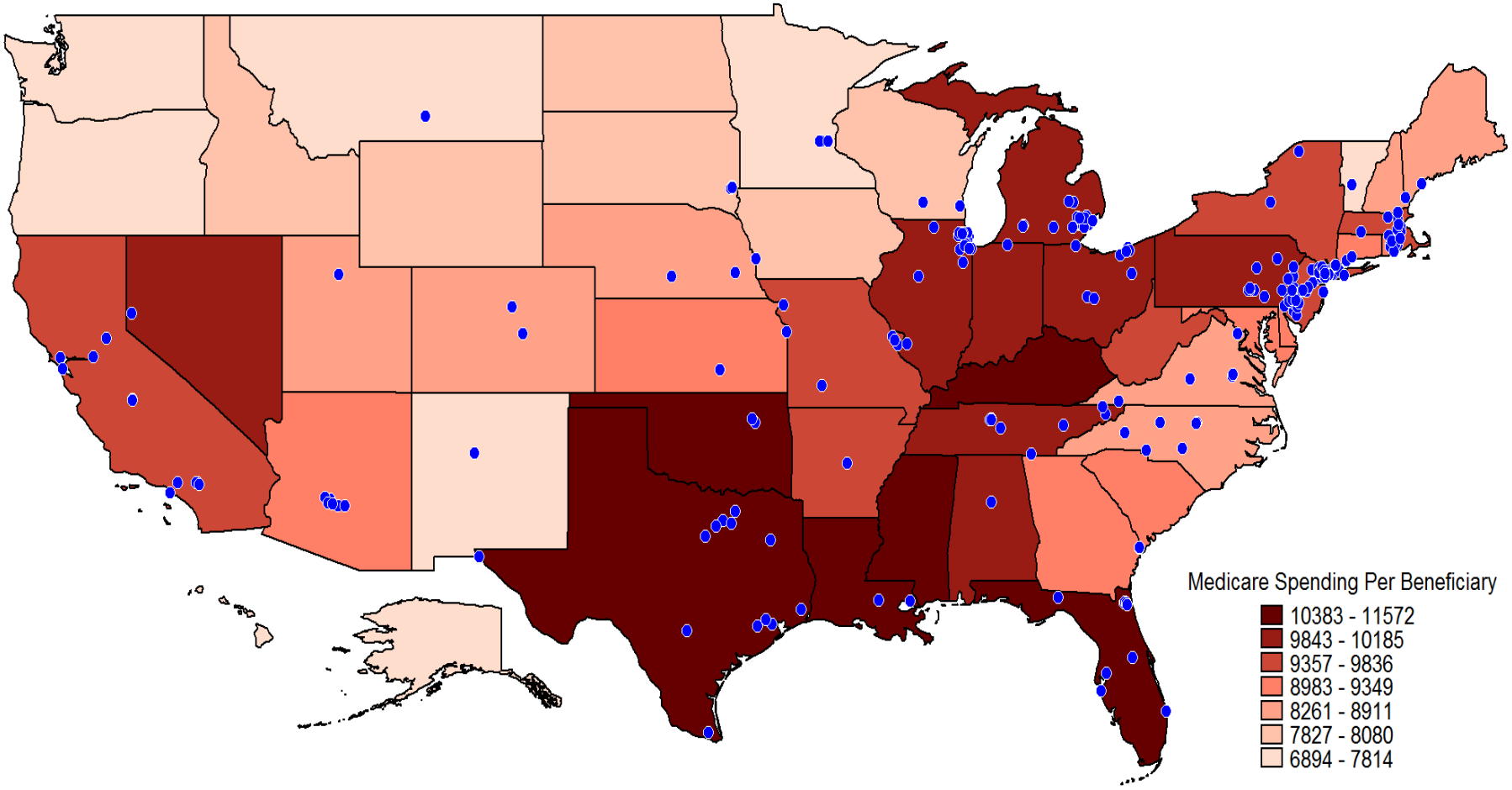
# CMS Innovation Center

**Four of the 26 Models Launched by the CMS Innovation Center.**

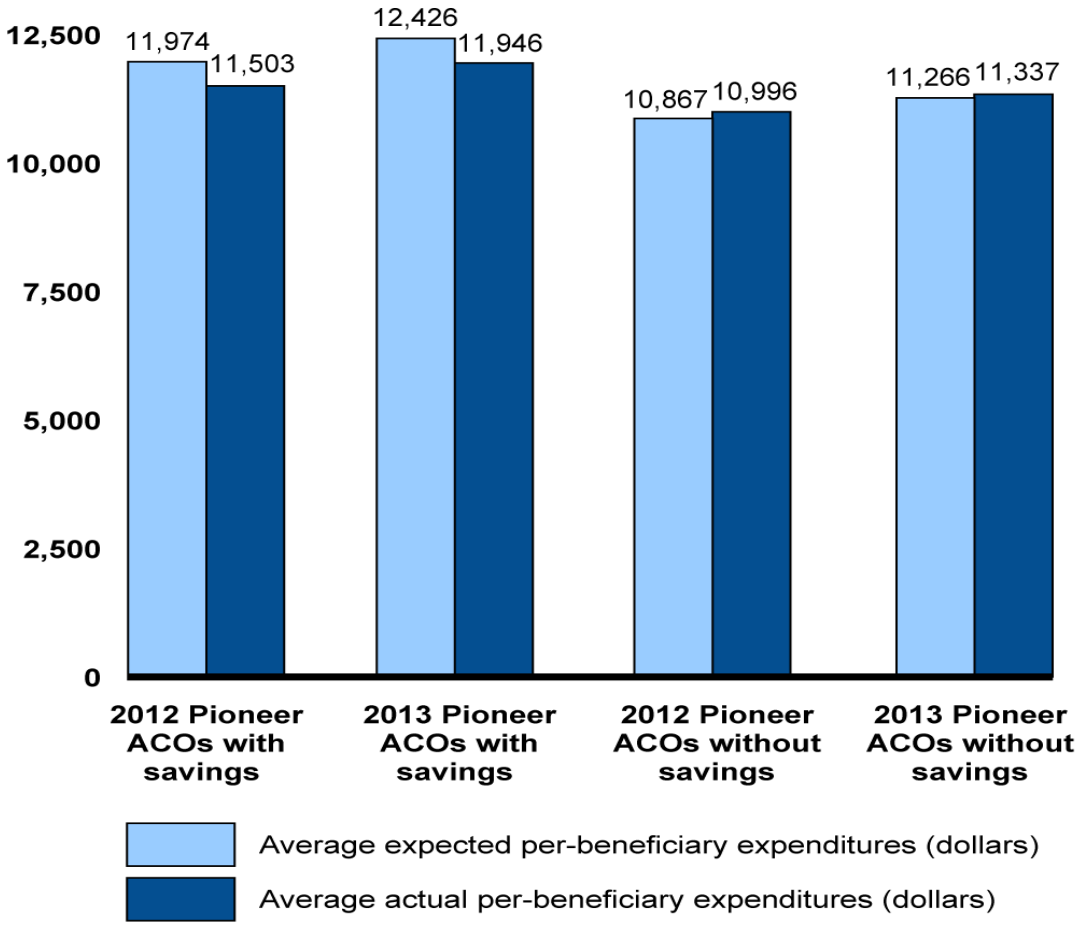
| Model Name | Start Date | Description | Early Results |
|---|---|---|---|
| Bundled Payments for Care Improvement | April 1, 2013 | Composed of four broadly defined models of care, which link payments for multiple clinical services during an episode of care. Under the initiative, organizations enter into payment arrangements that include financial accountability for episodes of care. | Within orthopedic surgery episodes that include acute and post-acute care (Model 2), participating hospitals in the fourth quarter of 2013 had significantly lower episode payments for patients who used post-acute care services ($3,724 savings on average for a 90-day episode). |
| Comprehensive Primary Care Initiative | January 1, 2013 | Multipayer model in seven U.S. regions to support primary care practice transformation through enhanced, non–visit-based payments (care management fees and shared savings), data feedback, and learning systems. | In its first year, the model produced 2% gross savings (nearly enough to offset care management fees), including reductions in hospitalizations, emergency department visits, and 30-day readmissions. |
| Pioneer Accountable Care Organization (ACO) Model | January 1, 2012 | Designed to show how particular ACO payment arrangements can best improve care and generate savings for Medicare and to test alternative program designs to inform future policy for the Medicare Shared Savings Program. | In the model's first 2 years, actuarial savings were $184 million (according to the independent evaluation, $385 million in risk-adjusted savings as compared with preceding and local market trends). |
| Partnership for Patients | December 1, 2011 | Engages leadership of more than 3700 acute care hospitals to align with the model goals of 40% reduction in all-cause preventable harm and 20% reduction in all-cause 30-day readmissions. | Through 2013, a total of 1.3 million harms were prevented and up to $12 billion and an estimated 50,000 lives were saved, owing to model and other synergistic efforts. |

# Medicare Spending per Beneficiary Overlaid with BPCI Phase II Participant Locations



# ACO Expenditures

**Expected and Actual Expenditures (per Beneficiary) for Pioneer Accountable Care Organizations (ACO) with and without Shared Savings, in First and Second Years**




Source: GAO analysis of CMS data. | GAO-15-401

# Pioneer ACOs: Spending Changes

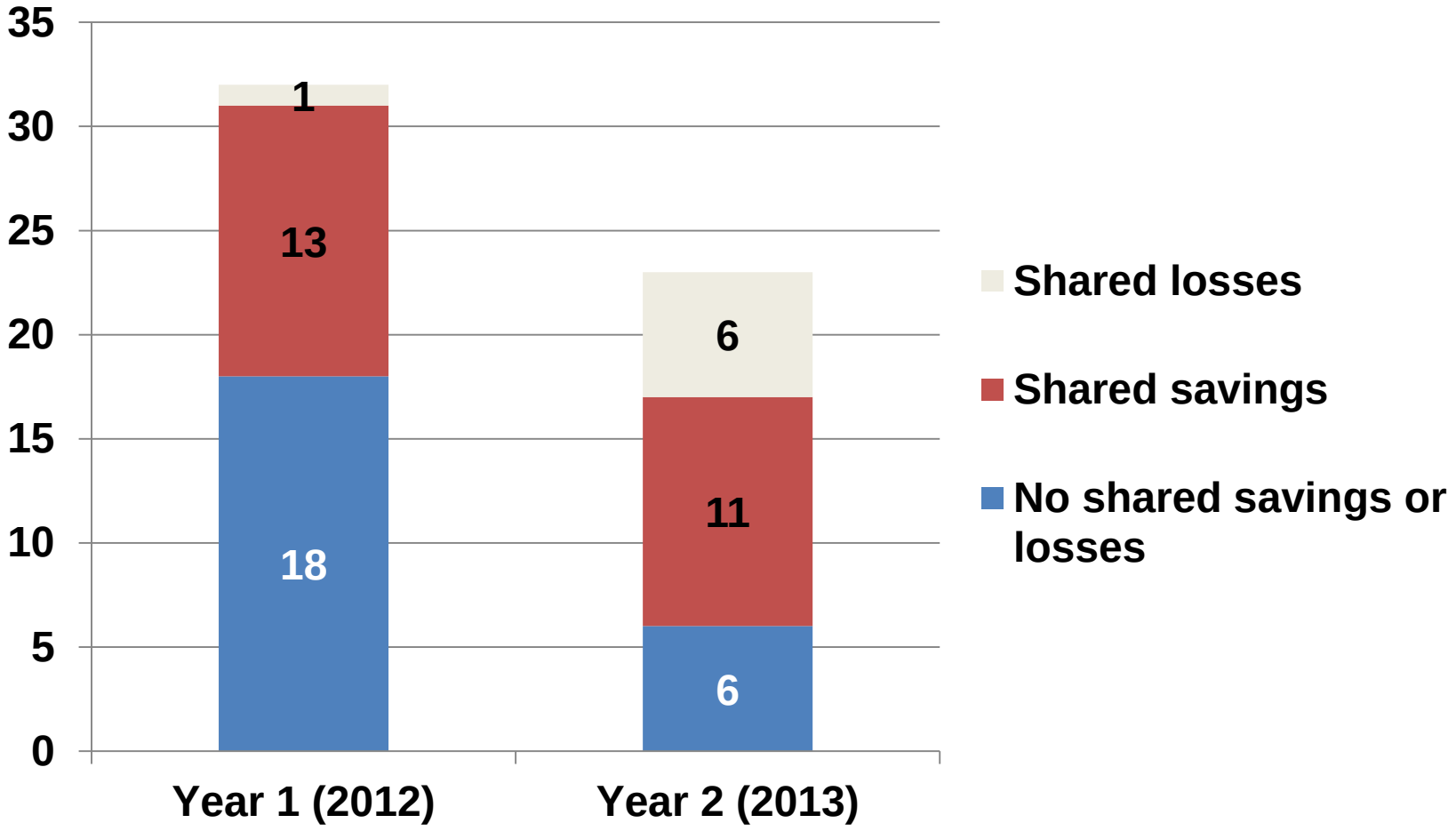
HHSM-500-2011-0009i/HHSM-500-T0002

**Table 4: Count of Pioneer ACOs with Higher, Lower, and No Significant Spending Growth between 2011 and 2012 Relative to Local FFS Market, by Service Type (N = 32)**

| Service | Significantly Faster Growth | Significantly Slower Growth | No Significant Differences |
|---|---|---|---|
| Outpatient | 4 | 15 | 13 |
| SNF | 9 | 3 | 20 |
| Home Health | 9 | 3 | 20 |
| Inpatient | 2 | 4 | 26 |
| Physician | 4 | 11 | 17 |
| Hospice | 7 | 7 | 18 |
| Durable Medical Equipment | 4 | 2 | 26 |

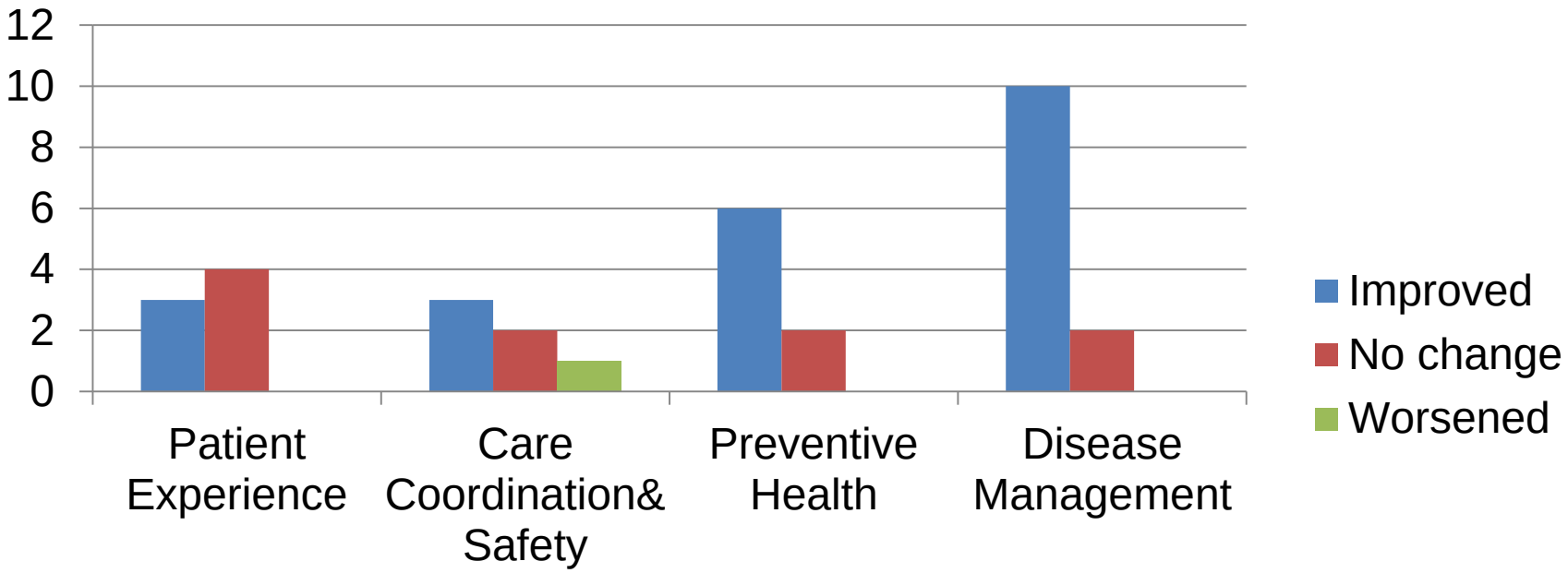
*Source: Analysis of Medicare claims data from the Chronic Condition Warehouse Master Beneficiary Summary File*

# Pioneer ACO Savings and Losses: 2012 & 2013



# Pioneer ACOs & Quality

Changes in Average Scores for Quality Measure Domains for 23 Pioneer ACOs that Participated in 2012 and 2013




Note: GAO-15-401-Pioneer ACO Model

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# CPC Outcomes

**Table ES.2. Early CPC outcomes on Medicare FFS health care cost and service use show promise in first 12 months of CPC (October 2012–September 2013)**

| | All | AR | CO | NJ | NY | OH/KY | OK | OR |
|---|---|---|---|---|---|---|---|---|
| **Medicare expenditures and service use** | | | | | | | | |
| Expenditures without fees | -2%** | 0% | 1% | -5%*** | -2% | 4%* | -7%*** | -2% |
| Expenditures with fees | 1% | 3%* | 4% | -3% | 0% | 6%*** | -5%*** | 1% |
| Hospitalizations | -2%* | 2% | 3% | -5%* | -6%** | 4% | -7%*** | -5% |
| Outpatient ED visits | -3%*** | -3% | -1% | -4% | 2% | -1% | -7%*** | -6%* |

Note: Negative, statistically significant estimates (in green) are favorable, implying reductions in service use and/or costs, while positive, statistically significant estimates (in red) are unfavorable, implying increases in service use and costs. Impact estimates are based on a difference-in-differences analysis that adjusts for baseline patient characteristics (including HCC scores) and baseline practice characteristics.

*/**/***Statistically significant at the 10%/5%/1% level, two-tailed test.

**Table ES.3. Very few early changes in CPC outcomes on Medicare FFS claims-based quality of care in first 12 months of CPC (October 2012–September 2013)**

| | All | AR | CO | NJ | NY | OH/KY | OK | OR |
|---|---|---|---|---|---|---|---|---|
| **Quality-of-care process measures** | | | | | | | | |
| Compliance with all 4 diabetes measures | 3% | 12% | 8% | 4% | 5% | 4% | -21%*** | 11%* |
| Continuity of care: | | | | | | | | |
| Percentage of primary care visits at attributed practice | 1% | 4% | 2% | 2% | -1% | -1% | 2% | -2% |
| **Transitional care** | | | | | | | | |
| 14-day follow-up to hospitalization | 0% | -4% | 3% | 0% | 4%** | -2% | -2% | 2% |
| Quality-of-care outcome measures | | | | | | | | |
| ACSC admissions | 1% | 7% | -4% | -1% | -6% | 8% | -5% | 3% |
| Readmissions | -4% | 1% | -2% | -6% | -1% | -8% | -7% | 5% |

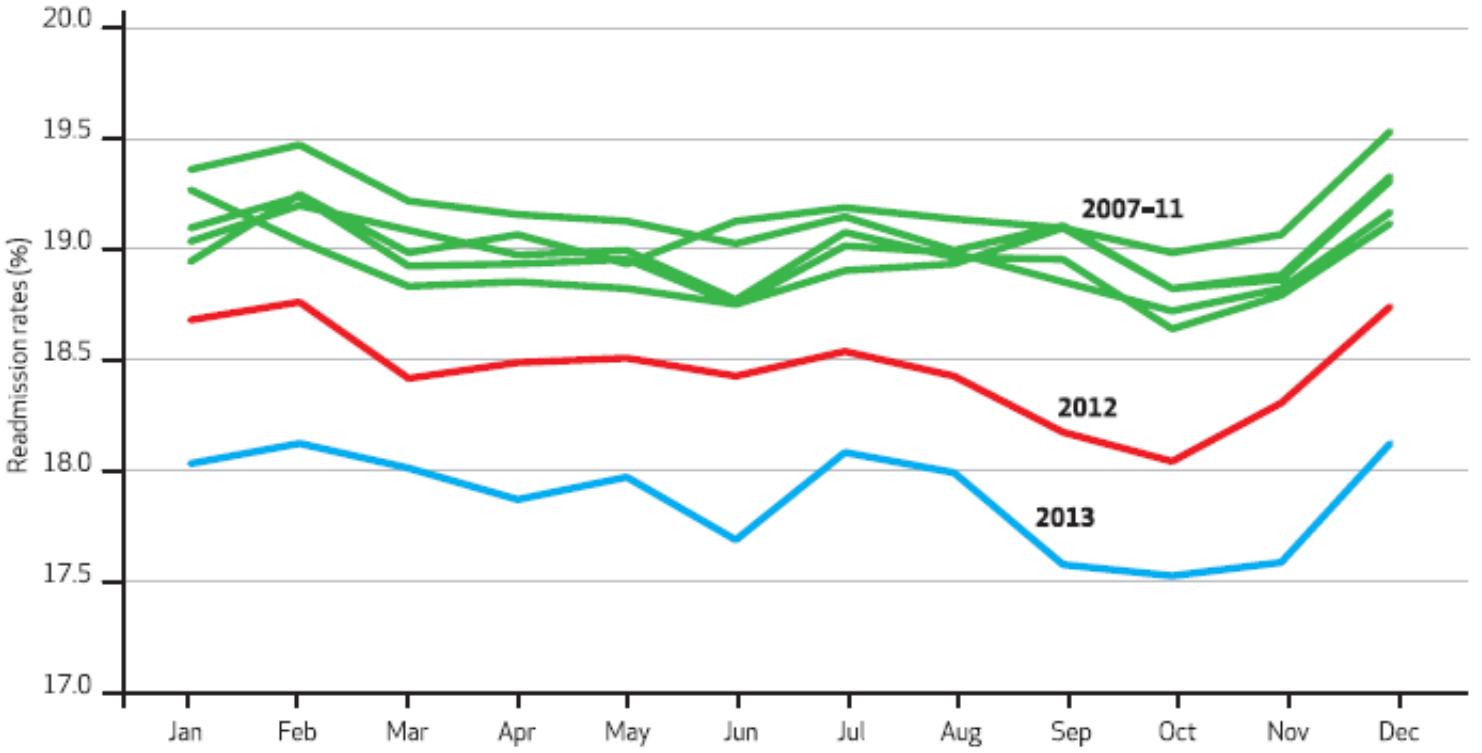
Note: Positive, statistically significant, estimates (in green) are favorable, implying improvement in care quality, and negative, statistically significant estimates (in red) are unfavorable, implying a deterioration in care quality. Impact estimates are based on a difference-in-differences analysis that adjusts for baseline patient characteristics (including HCC scores) and baseline practice characteristics.

*/**/***Statistically significant at the 10%/5%/1% level, two-tailed test.

# Readmission Rates

**EXHIBIT 1**

**All-Condition Thirty-Day Hospital Readmission Rates For Medicare Beneficiaries, By Month, 2007–13**




**SOURCE** Authors' analysis of data from the Centers for Medicare and Medicaid Services.

Source: Brennan, Oelschlaeger, Cox, Tavenner. *Health Affairs,* July 2014.

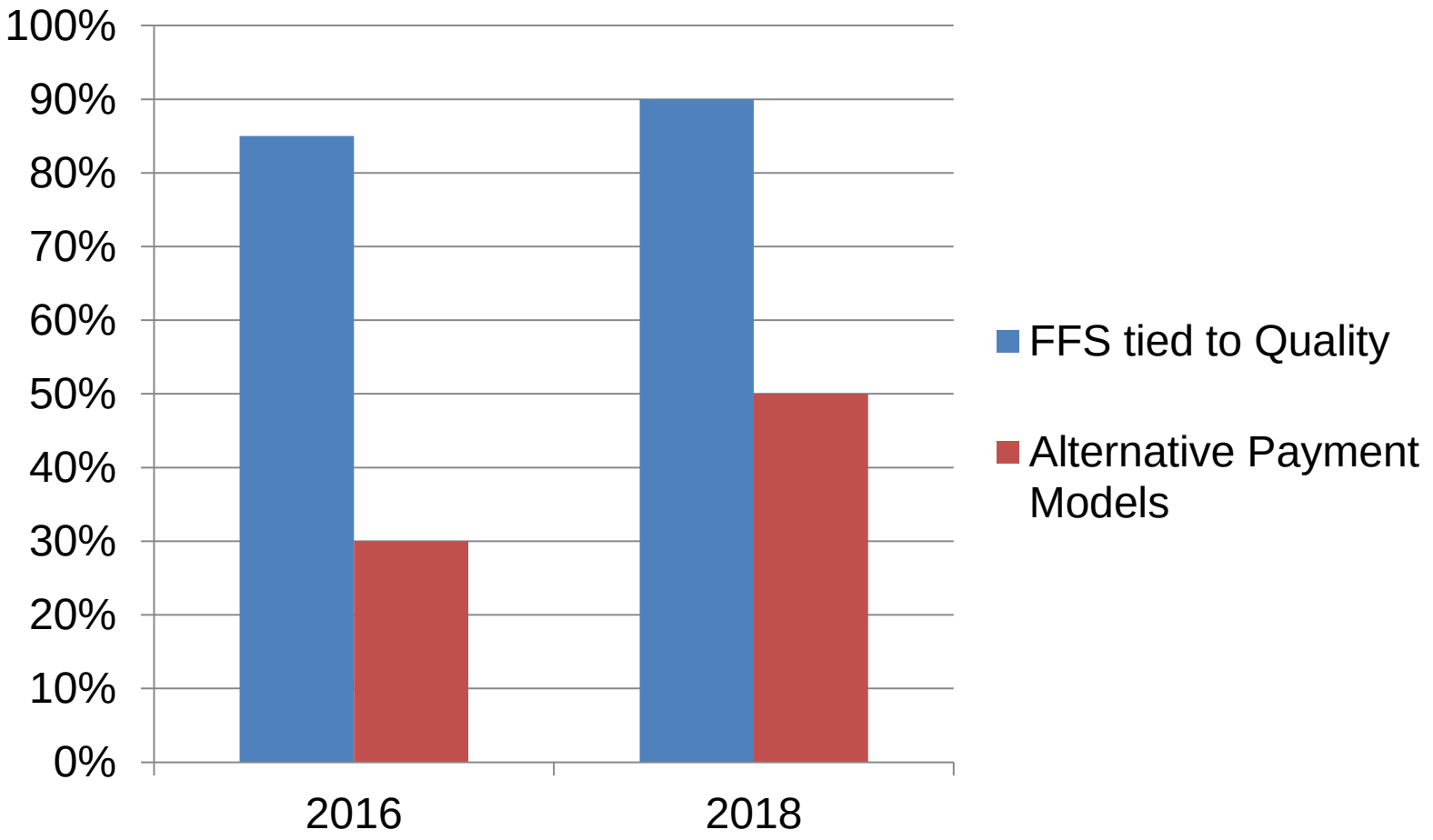
# Reaching Critical Mass?

## Scale not yet achieved

- Just over 300 Medicare Shared Savings Accountable Care Organizations, 23 Pioneer ACOs; 287 Commercial and 34 Medicaid
- 7,000 NCQA recognized PCMHs (roughly 10%)
- Comprehensive Primary Care Initiative has 492 practices; 2,158 providers and 2.5 million patients
- Bundled Payments for Care Improvement focuses on 48 episodes of care
- 8 states in Multi-payer Advanced Primary Care Practice Demonstration

## Payers are not yet ready to engage, enable, share data

# Value-Based Payment Goals




Source: Burwell, NEJM, March 5, 2015

# Value-Based Payment Strategies

## Incentives

ACOs, advanced primary care medical homes, bundled payments, dual eligible demos, specialty care payment models, care coordination payments

## Improve care delivery

Partnership for Patients, transitional care coordination to reduce readmissions, Transforming Clinical Practice Initiative, Medicaid Health Homes

## Accelerate availability of information to guide decision making

Meaningful use, Hospital Compare, PCORI

Source: Burwell, NEJM, March 5, 2015

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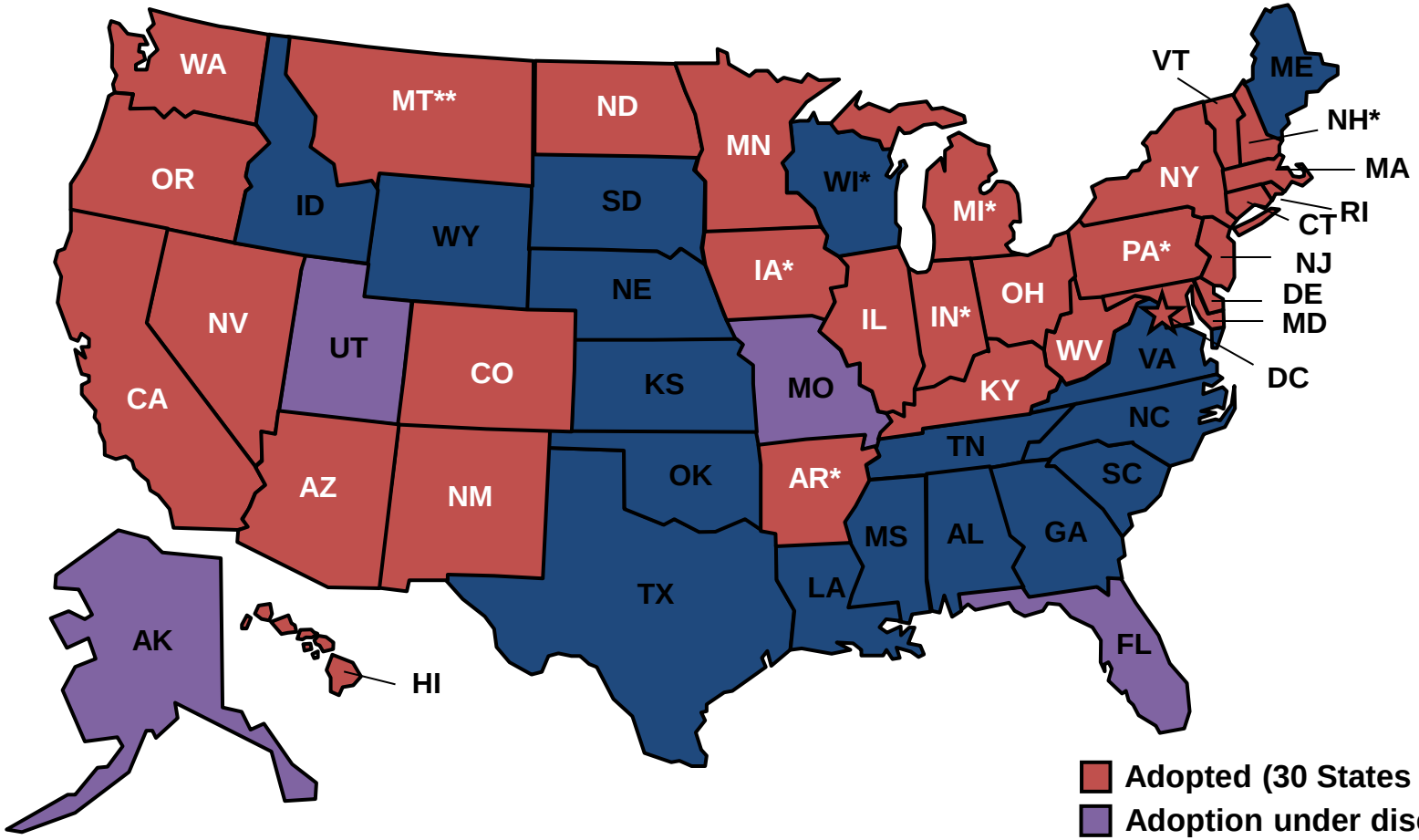
# Current State…

## Current Status of State Medicaid Expansion Decisions

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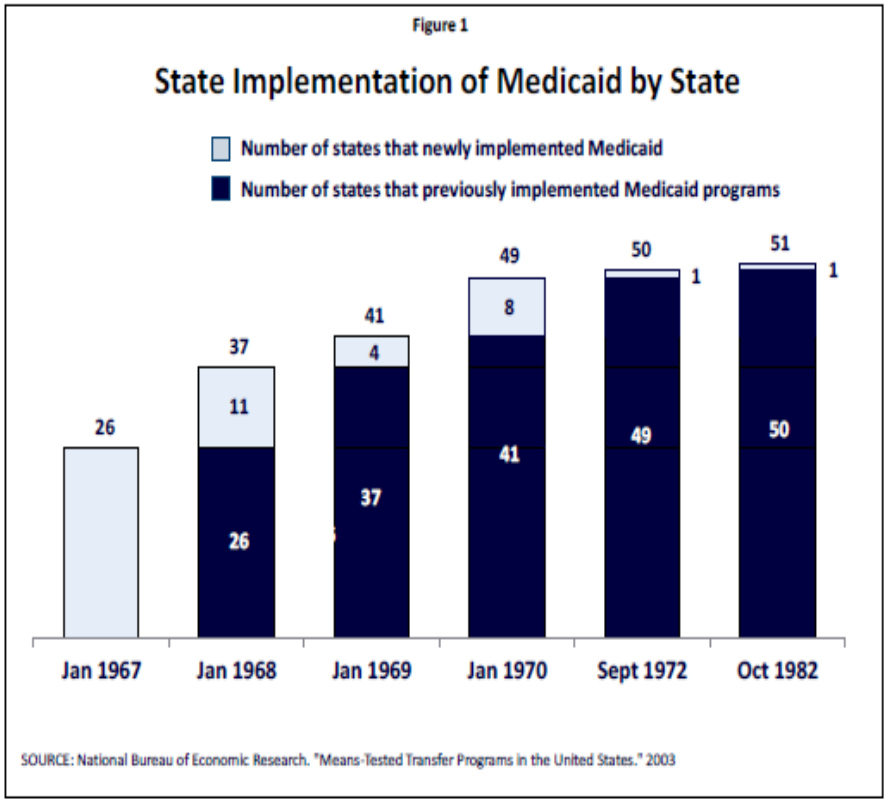
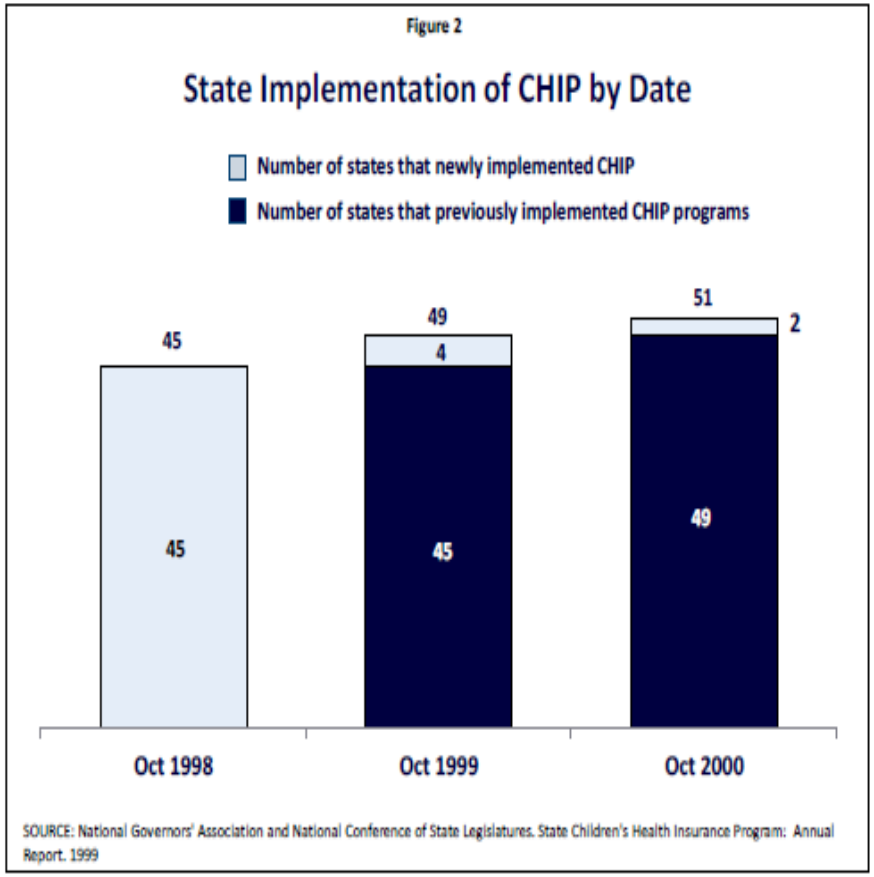
# Past State Decisions on Implementation

Figure 1




SOURCE: National Bureau of Economic Research. "Means-Tested Transfer Programs in the United States." 2003

Figure 2




SOURCE: National Governors' Association and National Conference of State Legislatures. State Children's Health Insurance Program: Annual Report. 1999

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Questions?

# Telling Your Project's Story

**Suzanne Smith, MBA**
**Founder & Managing Director**
**Social Impact Architects**

RHP 9 & 10
Collaborative Connections
Impacting Care
Texas 1115 Waiver

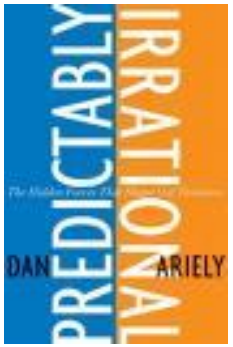
# Telling Your Project's Story: Why it Matters

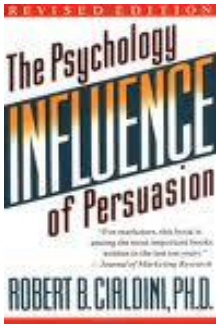
By: Suzanne Smith, Chief Storyteller
Social Impact Architects
suzanne@socialimpactarchitects.com

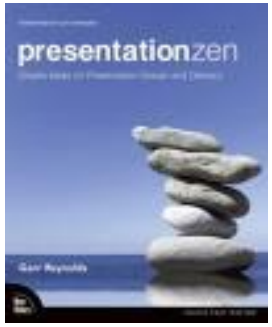


SOCIAL IMPACT ARCHITECTS


MADE
to
STICK
Chip Heath & Dan Heath


PREDICTABLY IRRATIONAL
DAN ARIELY


REVISED EDITION
The Psychology
INFLUENCE
of Persuasion
ROBERT B. CIALDINI, PH.D.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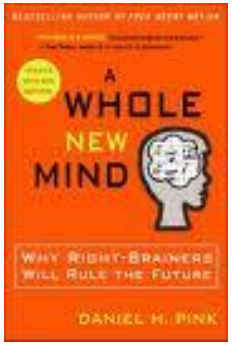
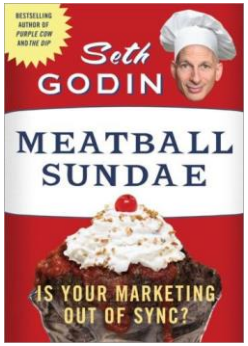
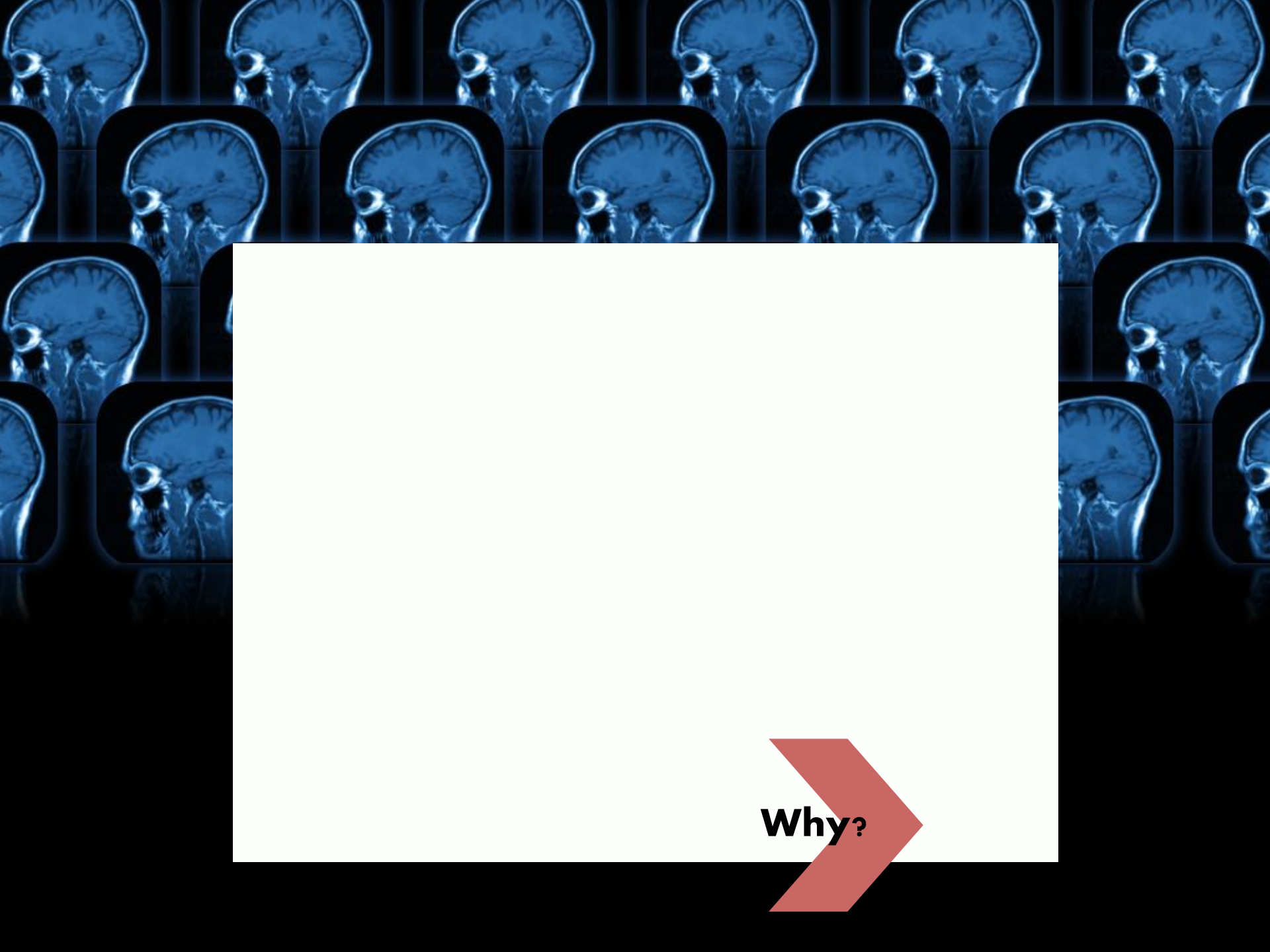

A
WHOLE
NEW
MIND
WHY RIGHT-BRAINERS
WILL RULE THE FUTURE
DANIEL H. PINK

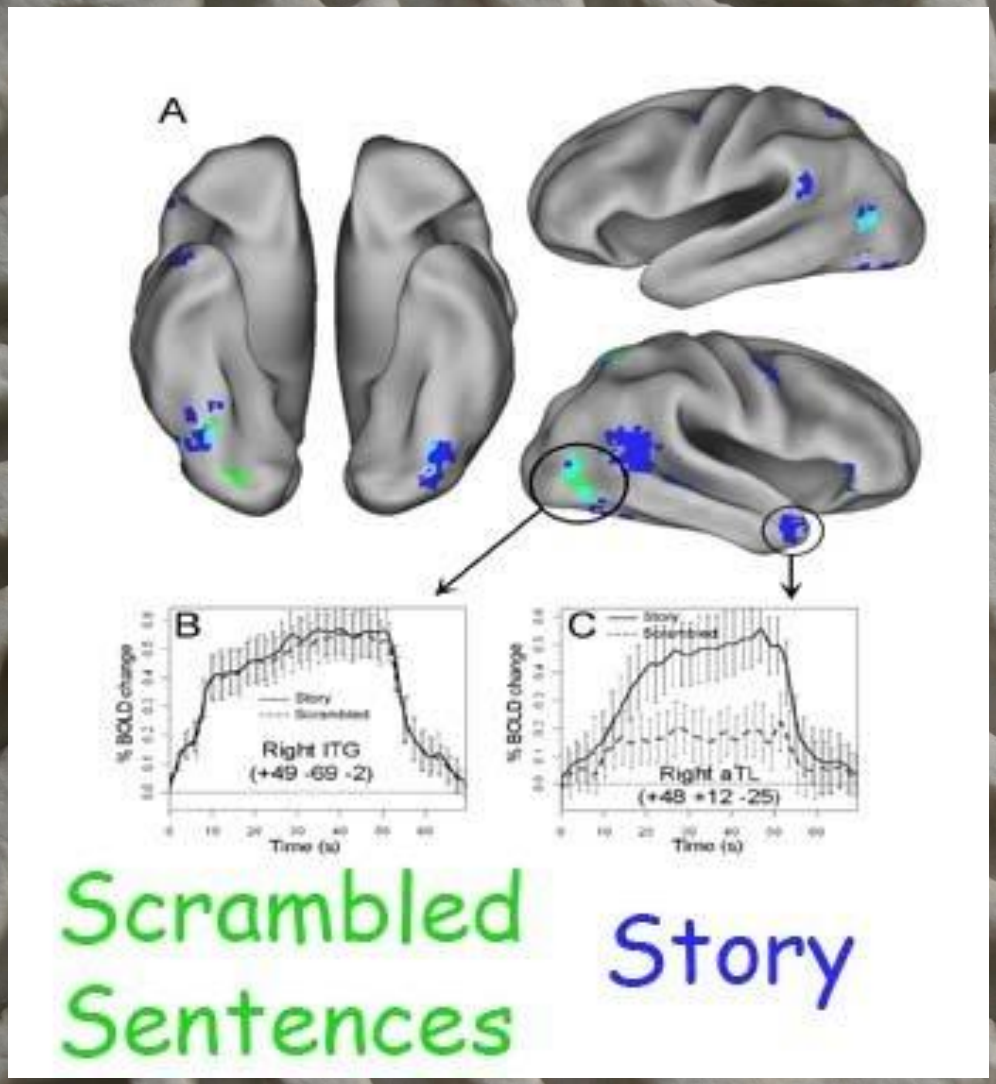

Seth
GODIN
MEATBALL
SUNDAE
IS YOUR MARKETING
OUT OF SYNC?

**Why?** **What?** **How?**


Why?


Recordkeeping
Entertain
Mediate
Teach
Cohesion
Communicate


Why?

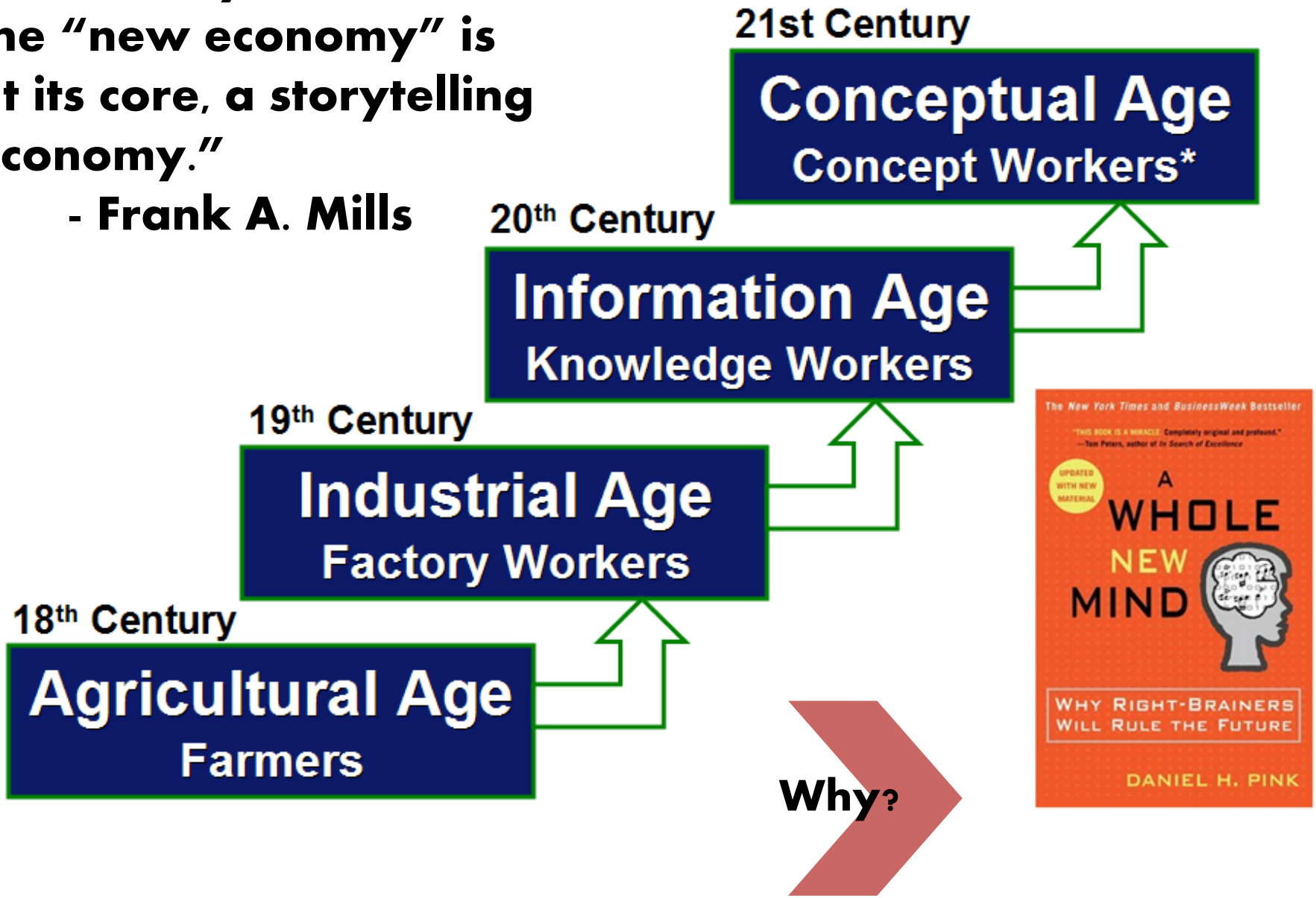

A
B
Right ITG
(+49 -69 -2)
% BOLD change
Time (s)
C
Right aTL
(+48 +12 -25)
% BOLD change
Time (s)
Scrambled Sentences
Story

Why?


Why?

**Whatever you call it, the "new economy" is at its core, a storytelling economy."**

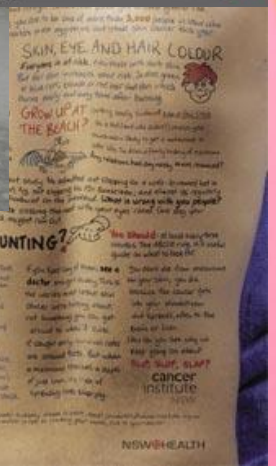
**- Frank A. Mills**




cancer institute NSW
THERE'S NOTHING HEALTHY ABOUT A TAN
darksideoftanning.com.au


TODAY, AROUND 35,000 PEOPLE WILL PASS BY THIS POSTER.
11,600 OF THEM WILL GET CANCER.
CHANGE THE STATISTICS. CALL IN WITH YOUR CONTRIBUTION 020 55 33 55
CANCER – AND ALLERGY FUND
GLOBAL AGENCIES


Silence is deadly.
Protect yourself
Get a HPV test today


SKIN, EYE AND HAIR COLOUR
GROW UP AT THE BEACH?
MOLE HUNTING?
cancer institute
NSW HEALTH


Five Myths About Colorectal Cancer:
It can't be prevented.
Minorities are not at risk.
It's a man's disease.
Treatment is not necessary.
Age doesn't matter.

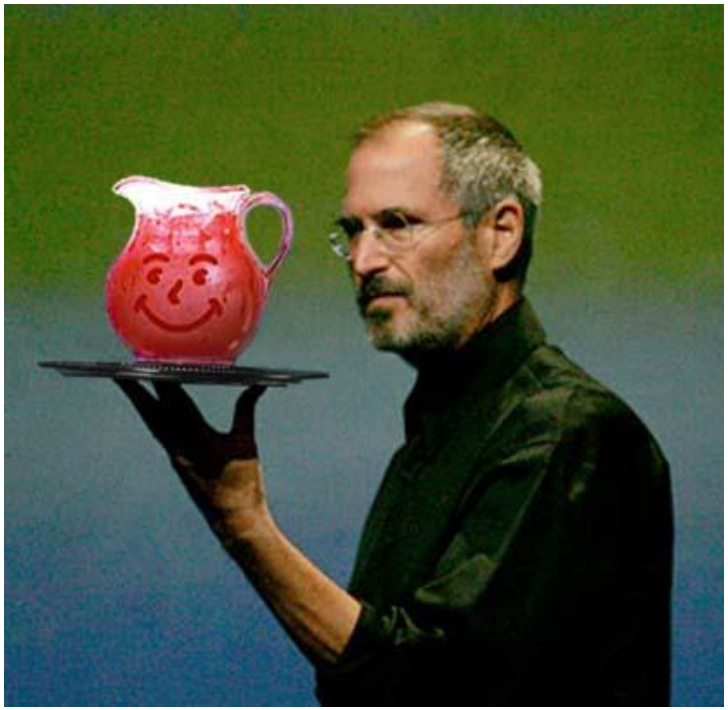

3,000

**Those who tell the stories rule society.**

**- Plato**

**You can't connect the dots looking forward; you can only connect them looking backwards.**

**-Steve Jobs**



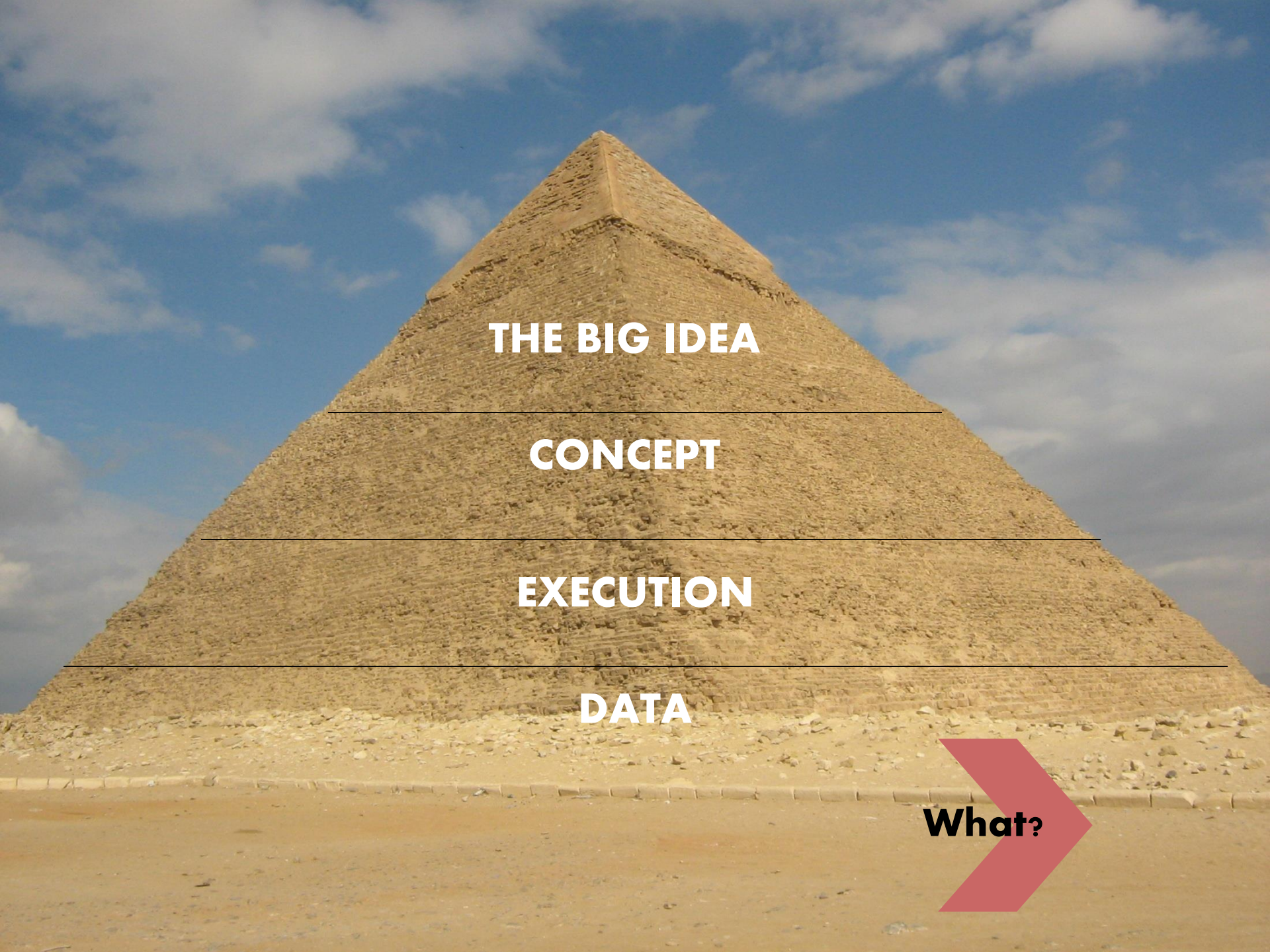
**Why should I care?**
**Why should I care now?**
**What can I do?**

**How do you impact human life?**
**To what end?**

**Who are you?**

**What?**

# Texas Regional Health Partnership 7


THE BIG IDEA
CONCEPT
EXECUTION
DATA
What?

THE BIG IDEA
CONCEPT
EXECUTION
DATA
What?


Opening Scene

Setting Up

Inciting Incident

Antagonist Returns

Character Development

Big Decision

All is Lost

Ah Ha! Moment

Resolution

# Childress Regional Medical Center

# MADE to STICK
# SUCCESs Model

A sticky idea is understood, it's remembered, and it changes something. Sticky ideas of all kinds—ranging from the "kidney thieves" urban legend to JFK's "Man on the Moon" speech—have six traits in common. If you make use of these traits in your communication, you'll make your ideas stickier. (You don't need all 6 to have a sticky idea, but it's fair to say the more, the better!)

PRINCIPLE 1


**SIMPLE**

Simplicity isn't about dumbing down, it's about prioritizing. (Southwest will be THE low-fare airline.) What's the core of your message? Can you communicate it with an analogy or high-concept pitch?

PRINCIPLE 2


**UNEXPECTED**

To get attention, violate a schema. (The Nordie who ironed a shirt…) To hold attention, use curiosity gaps. (What are Saturn's rings made of?) Before your message can stick, your audience has to want it.

PRINCIPLE 3


**CONCRETE**

To be concrete, use sensory language. (Think Aesop's fables.) Paint a mental picture. ("A man on the moon…") Remember the Velcro theory of memory—try to hook into multiple types of memory.

PRINCIPLE 4


**CREDIBLE**

Ideas can get credibility from outside (authorities or anti-authorities) or from within, using human-scale statistics or vivid details. Let people "try before they buy." (Where's the Beef?)

PRINCIPLE 5


**EMOTIONAL**

People care about people, not numbers. (Remember Rokia.) Don't forget the WIIFY (What's In It For You). But identity appeals can often trump self-interest. ("Don't Mess With Texas" spoke to Bubba's identity.)

PRINCIPLE 6


**STORIES**

Stories drive action through simulation (what to do) and inspiration (the motivation to do it). Think Jared. Springboard stories (See Denning's World Bank tale) help people see how an existing problem might change.

S

**How?**

www.MADE to STICK.com

# Post-Test


# Suzanne Smith, MBA

## Founder & Managing Director, Social Impact Architects

### National Member

- Senior Policy Advisor, Social Enterprise Alliance
- Consultant Member, Society for Organizational Learning
- Research Fellow, Center for the Advancement of Social Entrepreneurship at Duke University (CASE)
- Alumni Council, Fuqua School of Business at Duke University

### Local Leader

- **Adjunct Professor –** University of North Texas
- **Dallas, Texas –** South Dallas/Fair Park Trust, Mayor's Task Force on Poverty, Dallas Business Club, Entrepreneurs for North Texas, Leadership Dallas, Leadership North Texas & Junior League
- **Cincinnati, Ohio –** Flywheel: Social Enterprise Hub

### Awards & Honors

- Dallas Regional Chamber, Young ATHENA Award, 2014
- Huffington Post's Top 10 Social Sector Blog, 2014
- Dallas Business Journal's 40 Under 40 Award, 2012
- Next Generation Social Entrepreneurs Award, 2010

**@snstexas @socialtrendspot**

**SocialImpactArchitects**

**company/social-impact-architects**
**in/suzannesmithtx**

**suzanne@socialimpactarchitects.com**
**www.socialimpactarchitects.com**

# BREAK


RHP 9 & 10
Collaborative Connections
Impacting Care
Texas 1115 Waiver

# VitalSigns[6]

**Madhukar Trivedi, MD**
**Professor and Chief of the Division of Mood Disorders, Department of Psychiatry**
**The University of Texas Southwestern Medical Center**

RHP 9 & 10
Collaborative Connections
Impacting Care
Texas 1115 Waiver

# LUNCH

Return to Main Room

# Integrated Behavioral Health from Concept to Reality

**Alan L. Podawiltz, DO, MS, FAPA**
**Chair of Psychiatry University North Texas Health Science Center Texas College of Osteopathic Medicine**
**Chair of Psychiatry JPS Health Network**

**Wayne Young**
**Senior Vice President, Operations & Administrator**
**JPS Health Network**

# Integrated Behavioral Health

JPS Health Network

# Presenters

## Alan Podawiltz, DO, MS, FAPA

- Chair of Psychiatry, University of North Texas Health Sciences Center
- Chair of Psychiatry, JPS Health Network

## Wayne Young, M.Ed., MBA, LPC, FACHE

- Senior Vice President, Behavioral Health
- Administrator, Trinity Springs Pavilion

# JPS Health Network

The $950 million tax-supported healthcare system serving residents of Fort Worth and surrounding communities in Tarrant County, Texas.

### John Peter Smith Hospital

- 537 acute-care beds
- Tarrant County's only Level I Trauma Center
- 110,000+ emergency room visits annually

**Patient Care Pavilion at John Peter Smith Hospital**

*30 primary care and specialty clinics*

*20 school-based health centers*

*1.1 million patient encounters annually*

*Nine residency programs, including the nation's largest hospital-based family medicine residency*

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Powered by Pride

# JPS Behavioral Health

## JPS Health Network has a robust Behavioral Health Service Line

19,000+ emergency visits
30,000+ outpatient visits
30,000+ inpatient days


**Trinity Springs Pavilion**

*96 bed Psychiatric Hospital*

*4 Partial Hospitalization Programs*


*Psychiatric Emergency Center*

*Day Rehab For Homeless*

*Integrated Medical Unit*

*Virtual Psychiatric Guidance*

*6 behavioral health clinics*

*6 PC Clinics with Embedded BH Specialists*

*Walk-In BH Clinic*

*8 Peer Support Specialists*

*1 BH School-Based Health Center*

*Psychiatry residency*

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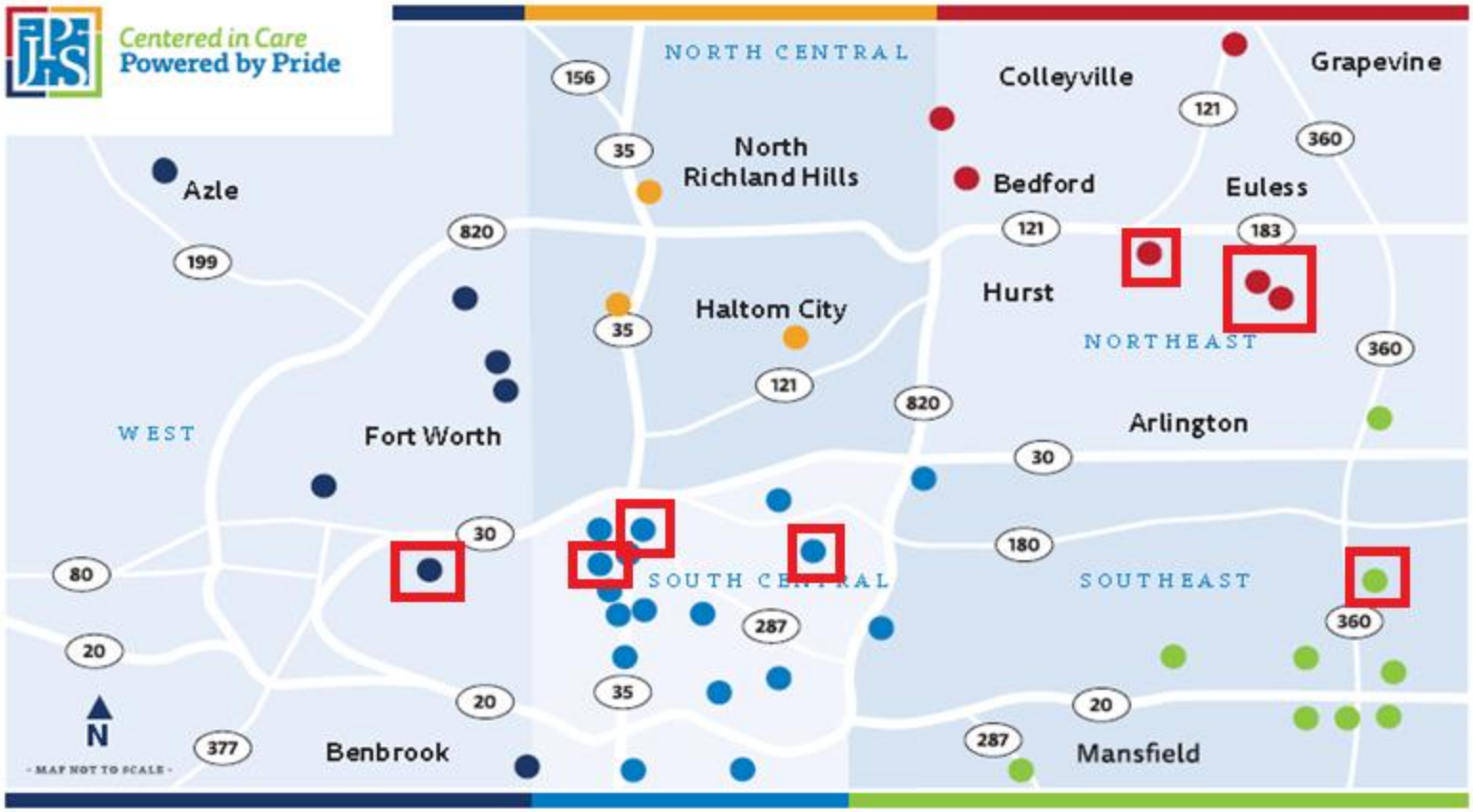
# JPS Health Network Locations




= JPS Behavioral Health Location

Tarrant County Population = 1.9M

# Psychiatric Emergency Center

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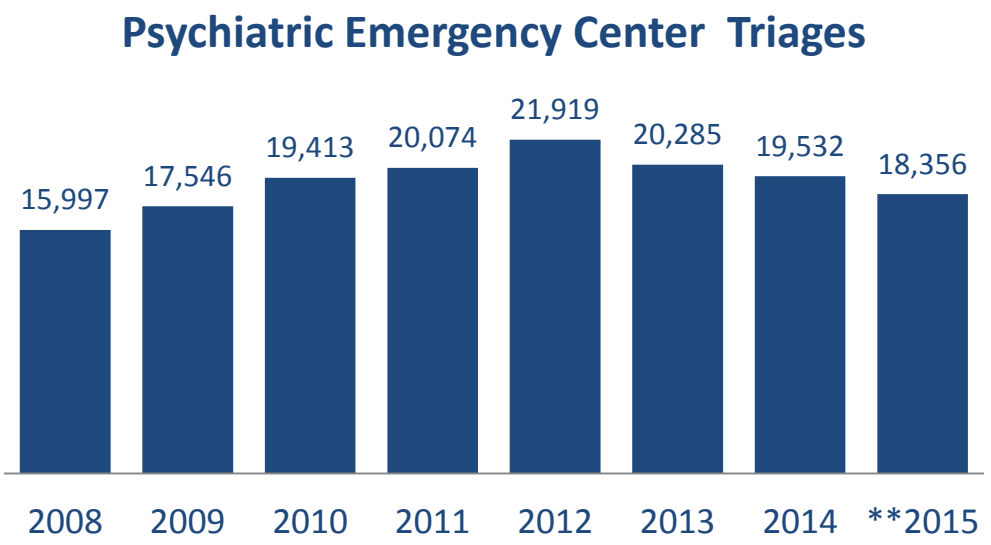
Emergency Psychiatric Services :

- 24 hours a day, seven days a week
- Psychiatrist on-site at all times
- Voluntary and involuntary patients
- Psychiatric evaluation
- Short-term interventions including observation, stabilization, and monitoring
- Admission to JPS inpatient services
- Referral services




# Adult Inpatient Services

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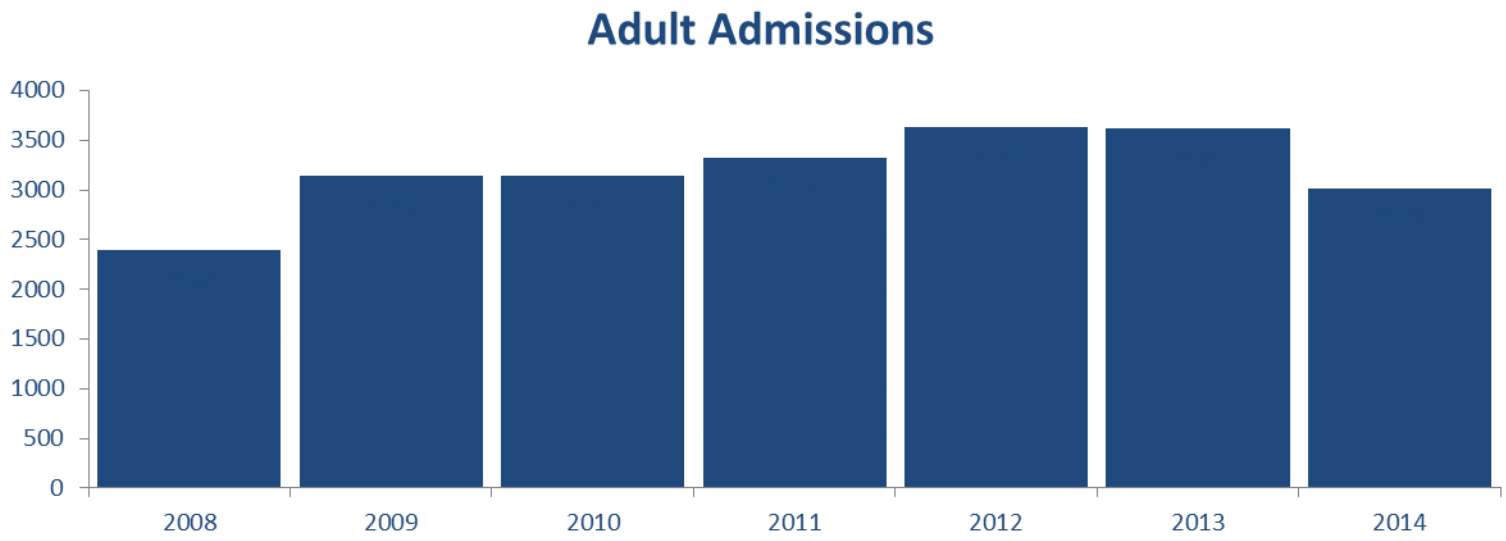
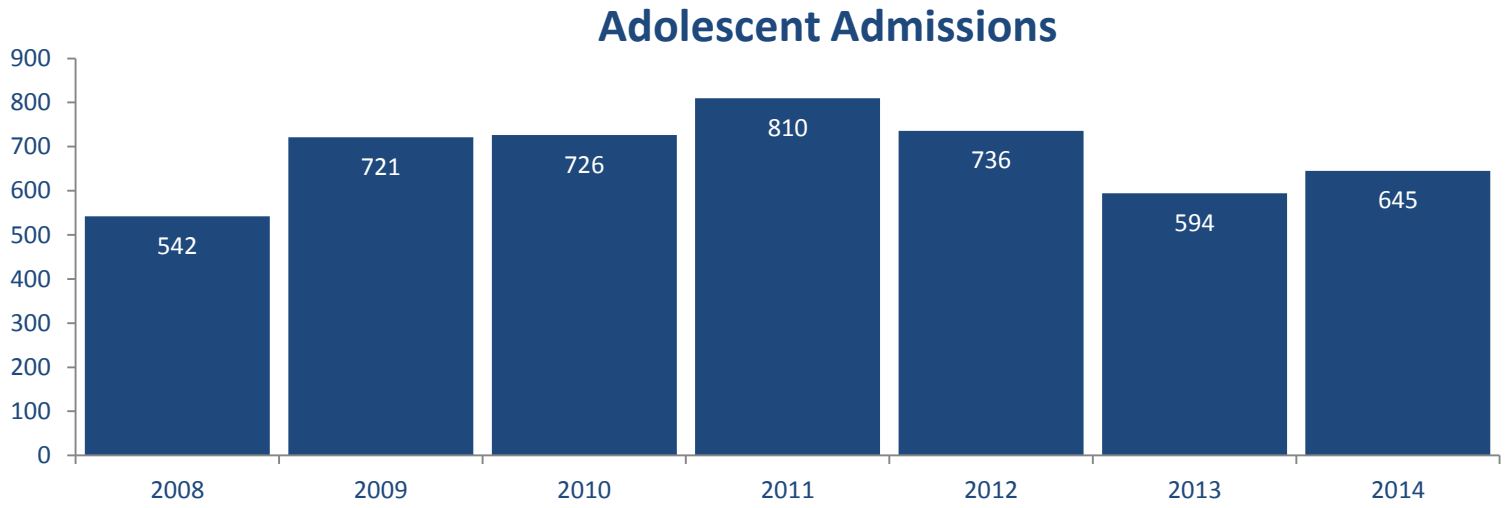



Crisis intervention and individualized, structured treatment are provided to patients in need of an intensive and safe setting.

Two units totaling 60 acute adult beds.

# Adolescent Inpatient Services




The Adolescent Inpatient Unit is a 16 bed acute care unit.

# Local Commitment Alternative

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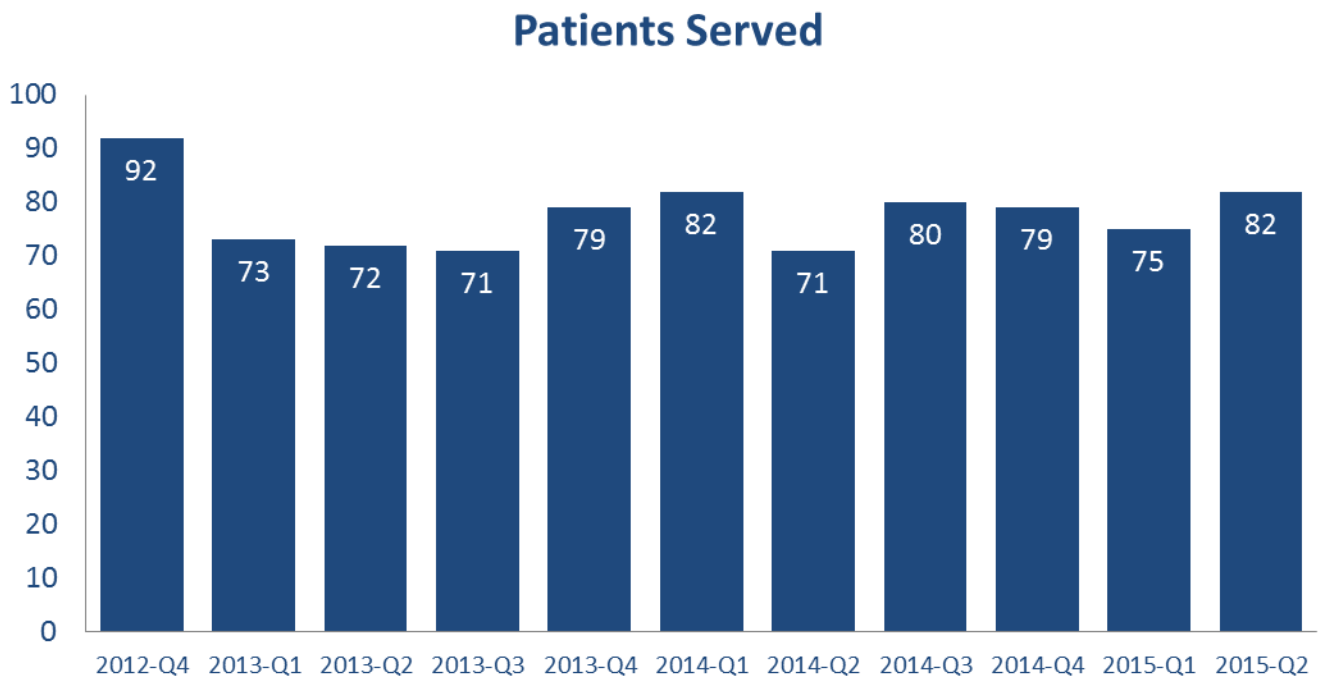
JPS opened 20 beds under contract with MHMR/DSHS for to offset the reduction in NTSH beds available in Tarrant County.



# Peer Support Specialists

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Peer Support Specialists are increasingly involved in our system. We hired two as a pilot effort 18 months ago and today we have 8 with a 9th position posted for a “Family Partner”

- Psychiatric Emergency Center
- Trinity Springs - Adult Inpatient
- Psychiatric Day Rehab
- Central BH Assessment Center

# Patient and Family Advisory Council

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The JPS Patient and Family Advisory Council is a group of 12-14 people who express interest in helping JPS improve our services.

- Dedicated to Behavioral Health Services
- Includes patients and family members of those who received or have received behavioral health services at JPS
- Assist with identifying priority areas for us to address
- Partner in Performance Improvement Projects
- Assist in setting policy and giving input into the impact current policies have on patients and families.

# Discharge Management Program

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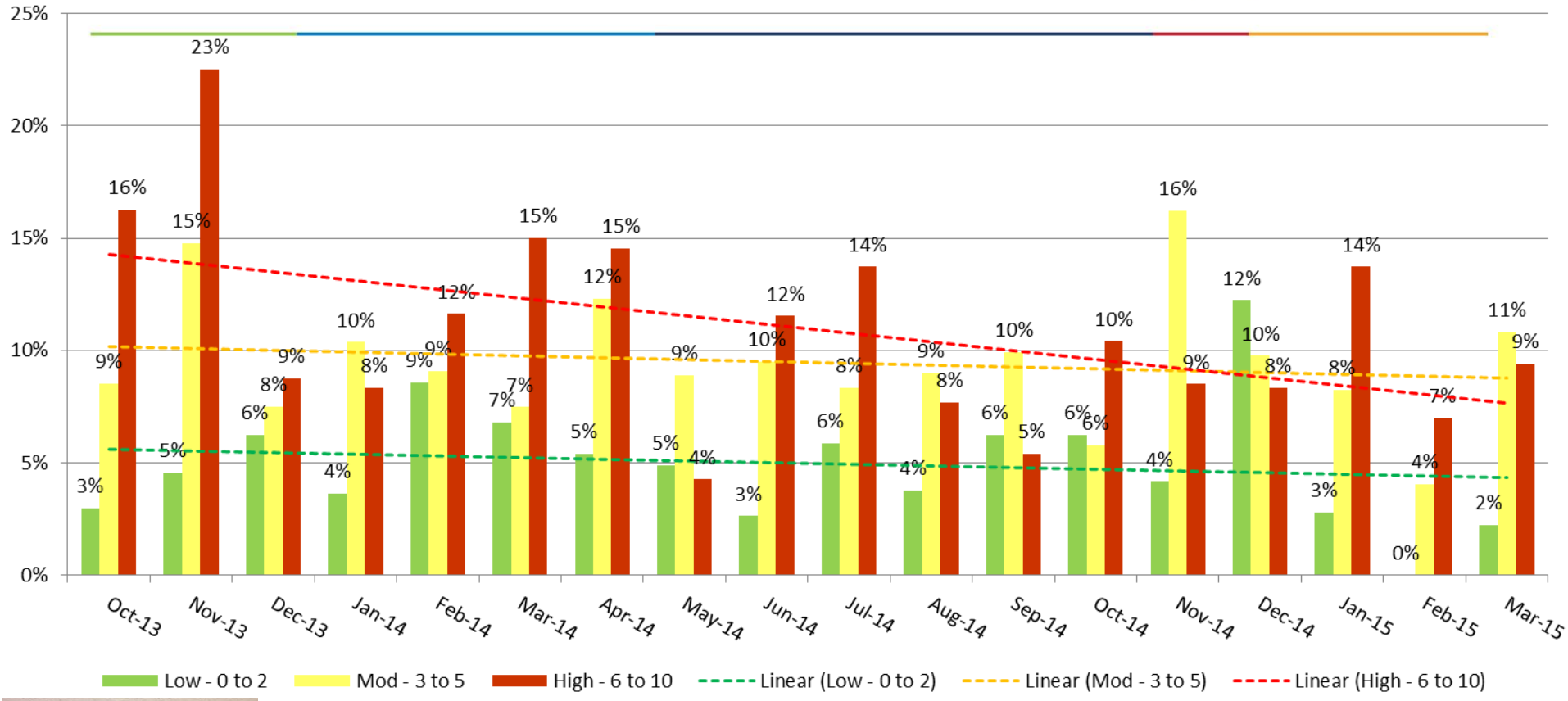



TEXAS HOSPITAL ASSOCIATION

We started a risk stratified readmission assessment tool to inform our discharge management program which connects with people after they leave the hospital to promote continued recovery.

# Mental Health Court

Mental Health Court is held in TSP twice weekly.

MHMR staff serve as court liaisons between TSP, MHMR, and North Texas State Hospital

98% of those who go to NTSH from Tarrant County depart from Trinity Springs Pavilion

# Behavioral Health Outpatient Services

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| | Partial Hospitalization | Med Mgmt | Assessment | Psychological Testing | Psychology | Counseling | Vocational Rehab |
|---|---|---|---|---|---|---|---|
| Central Arlington | YES | YES | YES | - | - | YES | - |
| Northeast | - | YES | YES | - | - | YES | - |
| Stop Six | - | YES | YES | - | - | YES | - |
| Viola Pitts | YES | YES | YES | - | YES | - | - |
| Northeast SBC | - | YES | YES | - | - | YES | - |
| Central Center | YES | YES | YES | YES | YES | YES | - |
| HEB BH Clinic | YES | YES | - | - | - | - | - |
| Psych Day Rehab | "YES" | YES | YES | - | - | YES | YES |
| Healing Wings | - | - | YES | YES | YES | YES | - |
| SE Tarrant Co MH | - | YES | - | YES | - | YES | - |

Most JPS outpatient behavioral health services are integrated into strategically located JPS Health Centers.

| | Outpatient Visits |
|---|---|
| 2013 | 17,875 |
| 2014 | 32,980 |
| *2015 | 40,334 |

*Projected
- Does not include Virtual Guidance Patients

# The Case for Integrated Care

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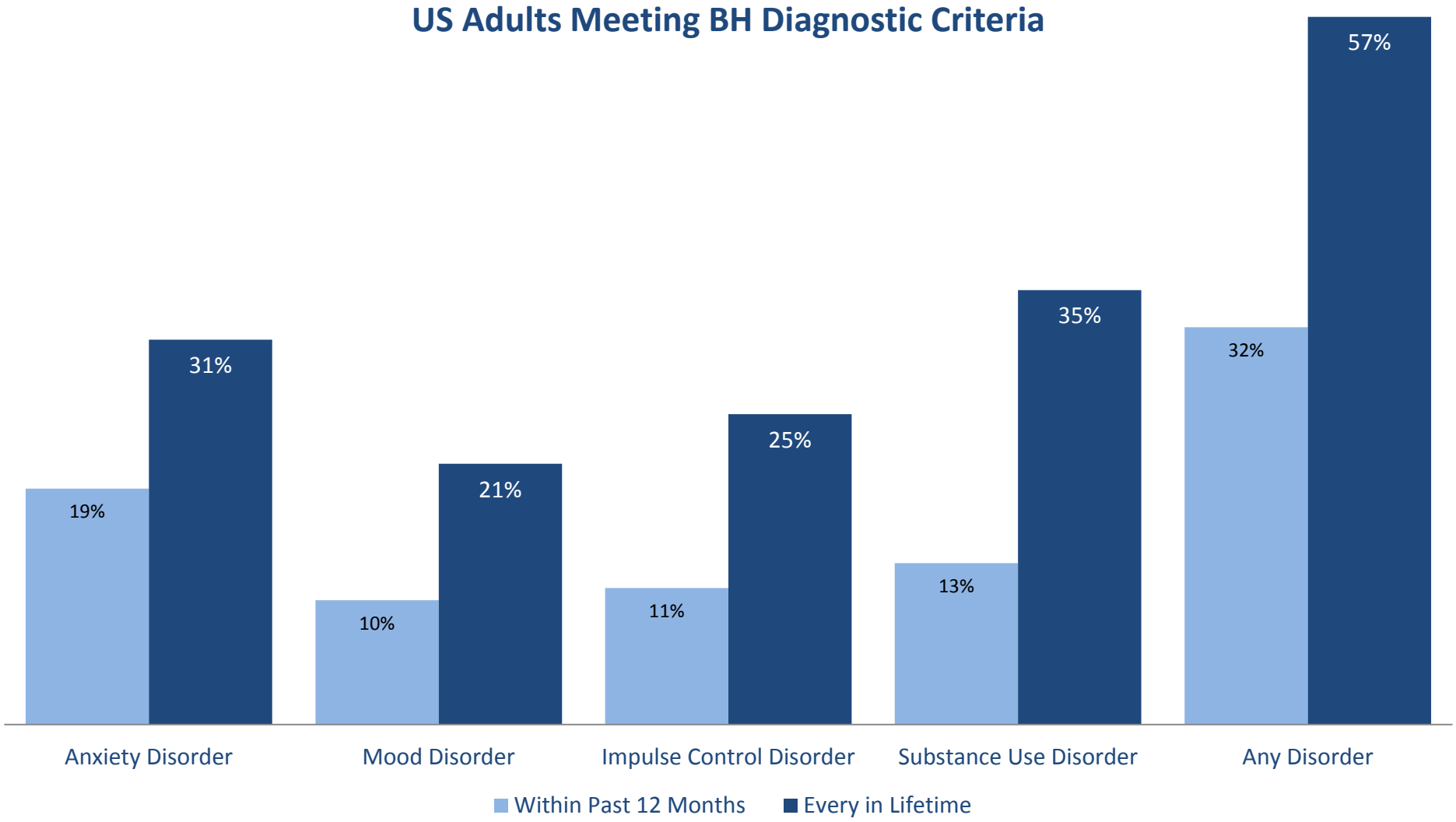

# The Case for Integrated Care

Centered in Care
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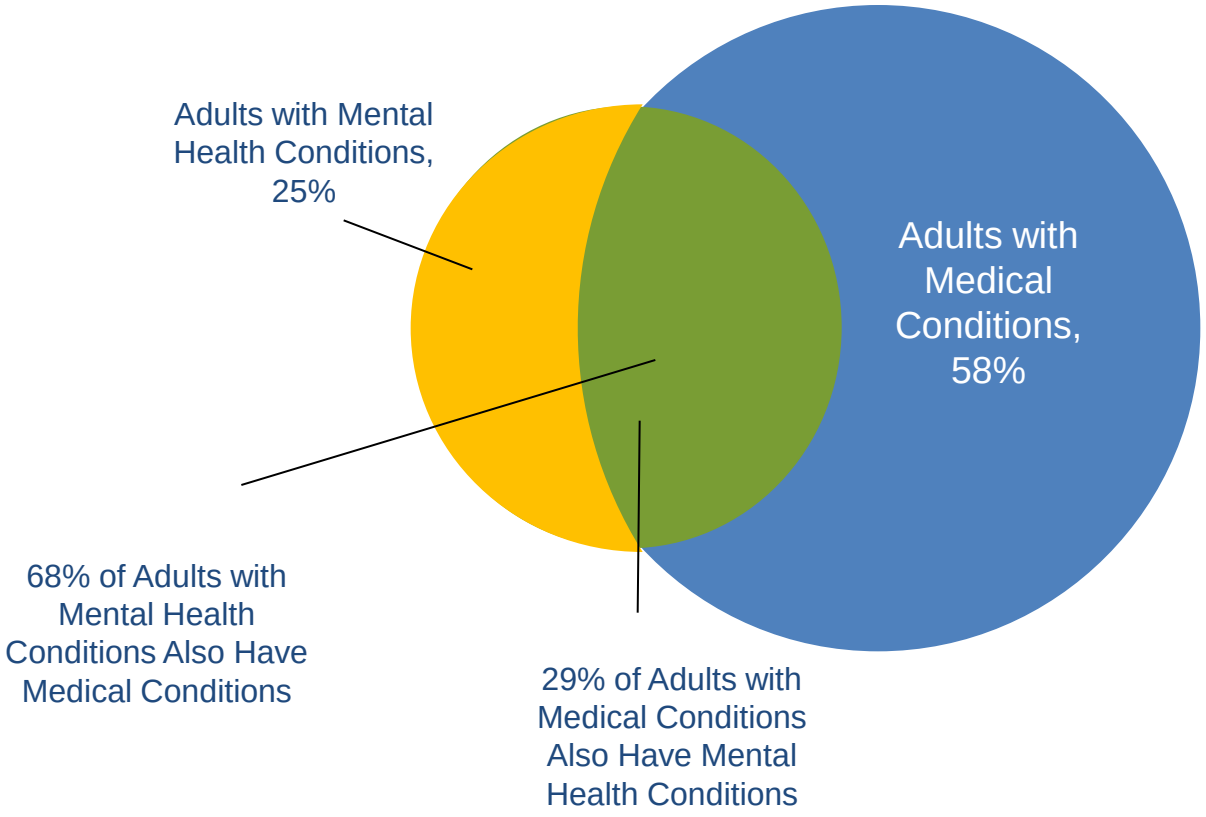


Source: Druss, B.G., and Walker, E.R. (February 2011). *Mental Disorders and Medical Comorbidity*. Research Synthesis Report No. 21. Princeton, NJ: The Robert Wood Johnson Foundation.

# The Case for Integrated Care

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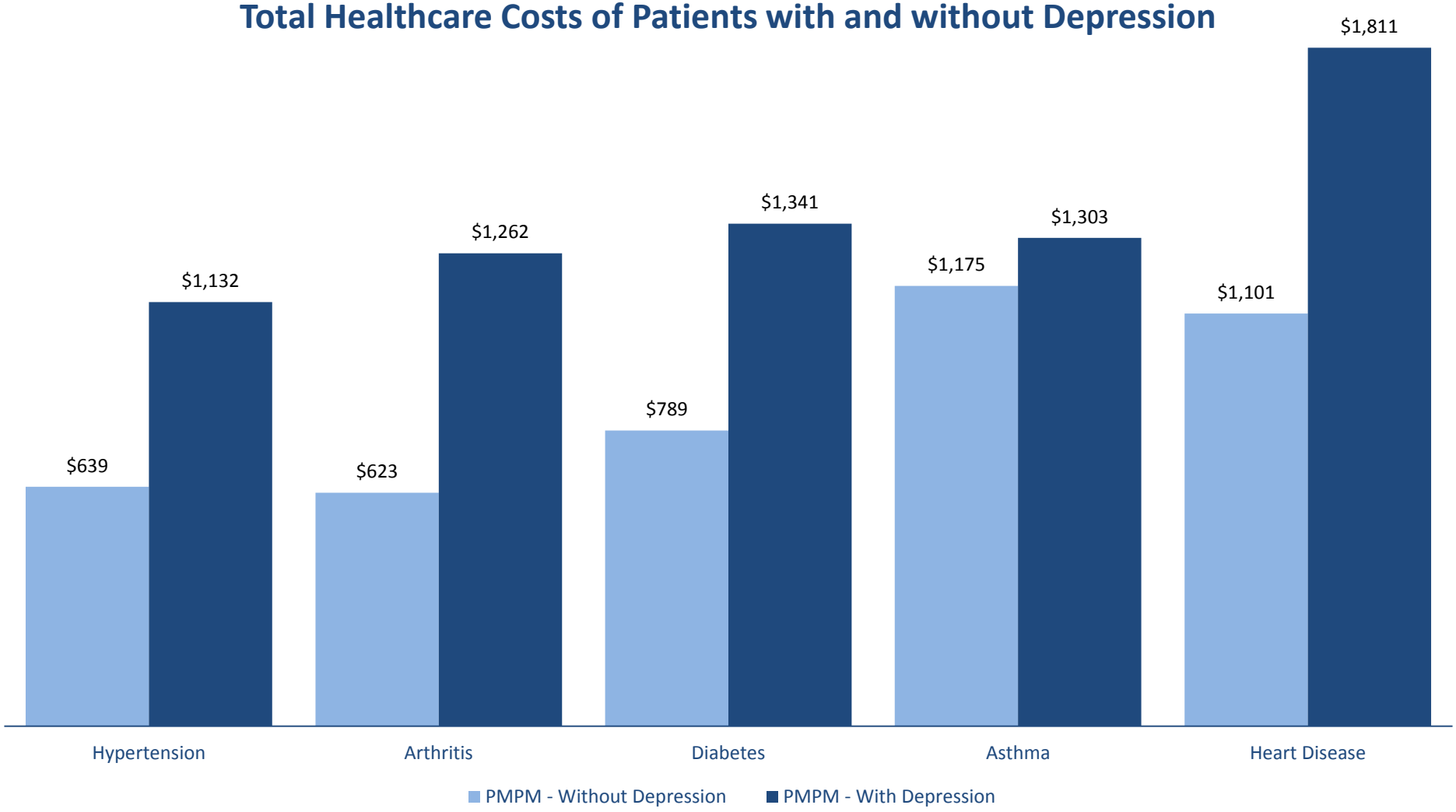
## Total Healthcare Costs of Patients with and without Depression




Melek, S. P. (2012). Bending the Medicaid healthcare cost curve through financially sustainable medical-behavioral integration. Milliman Research Report.

# The Case for Integrated Care

Centered in Care
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| Year | Mean Age at Time of Death | | | Mean Years of Life Lost Per Client |
|---|---|---|---|---|
| | All Clients Who Died During Year | Male Clients Who Died During Year | Female Clients Who Died During Year | |
| 1997 | 55.0 | 52.4 | 58.1 | 28.5 |
| 1998 | 55.0 | 53.3 | 56.6 | 28.8 |
| 1999 | 54.0 | 50.8 | 57.3 | 29.3 |

This and next slide reference: Colton CW, Manderscheid RW. Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. Prev Chronic Dis [serial online] 2006 Apr [*date cited*]. Available from: URL: http://www.cdc.gov/pcd/issues/2006/apr/05_0180.htm.

# The Case for Integrated Care

Centered in Care
Powered by Pride

Source: SAMHSA: A standard framework for levels of integrated healthcare

| MINIMAL COLLABORATION | BASIC COLLABORATION FROM A DISTANCE | BASIC COLLABORATION ONSITE | CLOSE COLLABORATION/ PARTLY COLLABORATED | FULLY INTEGRATED |
|---|---|---|---|---|
| ➢ Separate systems<br>➢ Separate facilities<br>➢ Communication is rare<br>➢ Little appreciation of each other's culture | ➢ Separate systems<br>➢ Separate facilities<br>➢ Periodic focused communication; most written<br>➢ View each other as outside resources<br>➢ Little understanding of each other's culture of sharing of influence | ➢ Separate systems<br>➢ Same facilities<br>➢ Regular communication, occasionally face-to-face<br>➢ Some appreciation of each other's role and general sense of large picture<br>➢ Mental health usually has more influence | ➢ Some shared systems<br>➢ Same facilities<br>➢ Face-to-face consultation; coordinated treatment plans<br>➢ Basic appreciation of each other's role and cultures<br>➢ Collaborative routines difficult; time and operation barriers<br>➢ Influence sharing | ➢ Shared systems and facilities in seamless bio-psychosocial web<br>➢ Consumers and providers have same expectations of system<br>➢ In-depth appreciation of roles and culture<br>➢ Collaborative routines are regular and smooth<br>➢ Conscious influence sharing based on situation and expertise |
| "Nobody knows my name. Who are you?" | "I help your consumers." | "I am your consultant." | "We are a team in the care of consumers." | "Together, we teach others how to be a team in care of consumers and design a care system." |

# Behavioral Health DSRIP at JPS

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- **Discharge Management Program**
- **Partial Hospitalization Program**
- **Extended Clinic Hours**
- **Integrated Care**
- **Virtual Psychiatric and Clinical Guidance**
- **Central Assessment and Referral Center**
- **Psych Day Rehab for Homeless**

# JPS Behavioral Health Integration Model

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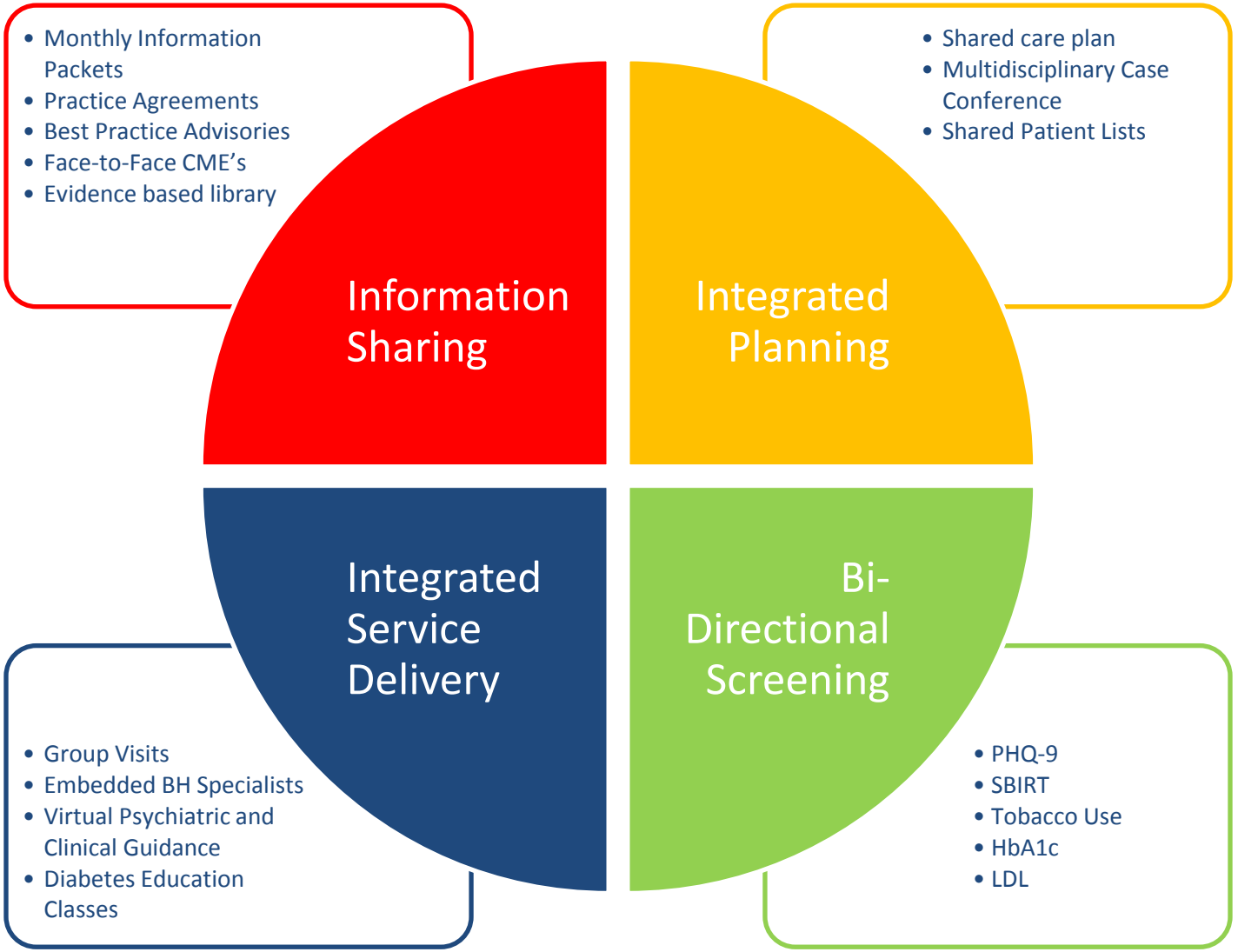

# Physician Engagement and Barriers

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- Perception of Time
- Understanding the purpose of integration and its value
- Organizational culture and sensitivity
- Practice agreements and standardization of care

# Information Sharing

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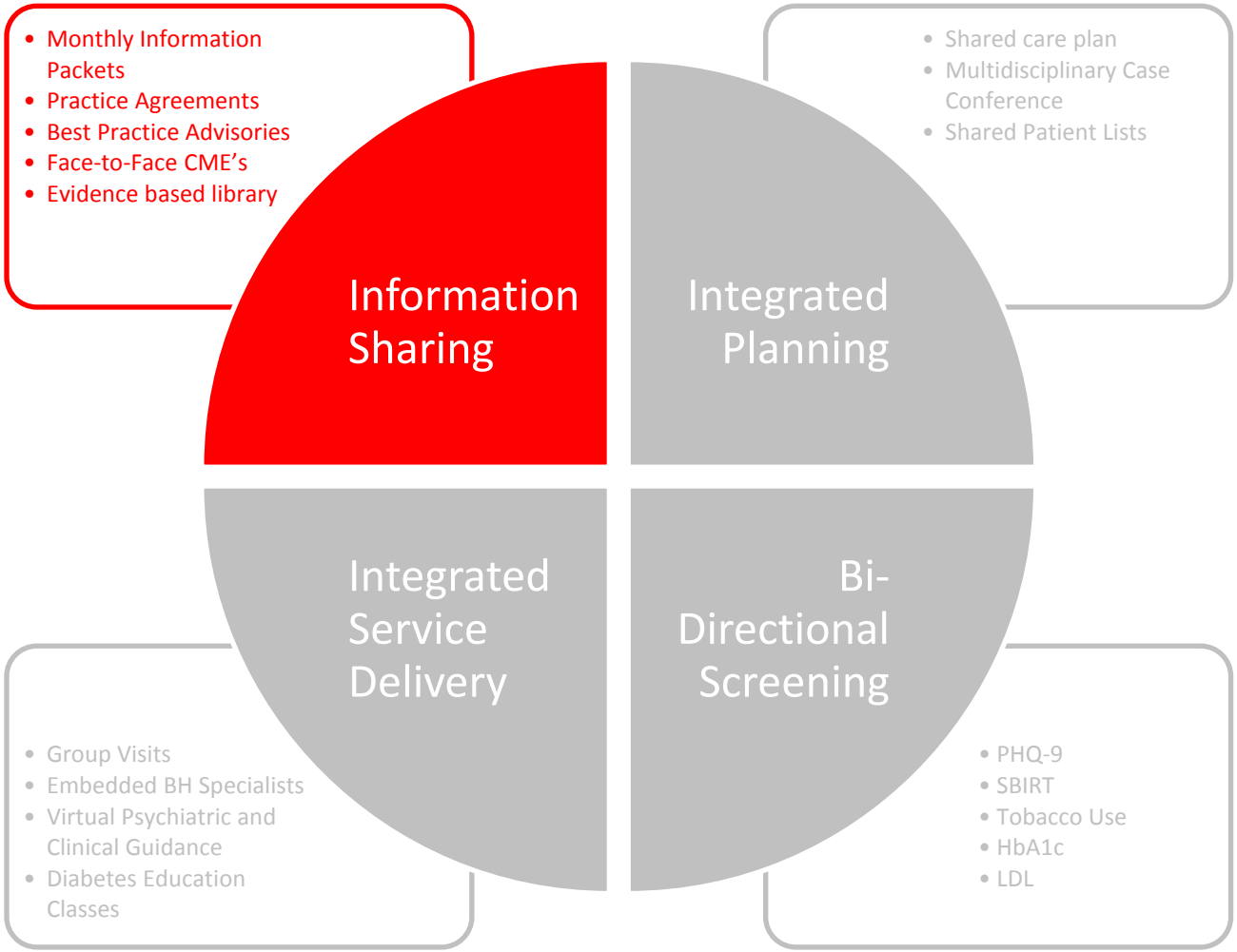

# Information Sharing
## - Practice Agreements

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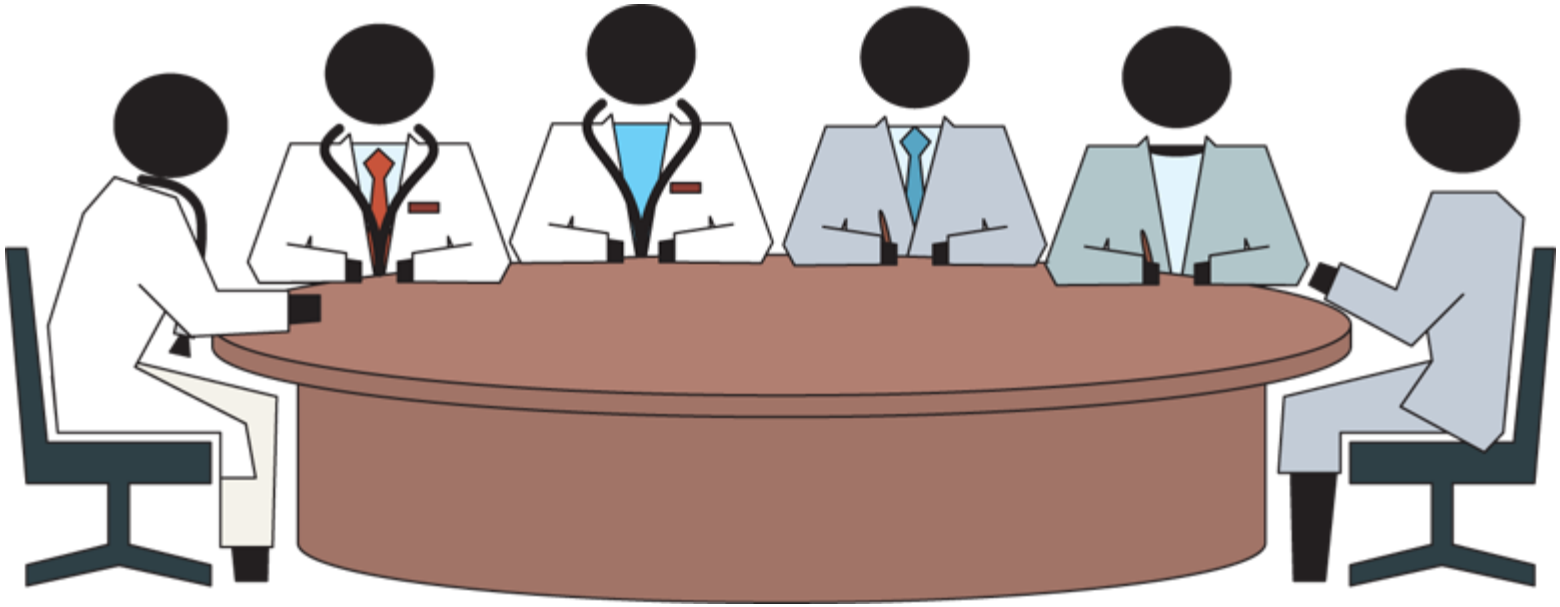


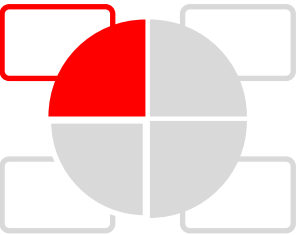
- Negotiated with primary care physician leaders and medical directors
- Documented in written agreement
- Approved by Med Executive Committee

# Information Sharing
## - Practice Agreements

Centered in Care
Powered by Pride

Core Elements of our Practice Agreements

- Statement of Purpose
- Roles and Responsibilities
- Screening Process
- Referral Protocols
- Communication Standards
- Patient Interventions and Transitions
- Strategies for Patients in Crisis



# Information Sharing
## - Practice Agreements (1 of 3)

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**Clinical Practice Agreement**

*Coordination of Services between Behavioral Health and Primary Care in the Outpatient Setting*

The goal of this agreement is to enhance the coordination of patient care services between Primary Care and Behavioral Health. This agreement will help ensure appropriate levels of care for the patient. The overall goal of specialty behavioral health services is to help the patient attain the highest level of independent function. To this end, these services and interventions will, for the most part, be targeted and time limited to maximize patient stability. The intent is to return the patient to on-going treatment in the medical home once appropriate.

Virtual Behavioral Health Consultation

If the Primary Care Provider desires a Behavioral Health consult, the Virtual Behavioral Health Clinical Guidance Service is available to outpatient Primary Care Providers on a 24/7 basis. The clinical guidance team will offer the first line of assistance to Primary Care Providers with patients that present signs and symptoms of mental illness. The team will have the ability to assist in directing referrals for Behavioral Health to appropriate areas and will provide support to Primary Care Providers with resources and guidance to adequately treat patients who present with behavioral health conditions. This support will include:

- Information and referral assistance
- General information about various mental illnesses and tools to assist with determining an appropriate diagnosis
- An evidence based resource with literature and evidence based practices from multiple sources on behavioral health disorders and topics to be available to medical professionals including guidelines for psychotropic medication indications, diagnosis and symptomology, psychotropic medication administration and monitoring, and appropriate screening, prevention, and interventions in community settings.
- Webinar types of education and training for primary care providers focused on improved identification, diagnosis, and treatment of common behavioral health conditions
- Virtual behavioral health guidance consisting of an interdisciplinary consultative team comprised by a psychiatrist, a master's level psychiatric social worker and a psychiatric nurse who will ensure virtual psychiatric guidance services are available within 30 minutes on a 24-hour basis to primary care providers.

**Standardized Screening**

Behavioral Health will provide Primary Care with standardized screening tools to assist with diagnosing individuals with behavioral health issues as well as early detection and intervention. A standardized treatment protocol will be provided to Primary Care providers to begin first line treatment to uncomplicated or mild psychiatric illnesses. The tools used can also help guide physicians to the next level in the referral process.

# Information Sharing
## - Practice Agreements (2 of 3)

Centered in Care
Powered by Pride

**Clinical Practice Agreement (Cont.)**

Embedded Behavioral Health Specialists

Behavioral health will provide primary care with a behavioral health specialist at each of the integrated sites where behavioral health services are currently located. The general behavioral health specialist is typically a social worker or a psychiatric nurse. They will be located within the primary care setting and function as part of the primary care team as well as the behavioral health team. The specialist's role is to provide support and assistance to both PCPs and their patients without engaging in any form of extended specialty behavioral health care. The role of the behavioral health specialist is to coordinate care and communication between behavioral health and primary care. Their responsibilities are as follows:

- Integrate treatment plan to include behavioral health goals and education for patients with behavioral health issues.
- Follow up with providers and patients being referred to behavioral health and being referred back into primary care.
- Provide immediate access to a behavioral health provider by delivering behavioral health services and interventions in the primary care setting on a stat basis
- Provide brief, solution focused counseling services in primary care settings as needed.
- Manage the referral process and case load balance between primary care referrals and stable BH patients transitioning back to primary care providers
- Initiate treatment planning related to behavioral health issues for patients psychiatric illness.

**Referrals to Behavioral Health**

The following unstable conditions of patients would be appropriate for primary care providers to request consultation and/or refer to behavioral health providers:

- Schizophrenia
- Bipolar spectrum disorders
- Major Depressive disorder with psychosis
- Treatment resistant depression as defined by failure of at least one antidepressant trial at appropriate dosage for 6-8 weeks.
- Newly diagnosed or untreated/unremitting Post Traumatic Stress Disorder
- Borderline Personality Disorder with self-injurious behavior
- Suicidal or homicidal patients (w/o intent or plan)
- Psychiatric Evaluation for ADD/ADHD and medication recommendations
- Any patient insisting upon seeing a mental health professional
- Need for consultation to support on-going medical counseling and or behavior management in the primary care setting
- Patient experiencing significant acute physical and/or emotional distress as a result of life events (e.g. death, divorce, etc.) and the patient's usual coping skills and resources are overwhelmed
- Patients with primary medical conditions with evidence or diagnosis of comorbid psychiatric illness.
- Psychotherapy, requested by the physician and/or the patient, to address specific emotional/behavioral problems and needs

Other psychiatric conditions not listed above may be referred at the primary care provider's discretion. Uncomplicated depressive or anxiety disorders should initially be treated by the primary care provider with an adequate (6-8 weeks at an adequate dose) trial of a selective serotonin reuptake inhibitor or other appropriate medication of the prim[illegible]ider's choice. Patients referred for depression should be seen by their primary care provider at the recommended intervals until their first behavioral health

# Information Sharing
## - Practice Agreements (3 of 3)

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**Clinical Practice Agreement (Cont.)**

In response to a physician referral or a patient initiated request for services the patient will be evaluated by licensed clinician member of Behavioral Health Team. This will include initial telephone screening, triage and referral as well as face-to-face evaluation as indicated. Recommendations for specialty mental health services will be made based upon established medical necessity criteria and then prioritized based on availability and need.

**Emergent Situations**
Emergency situations in which the patient presents in a crisis as a danger to self or others with a plan or intention to act should be taken seriously. The patient should not be left alone and staff should contact 911 to ensure the patient is evaluated for safety. *NOTE: an emergency in the outpatient setting should never rely on consultative process.*

Case Review/Conference Consults
Behavioral health outpatient consult services will be available for difficult case review and/or integrated service case conferencing on as needed basis. The intent of this service is to increase effective communication and hand off for cases shared between behavioral health and primary care as well as to provide case review for challenging patient issues related to behavioral health. Patients who may not be appropriate for outpatient behavioral health consultation include:

- Patient needing emergent care (e.g., suicidal or homicidal ideations)
- Patients on pain medications without comorbid psychiatric illness
- Patients with a primary diagnosis of substance dependence for the purpose of detoxification, substance abuse rehabilitation, or withdrawal management.
- Patients stable on benzodiazepines for sedative or hypnotic benefits
- Patients stable on antidepressant medication for depression or anxiety disorders
- Patients with uncomplicated depression prior to at least one (1) antidepressant trial for a 6-8 week period at an appropriate dosage.
- Patients with only a positive depression screen without further evaluation by the primary care provider establishing a diagnosis of depression
- Vascular Cognitive Disorders

Informing Patients of Need for Consult
Patients referred to behavioral health services need to be informed of the need for specialty consultation by the Primary Care Provider. The patient's agreement with the consultation is essential for successful patient engagement in their health care plan.

Return of Patients to Primary Care
Once a patient is determined to be stable on commonly prescribed psychiatric medications without need for other behavioral health interventions, the patient will be referred back to a primary care provider for continued medication management. A stable psychiatric patient is defined as one of the following:

- A patient on no more than two psychotropic medications
- A patient who has had no change in medication during the past six months
- Able to self- manage mental health treatment needs without requiring on-going multidisciplinary/team-based mental health services
- A Patient that meets criteria within Quadrant I and Quadrant III of the Four Quadrant Model.

Behavioral health providers, with concurrence from the patient, will contact the primary care provider to discuss the transfer of care and follow-up recommendation for [illegible] and monitoring. Behavioral health will retain responsibility for care of patients with unstable psychiatric conditions.

[illegible] agreement regarding the coordination of care between primary care and behavioral health was implemented on _____.

# Information Sharing
## - Monthly Information Packets

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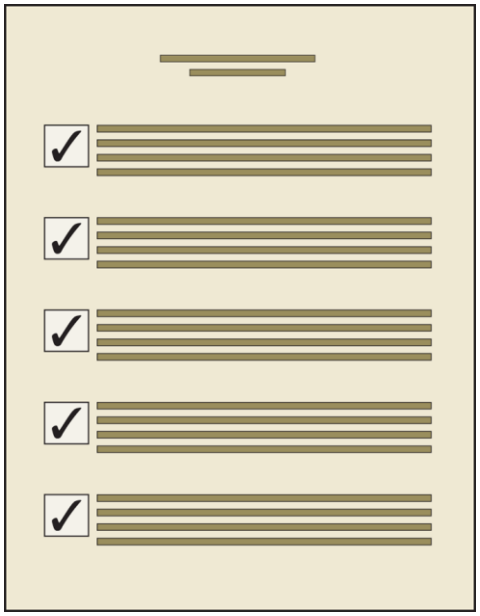

| | |
|---|---|
| October 2013 | - Depression |
| November 2013 | - Anxiety |
| December 2013 | - Insomnia |
| January 2014 | - Bipolar |
| February 2014 | - Schizophrenia |
| March 2014 | - PTSD |
| April 2014 | - Integrated Healthcare |
| May 2014 | - Psych Meds and Pregnancy |
| June 2014 | - Metabolic Side Effects from Antipsychotics |
| July 2014 | - Domestic Violence |
| August 2014 | - Substance Abuse |
| September 2014 | - Antidepressant-Anticonvulsants for Chronic Pain |
| October 2014 | - Prescribing and Tapering Benzodiazepines |
| November 2014 | - Importance of Integrated Healthcare |
| December 2014 | - Insomnia & Sleep Hygiene |
| January 2015 | - Eating Disorders |
| February 2015 | - E-Consults |
| March 2015 | - Depression |

# Information Sharing
## - Best Practice Advisory

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Powered by Pride

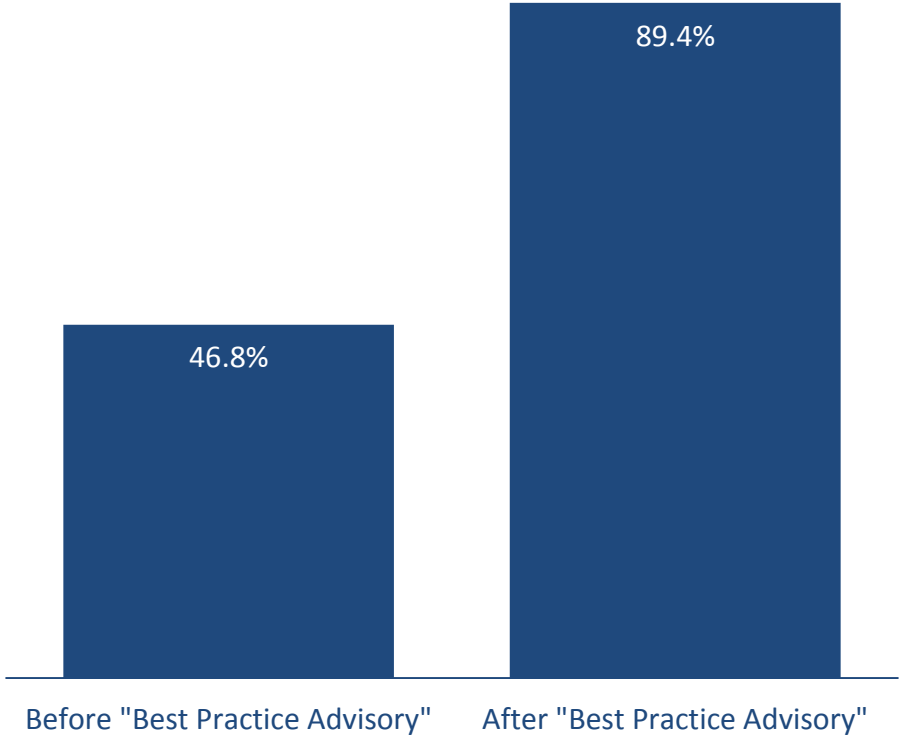
Staff trained on screening tool

Automated alert in EMR prompts providers to document follow-up plan for scores > 9

Results monitored

## Physician Documentation of Follow-Up Plan

*Among individuals with PHQ-9 score >9*



# Information Sharing
## - Best Practice Advisory

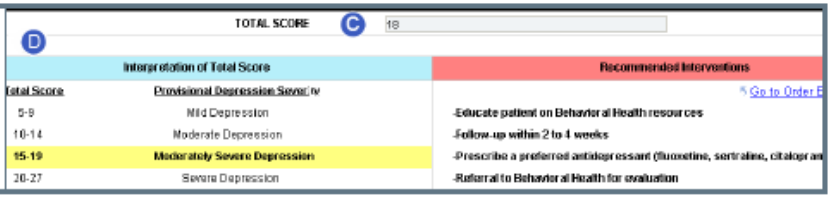
Centered in Care
Powered by Pride

1. Patient record in EMR prompts depression screening with PHQ-9. After all questions are answered, a total score will populate and assign a severity risk.

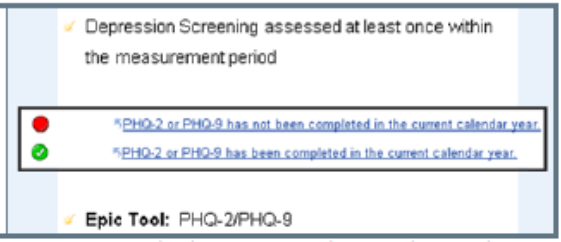

2. If the score is >9, the screening creates a "Best Practice Advisory."


3. If the provider chooses to take action and evaluate further, a smart order set automatically populates (e.g., referrals, medications, follow-up).


4. "Best Practice Advisory" additionally presents recommended intervention based on PHQ-9 Score.




5. The system will remind staff/providers to screen for depression using the PHQ-9 if the patient has not been screened within the past 12 months.

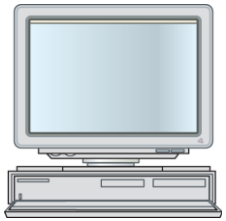


# Information Sharing
## - Face-to-Face CME's

Centered in Care
Powered by Pride

Two presentations each year focusing on common behavioral health issues found in Primary Care. Both are done in person and streamed on the internet

- Management of Anxiety in Primary Care
- Management of Depression in Primary Care
- Benzodiazepine Prescribing and Tapering Guidelines in Primary Care



These are also made available on our Virtual Guidance Provider Resource Page

# Information Sharing
## - Evidenced Based Library

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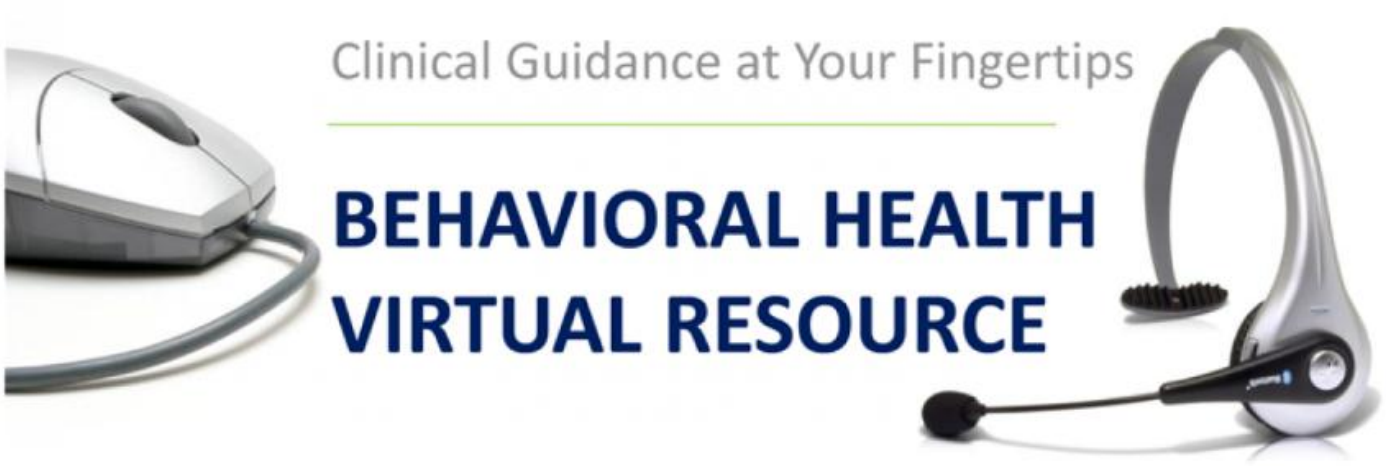
Careers MyChart Contact Us Locations

Search

Urgent Location Updates

*for* Patients | *for* Medical Professionals | Health Care Services | *about* JPS

- JPS Research Day 2015
- Academic Affairs
- Alumni Connection
- Provider Opportunities
- Residency Programs
- Virtual Behavioral Health Clinical Guidance
  - Request Virtual Guidance
  - Community Resources
  - Monthly E-Resource
  - Our Team
  - Research Library
  - Webinars & Presentations



# Information Sharing
## - Evidenced Based Library

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# Integrated Planning

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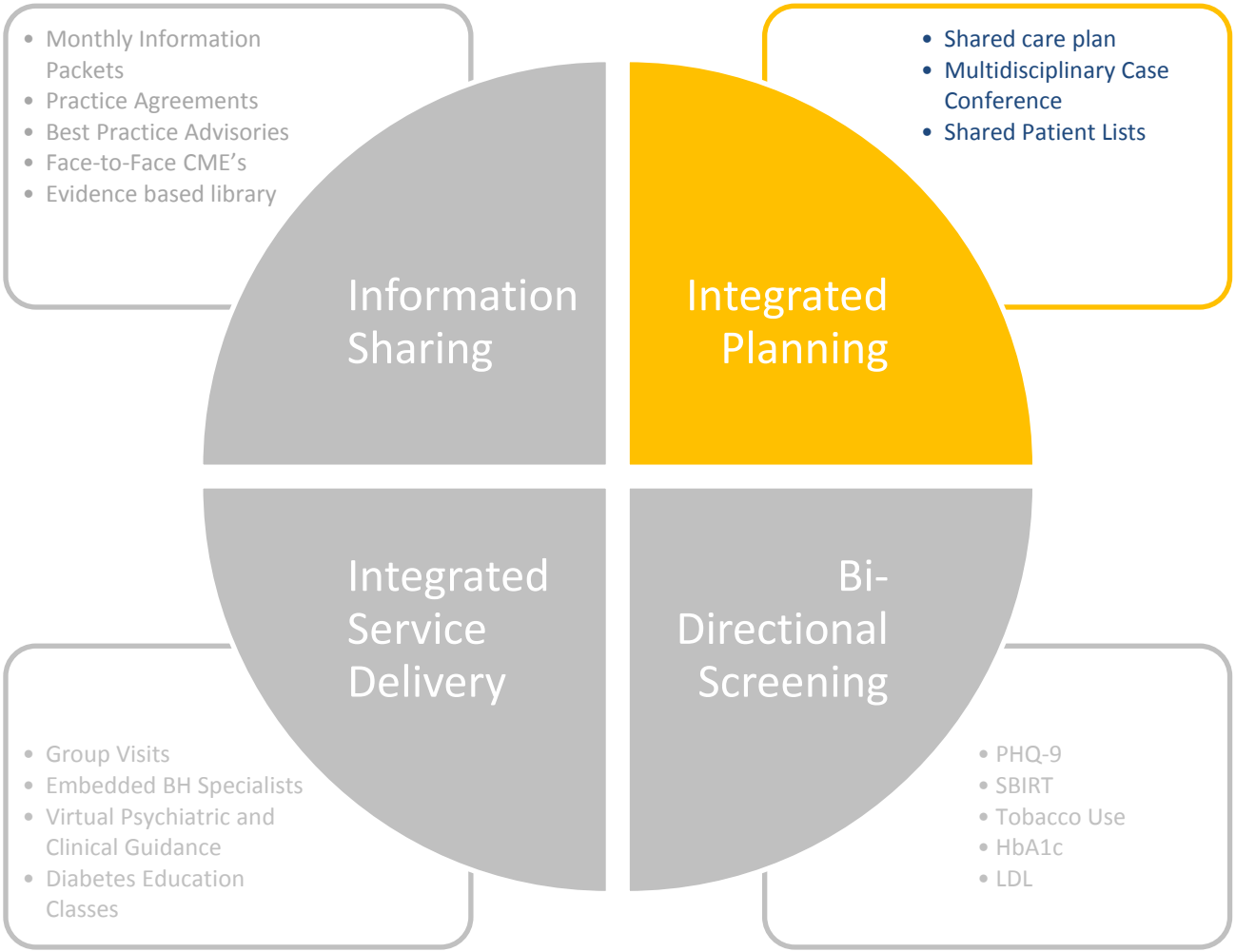

# Integrated Planning
## - Shared Care Plans

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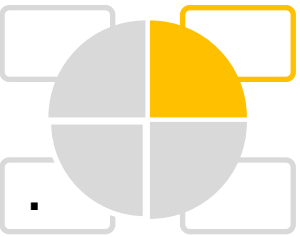
Our system is transitioning to shared care plans as a way to improve coordination and integration of care

- Work in progress
- Broader than Behavioral Health and Primary Care
- Allows all specialties and primary care to see, edit and document problems, goals, interventions, and outcomes.
- Seen in the same format from the same screen for all disciplines involved.



# Integrated Planning
## - Shared Patient Lists

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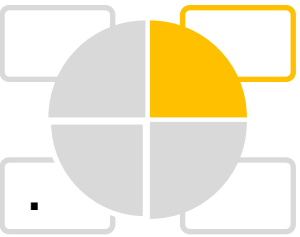
Our Shared Patient Lists were created to identify patients shared between a behavioral health provider and primary care provider at the same location

- Identifies key metrics:
  - BP
  - HbA1c
  - PHQ-9
  - Diagnoses
  - Medications
  - # of ED Visits in past 6 months
  - # of Hospitalizations in past 6 months
- Embedded Specialists summarize key points from previous visits and reports to providers.
- Drives recommendations for transitioning level of specialty involvement and care



# Integrated Planning
## - Multi-Disciplinary Case Conference

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Multidisciplinary Case Conference occur at the request of the patient and/or the providers.

These typically involve the most complex patients.

# Bi-Directional Screening

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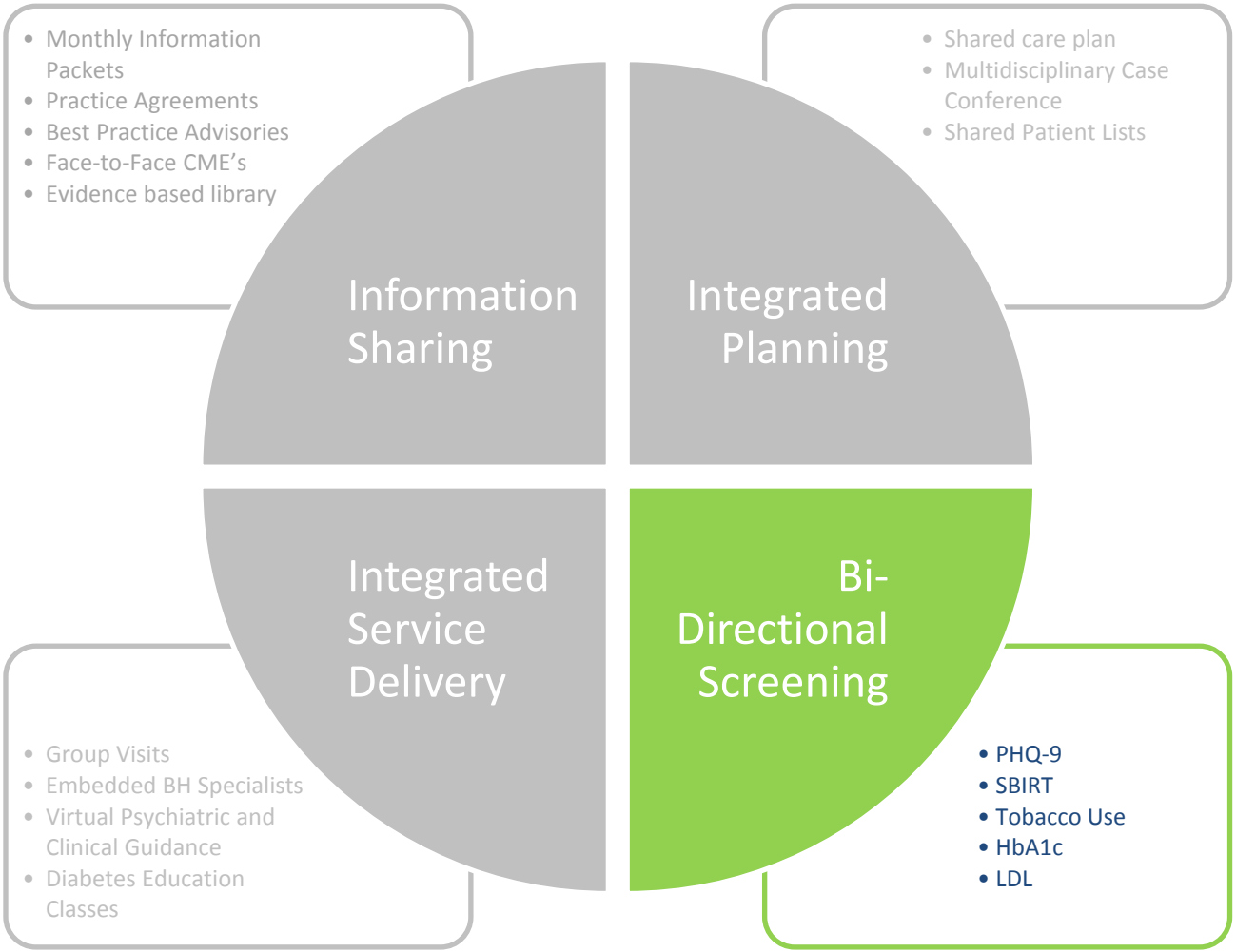

# Bi-Directional Screening - PHQ-9

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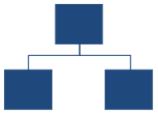
Standardize screening administration and follow-up processes across primary care practices

Train staff on how to use screening and how to escalate

Work with IT to develop MER reporting specs and create reports

Automate alerts in EMR prompting providers to screen patients at routine intervals



Include recommended guidelines in EMR for provider action

Monitory and share results to inform quality improvement

# Bi-Directional Screening - PHQ-9

Over 100,000 primary care screenings for depression

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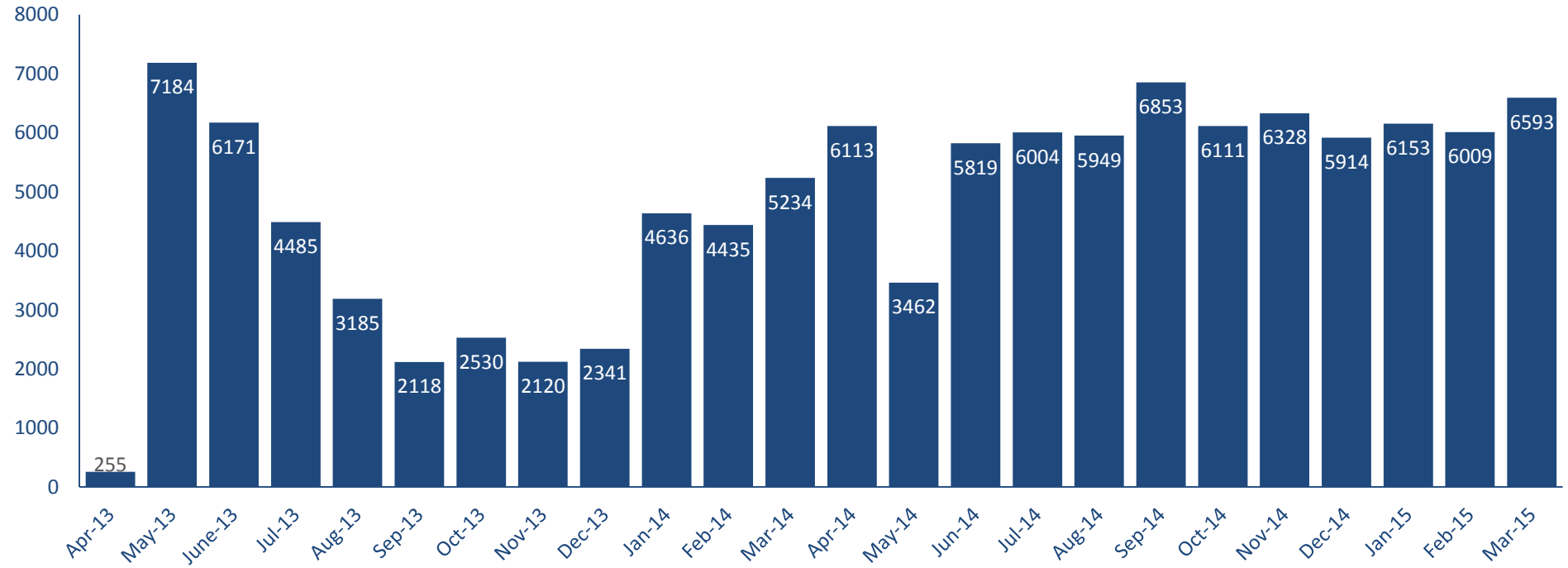
## Patients Screened for Depression in Primary Care



# Bi-Directional Screening - PHQ-9

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| Score: | Interpretation: | Treatment Recommendation |
|---|---|---|
| 0-9 | Mild to Minimal Risk | • Support, educate to call if worsens, follow up as needed. |
| 10-14 | Moderate Risk | • Antidepressant therapy and/or psychotherapy<br>• Behavioral health specialist provides resources, initiates treatment planning and motivational therapy as needed<br>• Conduct suicide risk assessment<br>• Virtual Psychiatric Guidance<br>• Follow up in 4-8 weeks |
| 15-19 | Moderately Severe Risk | • Antidepressant and/or psychotherapy<br>• Behavioral health specialist provides resources, initiates treatment planning and motivational therapy as needed<br>• Conduct suicide risk assessment<br>• Virtual Psychiatric Guidance<br>• Referral to Psychiatry if warranted<br>• Follow up in 2-4 weeks |
| 20 or higher | Severe Risk | • Antidepressant, Possible augmentation<br>• BH specialist provides resources, initiates treatment planning and follows up with patient.<br>• Conduct Suicide risk assessment<br>• Follow up in 2-4 weeks<br>• Referral to Psychiatry |

# Bi-Directional Screening
## - 12 Month Remission Rates

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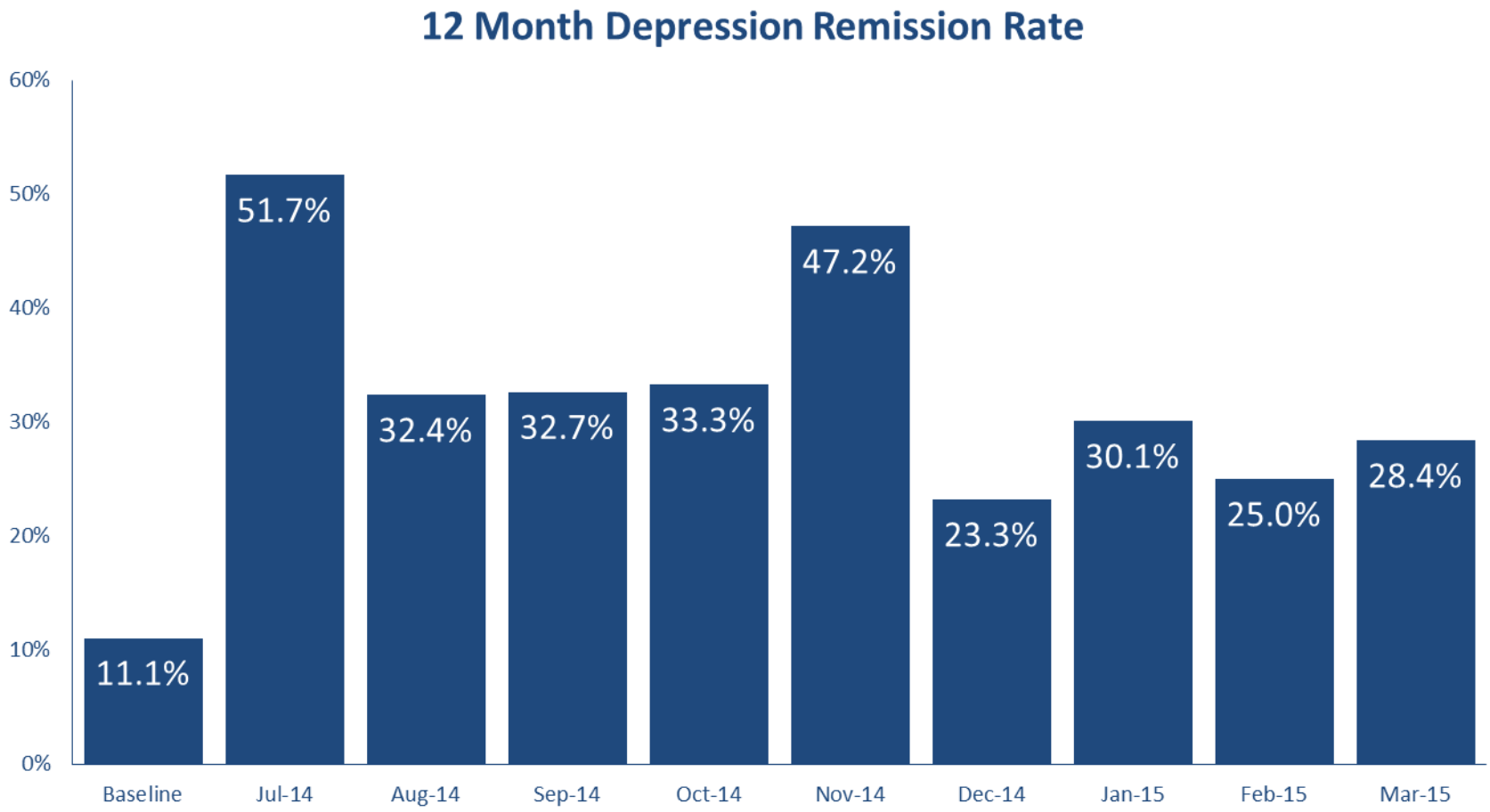

# Bi-Directional Screening
## - Trauma Patients - SBIRT

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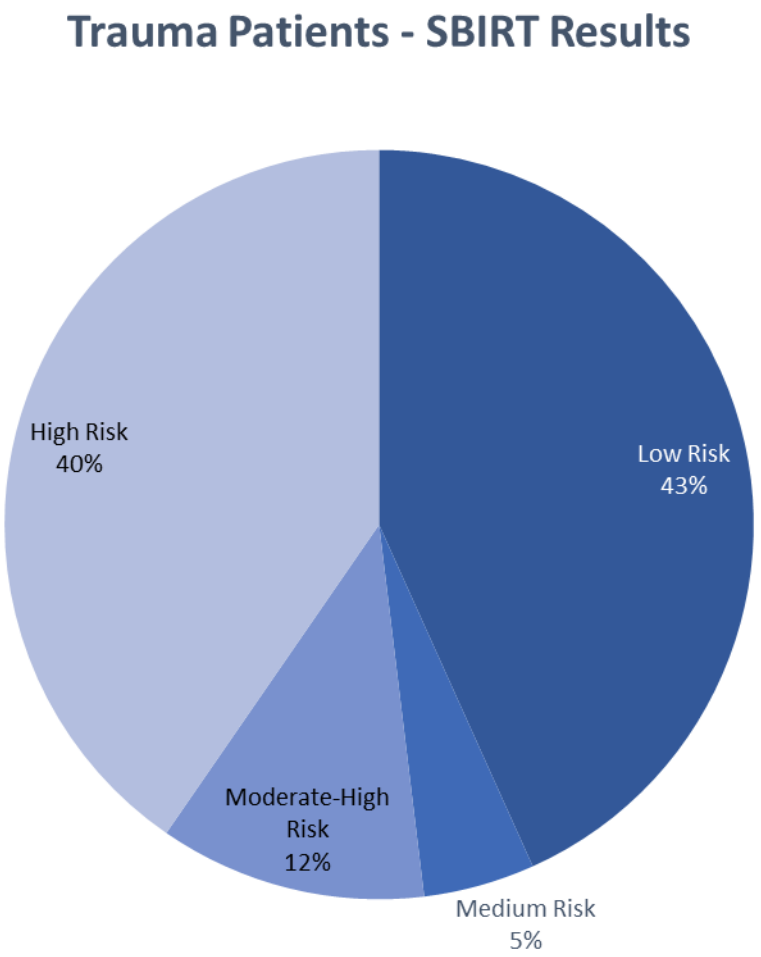
Approximately 500 trauma patients are year are positive for alcohol on arrival. Our Behavioral Health team engages them utilizing SBIRT



# Bi-Directional Screening - Tobacco Use

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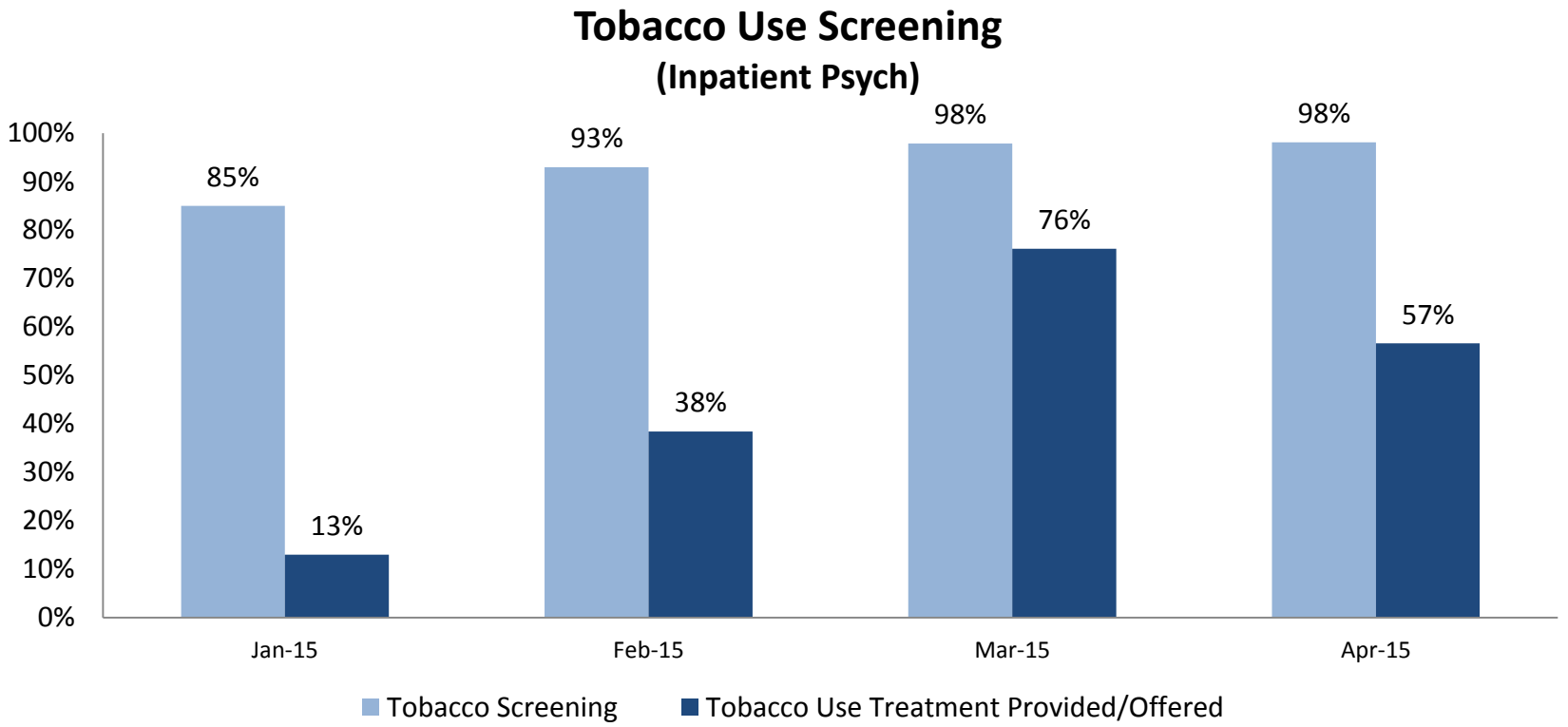

# Bi-Directional Screening - HbA1c

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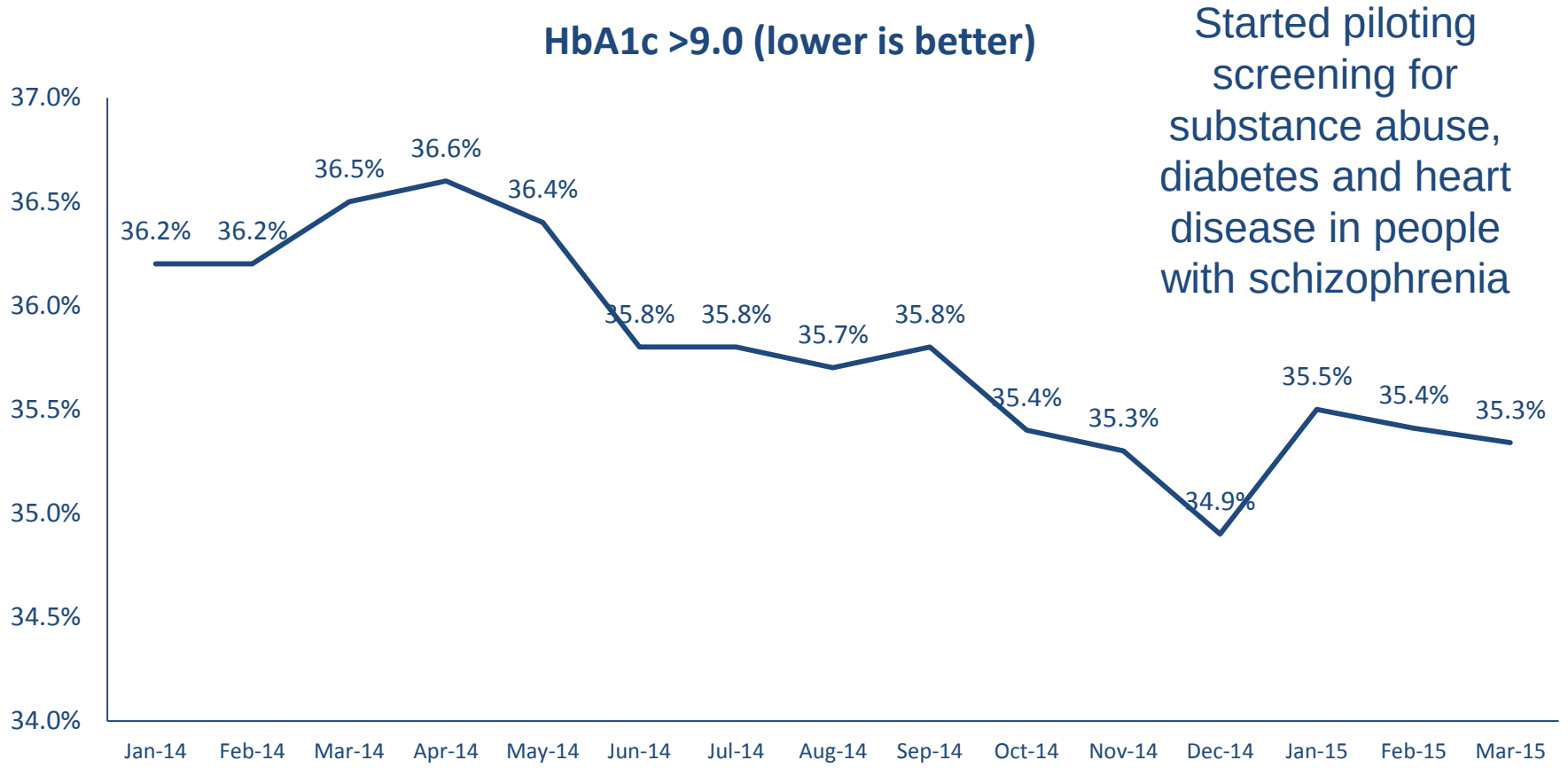


Started piloting screening for substance abuse, diabetes and heart disease in people with schizophrenia

# Bi-Directional Screening - LDL

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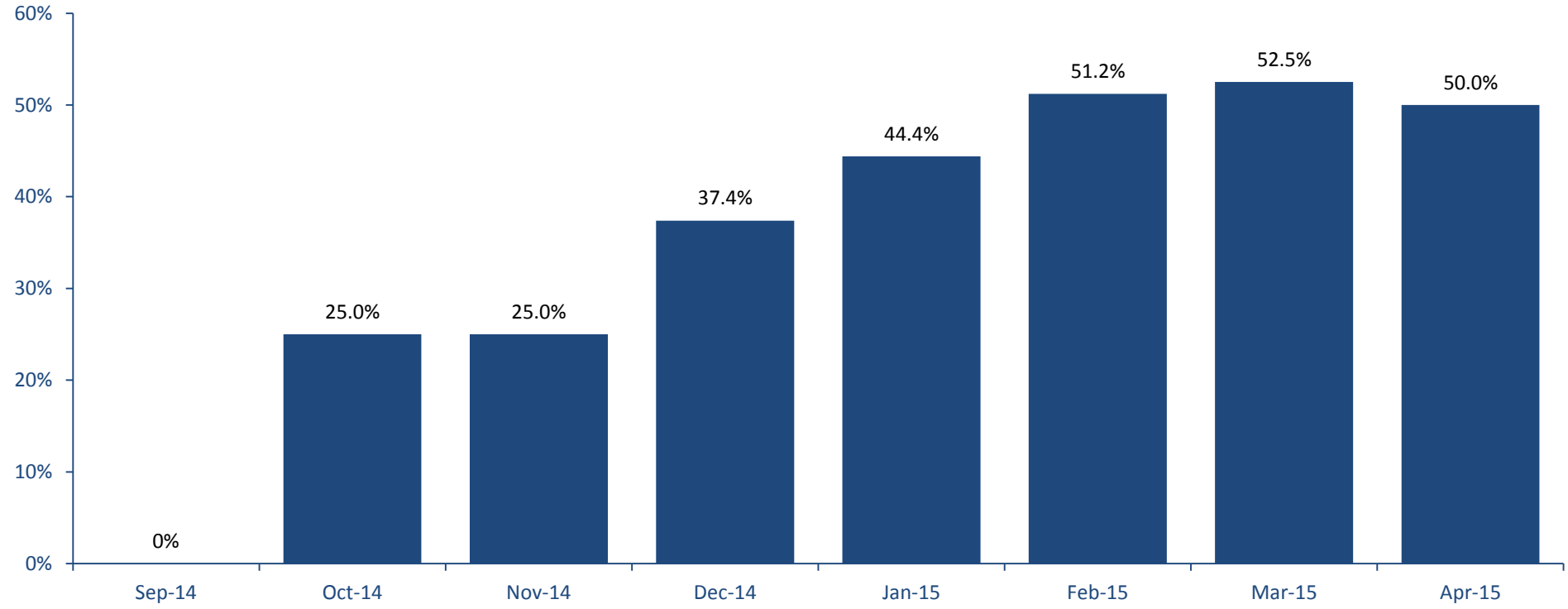
## Pilot Cardiovascular Screening (LDL) and Diabetes (HbA1c) in Day Rehab

*for patients prescribed an atypical with a diagnosis of schizophrenia or bipolar disorder*




***Will go live in all behavioral health clinics once IT build is complete**

# Integrated Service Delivery

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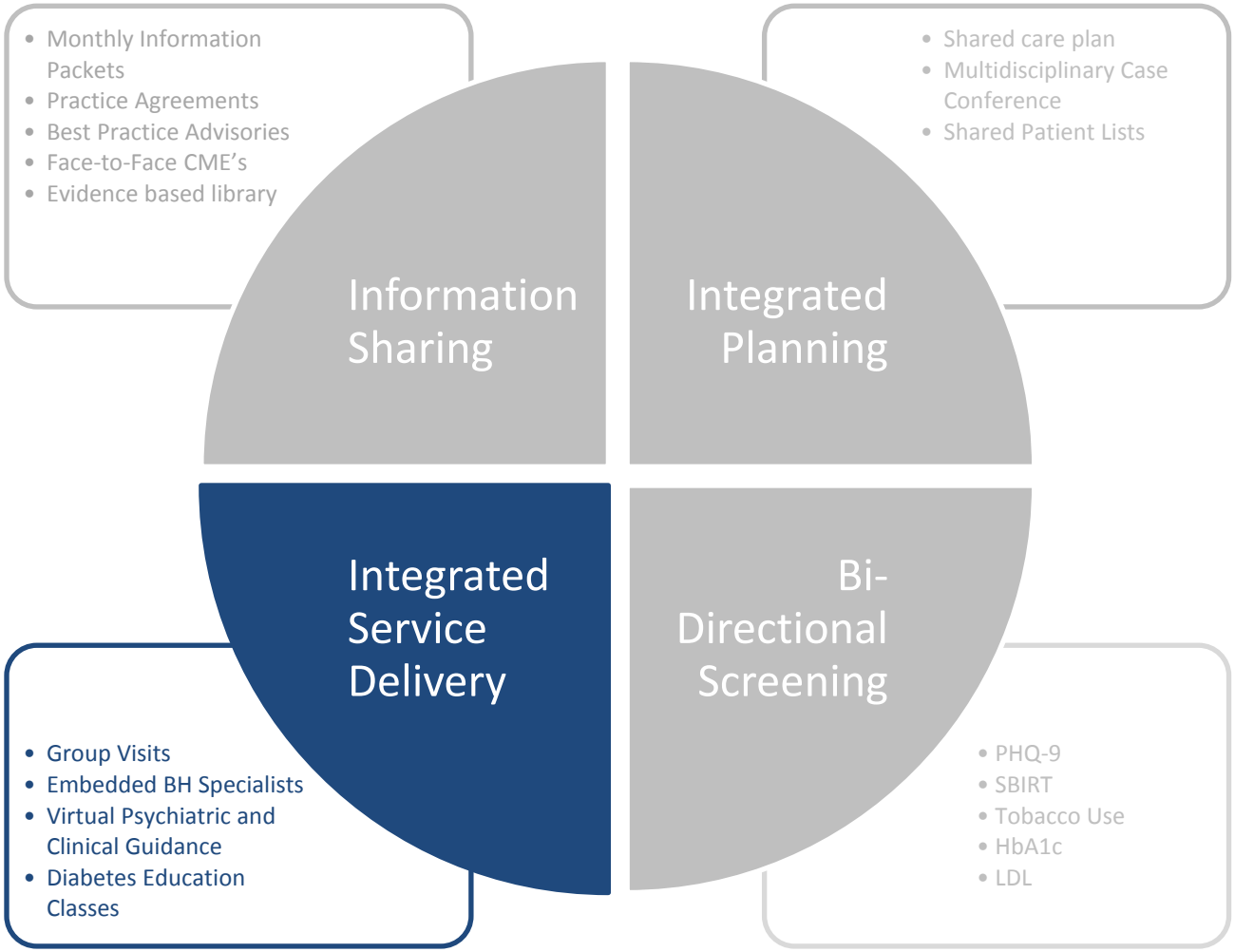

# Integrated Service Delivery
## - Group Visits

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Powered by Pride

At several primary care clinics, we have quarterly Co-Facilitated Medical Groups with the Primary Care Physician and Embedded Specialists

# Integrated Service Delivery
# - MHMR of Tarrant County

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Co-location of primary care within a MHMR behavioral health setting for the homeless population to provide convenience for target population of a “one stop shop”.

- Improved access to primary care for individuals with behavioral health conditions and vice versa.
- Provide service coordination to assure seamless level of care between BH and PC
- Reduce cost of care by diverting individuals out of the ED.

<u>Role collaboration plays</u>

Collaboration, coordination, communication and consultation on the integrated care team have been crucial for the successful outcome for individuals.

- Coordination of information sharing
- Coordination of appointment scheduling
- Coordination of appropriate level of care
- Coordination of needed resources
- Direct face-to-face communication & consultation regarding critical cases

# Integrated Service Delivery
## - Embedded BH Specialists

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We currently have embedded behavioral health expertise into multiple settings:

- Primary Care Clinics
- Trauma Services
- AIDS/HIV Medical Home
- Diabetes Groups
- Co-Facilitating General Medical Condition Groups Throughout System

# Integrated Service Delivery
## - Virtual Psychiatric & Clinical Guidance

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- Education
- Evidence base practice
- Case specific consultation

# Integrated Service Delivery
## - Virtual Psychiatric & Clinical Guidance

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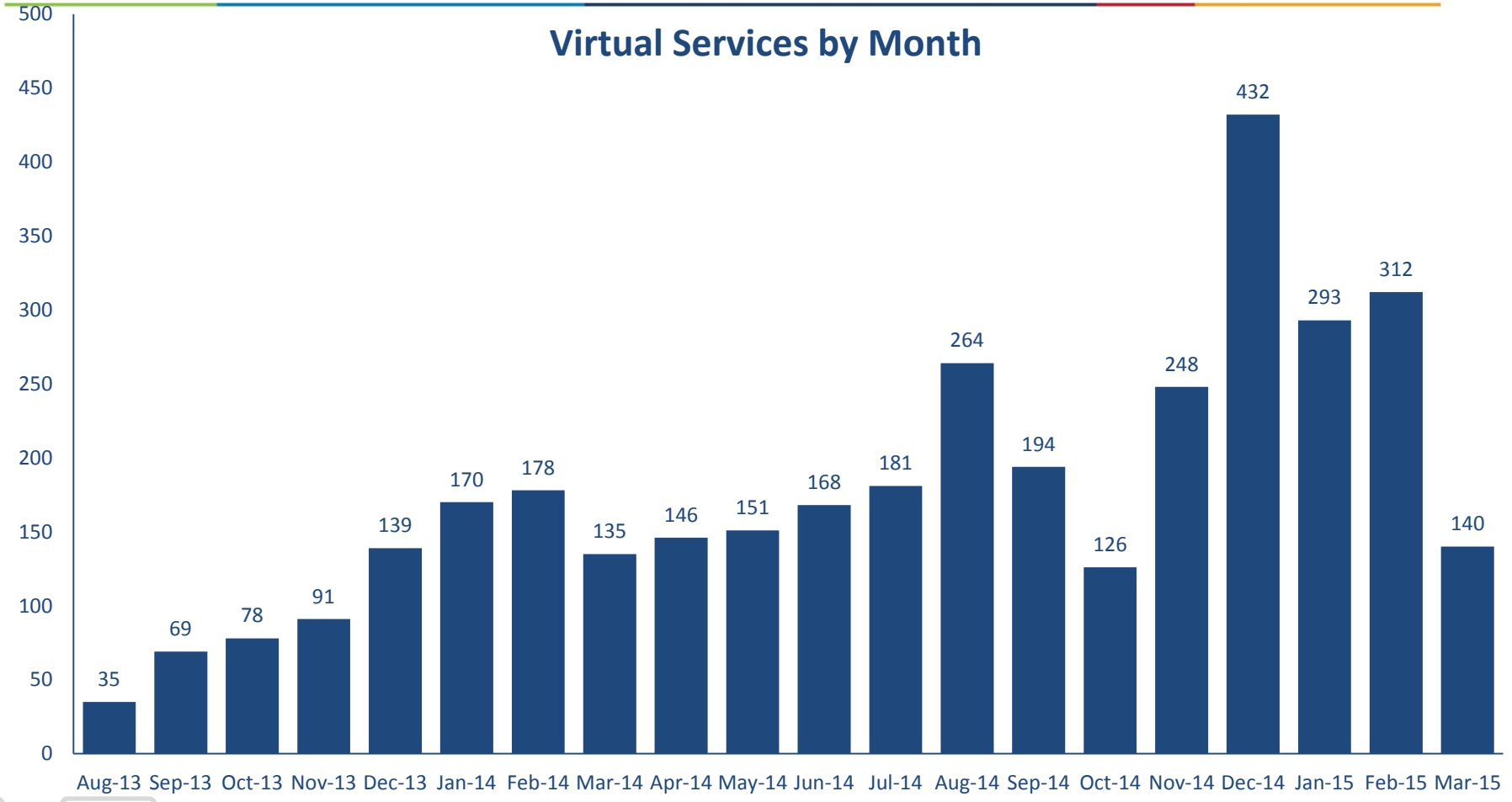

# Integrated Service Delivery
## - Virtual Psychiatric & Clinical Guidance

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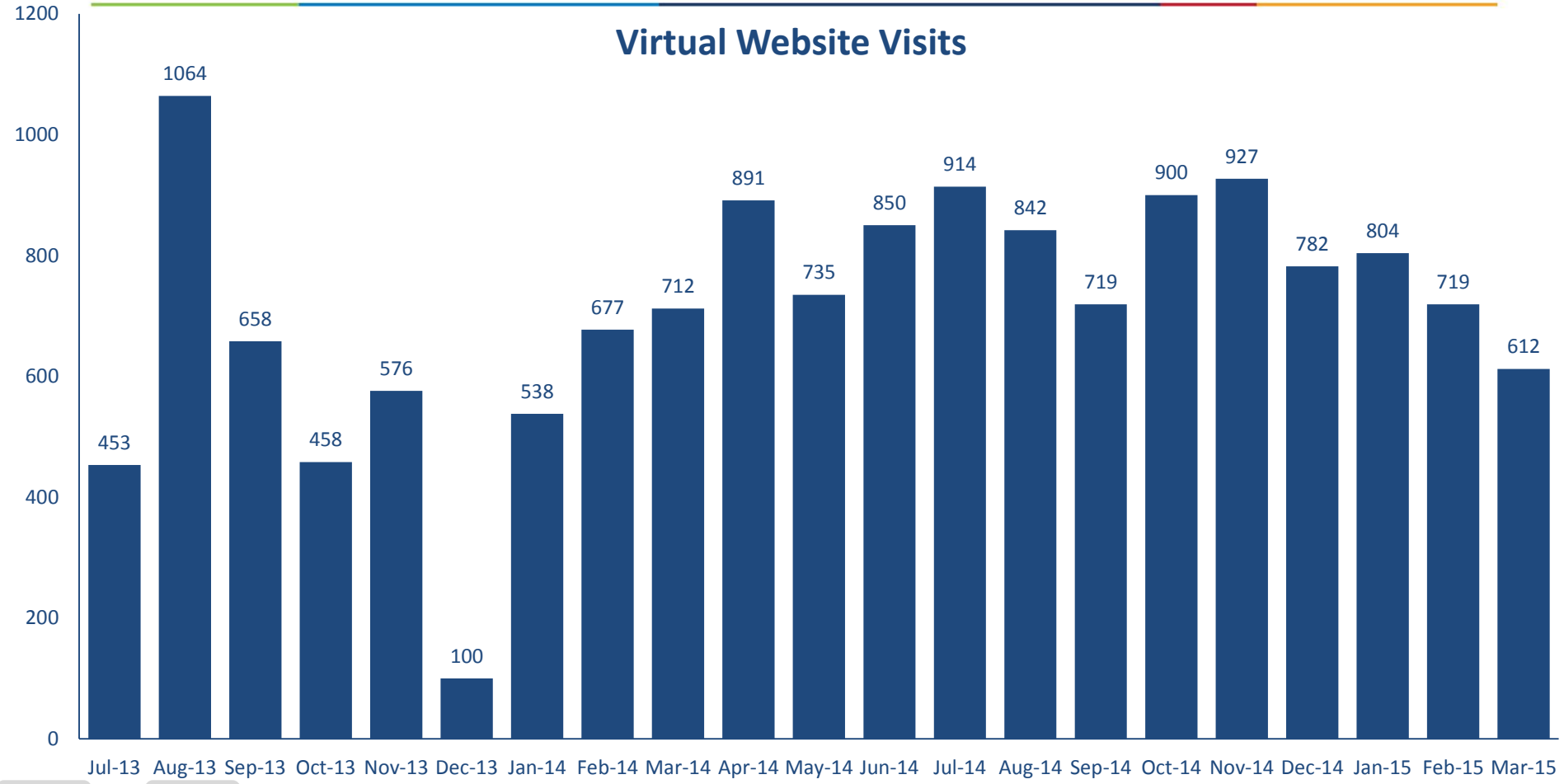

# Integrated Service Delivery
## - Virtual Psychiatric & Clinical Guidance

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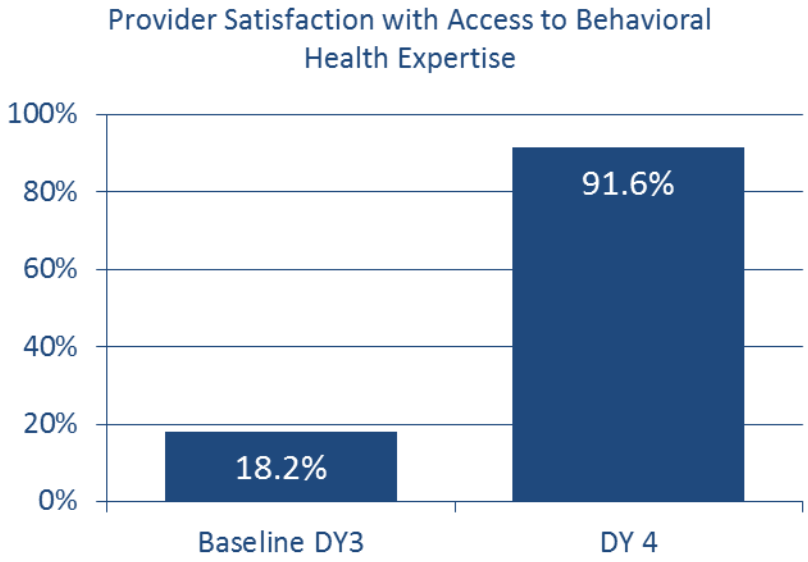


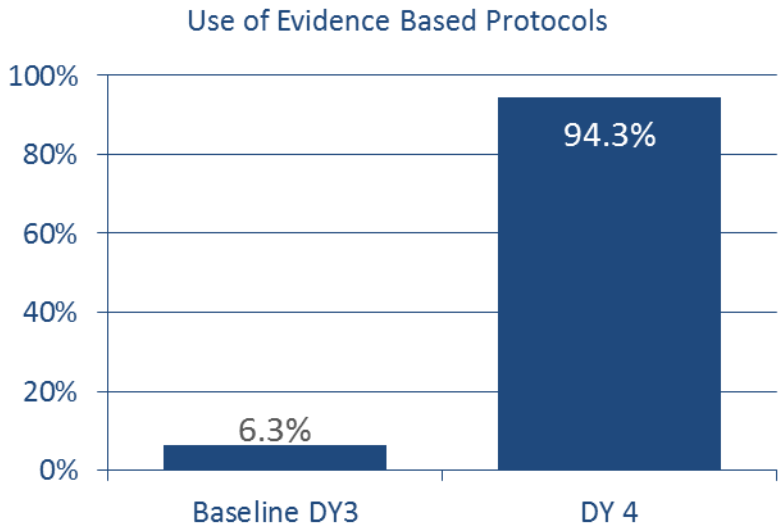


Primary care providers can speak with a psychiatrist about evidence based and best practice medication algorithms within 30 minutes.

# Integrated Service Delivery
# - Diabetes Education Classes

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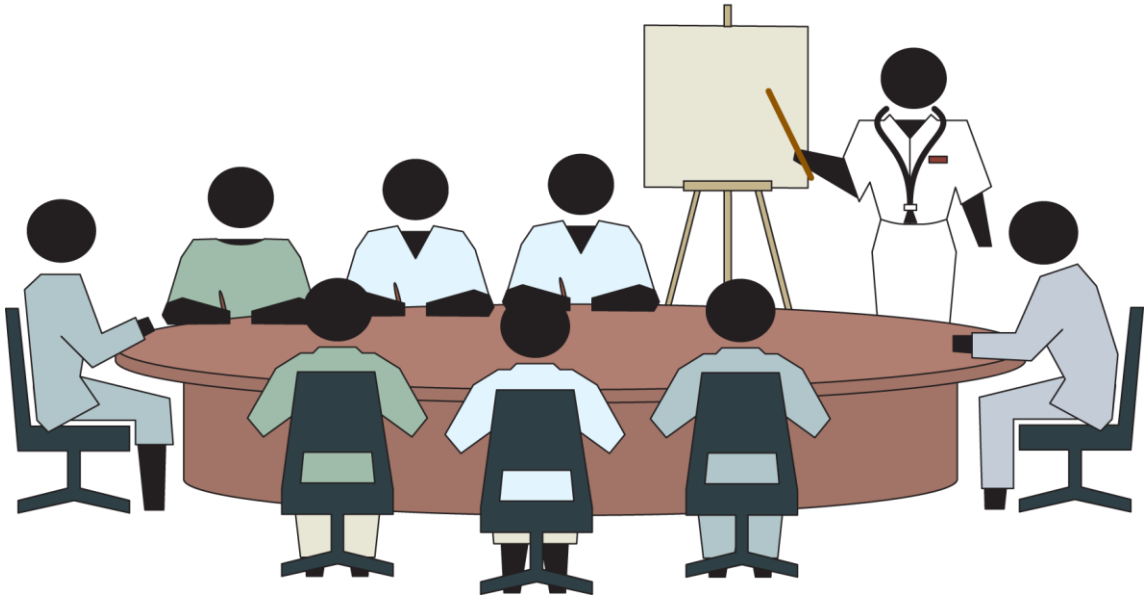

We have eight Diabetic Education Groups at various locations in both English and Spanish. Each of the group cohorts meet for eight weeks.

Embedded specialists lead the 8th group to discuss depression, coping skills, and stress management related to their medical conditions and lifestyle changes.

# Integrated Service Delivery - Clinical Pharmacist

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Powered by Pride

- Review patients' medications and make recommendations for psychotropic and non-psychotropic medications
- Support for patients with medication related questions or problems
- Facilitate inpatient groups on medication-related topics (3 x/week)
- Soon to see patients receiving care in our HIV+/AIDS Clinic with complex medication regimens
- Teach psychopharmacology lectures for the Psychiatry, Emergency, & Family Medicine Residents

# Learning Collaborative

We currently have seven organizations operating in the nine Texas counties of RHP 10 that are participating in the Integrated Care Learning Collaborative.

- Baylor Health Care System
- Helen Farabee Center
- JPS Health Network
- Lake Regional MHMR Center
- MHMR of Tarrant County
- Pecan Valley Centers
- Wise Regional Health System

**http://rhp10txlc.com/**

# Improve Screening Rates

LEARNING COLLABORATIVE RHP 10

| | |
|---|---|
| **Percentage of patients screened with team's selected cross-specialty screening** | **Numerator**: Total number of patients in the population of focus who have received screening with the selected screening tool within the past 12 months |
| | **Denominator**: Total patient population of focus for improved care integration at your site. |

**Behavioral health** screenings for **primary care** settings

- PHQ2/PHQ9
- SBIRT (Screening, Brief Intervention and Referral to Treatment)
- Tobacco use screening
- Alcohol abuse screening (audit), MAST
- Drug abuse screening (DAST)
- Screening for risk of harm to self or others

**Physical health** screenings commonly done in **behavioral health** settings

- Diabetes screening
- Hypertension Screening
- BMI Calculation
- COPD Screening
- Cardiovascular disease screening
- HIV, STD, hepatitis

# Improve Coordination

LEARNING COLLABORATIVE RHP 10

| | |
|---|---|
| **Percentage of patients who received the teams' selected integrated care intervention in past 12 months.** | **Numerator**: Number of patients in the population of focus who have received the selected integrated care intervention in the past 12 months |
| | **Denominator**: Total patient population of focus for improved care integration at your site. |

- Patients with a shared care plan documented at both the PC Provider site and the BH Provider site
- Patients whose treatment plans include goals for both PC and BH
- Patients whose care was covered in Care Coordination Conferences with PC and BH Providers in the past 12 months (Note: Teams focusing on more complex patients may want to track patients covered in coordination conferences at more frequent interval. They could to use the different interval in addition to or instead of the 12-month interval.)
- Patients receive a visit with both their PC Provider and BH Provider within a set time period (e.g. past 60 days for more complex patients)

# Improve Outcomes

LEARNING COLLABORATIVE

RHP 10

| | |
|---|---|
| **Percentage of patients receiving integrated care whose condition improved.** | **Numerator**: Number of patients in population of focus whose condition has been documented as improved in past 12 months, as measured by selected indicator. |
| | **Denominator**: Total patient population of focus for improved care integration at your site. |

Examples of improvement in **behavioral health** conditions in **primary care** settings

-Screening results no longer positive

-Adherence to medication for behavioral health condition (in DSRIP category 3)

-Completion of counseling for behavioral health condition, based on documented achievement of 1+treatment plan goals

-reduced PHQ-9 score for all patients with initial scores over 10, to less than 10

-reduced PHQ-9 score for all patients with initial scores over 10, to less than 5

-Behavioral health condition in remission

-Abstinence from alcohol or other drug use

-Reduced alcohol or other drug use

Examples of improvement in **primary care** conditions in **behavioral health** settings

-Screening results no longer positive

-Reduced tobacco use

-Discontinued tobacco use

-HbA1c less than 9%

-BP to <140/90

-LDL-C control

-Patients engaged in or received treatment for STD, HIV, hepatitis

# Integrated Care

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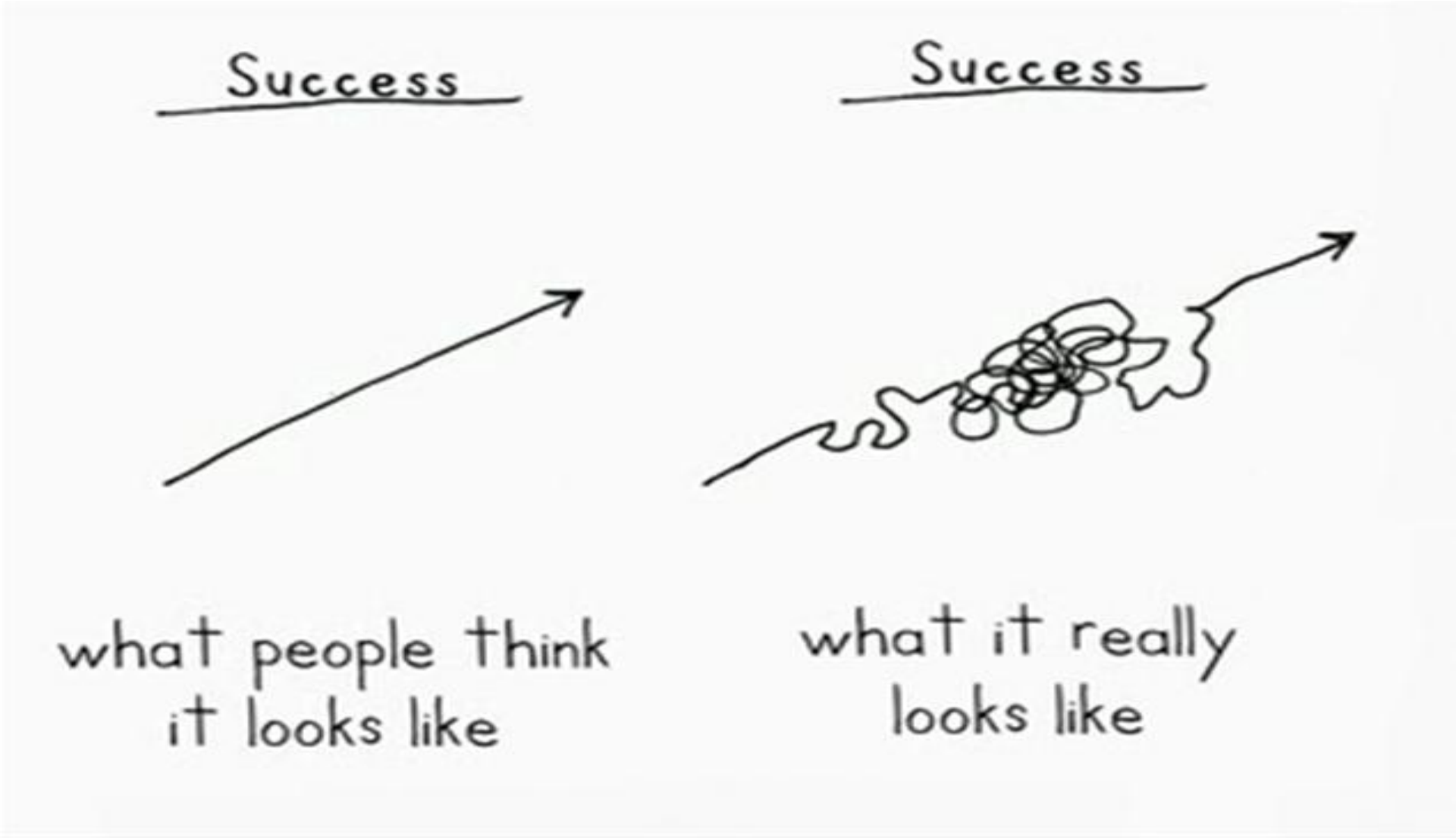

# Thank You

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QUESTIONS?

# Results, Outcomes and the Real Impact of the Transformation Waiver

**Noelle Gaughen**
**Medicaid/CHIP Transformation Waiver**
**Texas Health and Human Services Commission**

**Christina Mintner**
**Vice President Waiver Operations**
**Parkland Health & Hospital System**

RHP 9 & 10
Collaborative Connections
Impacting Care
Texas 1115 Waiver

# Demonstrating the Impact of the Texas Transformation Waiver

Noelle Gaughen
Senior Policy Advisor
Health and Human Services Commission
Medicaid/CHIP Transformation Waiver

TEXAS Health and Human Services Commission

# Waiver Renewal Ask

"HHSC proposes that the majority of the current 1458 active DSRIP projects be eligible to continue into the extension period in order to give projects *more time to demonstrate outcomes*."

TEXAS Health and Human Services Commission

# How do we demonstrate outcomes?

- Project Level Outcomes
  - Mid Point Assessment
  - Operational data from QPI, Category 3, and qualitative reporting
  - Clinical Champions
  - Stretch Activity 3
  - MCO Alignment
- Statewide DSRIP Evaluation
- National DSRIP Evaluation

TEXAS Health and Human Services Commission

# Challenges

- Data availability, standardization, and timeliness
- Complex objectives
- Changing populations
- Changing measurement resources

TEXAS Health and Human Services Commission

# DY3 Reported QPI

| QPI Measurement Type | Sum of all DY3 QPI Goals | DY3 QPI Achieved (from 10/2013 - 09/2014) | % of total DY3 QPI Goals Achieved |
|---|---|---|---|
| Encounters | 1,201,060 | 2,057,326 | 171% |
| Individuals | 706,046 | 956,811 | 136% |

# Category 3 Performance

- 249 Category 3 outcomes reported DY4 achievement in April
  - XX% reported an improvement over their baseline.
  - XX% fully achieved or exceeded their DY4 goal.

# Qualitative Reporting

Common Challenges & Lessons Learned identified in Semi-Annual Reporting:

- Patient Recruitment/Participation
- Administrative Capacity
- Provider recruitment & retention
- Changing organizational structure

# Provider Led Evaluation

## Stretch Activity 3: Alternative Approaches to Program and Outcome Linkages

- 96 Cat 1 or 2 projects are required to conduct a program evaluation as part of their Category 3 stretch Activity, making it the second most common Cat 3 outcome.
- HHSC plans to have training and support for providers conducting a program evaluation at the 2015 SLC

# Clinical Champions

- A workgroup made up of clinical, quality and operational experts, who will help HHSC to:
  - Assess the transformational potential and impact of active DSRIP projects
  - Identify best practices by project area
  - Support HHSC in discussions of waiver renewal/extension and inform the clinical and quality aspects of future DSRIP protocol development.
- Clinical Champions nominations were solicited from Executive Waiver Committee member entities and other stakeholders, and began meeting monthly in January 2015 with support from HHSC staff.

# Transformational Impact Summary

Sent to Anchors and Providers week of May 11th:

- Identify and share promising practices with like projects around the state
- Develop content for the 2015 Statewide Learning Collaborative
- Support Waiver extension/renewal efforts with CMS
- Inform ways to better evaluate projects in the next phase of the Waiver

1st Batch deadline: May 31st

2nd Batch review deadline: June 15th

TEXAS Health and Human Services Commission

# Transformational Impact Summary

- Intent is to identify information that demonstrates the early success of projects.
- Not intended to be a formal peer-review or determine which projects are eligible for continuation beyond DY5.

# Transformational Impact Summary

- The Impact Summary asks if providers are able to provide Medicaid IDs for patients served through DSRIP projects. This is intended to determine capacity for future analysis

TEXAS Health and Human Services Commission

# Alignment with Medicaid Managed Care

- HHSC is encouraging coordination between DSRIP projects and MCO performance improvement projects (PIPs).
- Best practices and lessons learned from DSRIP will inform Medicaid benefits and program design.

# DSRIP and Managed Care

- HHSC Quality Analytics team will be setting up quarterly one-on-one calls with MCOs to discuss, among other topics, progress on payment reform and moving successful DSRIP projects into Medicaid managed care.
- HHSC is working with some DSRIP providers that serve Medicaid patients to develop a model for creating value-based purchasing arrangements with MCOs. Specifically, HHSC is looking at:
  - Services provided by these DSRIP projects (those that are both covered and not covered by Medicaid)
  - Reimbursement and/or costs of those services,
  - Outcomes for the patients being served – both the quality of care outcomes and the cost/savings metrics.

# Formal Waiver Evaluation

Evaluation Goals:

- Measure changes to quality, health outcomes, and cost as a result of DSRIP
- Measure changes in collaboration among organizations as a result of DSRIP
- Assess stakeholder perceptions and recommendations

# Formal Waiver Evaluation Questions

- What are **stakeholders' perceptions** of Program implementation and effectiveness? What are their recommendations for future improvement?
- Did the Program increase **collaboration** among RHP participants?
- Did DSRIP projects improve **cost, quality, and health** outcomes?
- Did participation in DSRIP projects change trends in **Uncompensated Care** claims?

# Sample Used for Each Question

| Question | Sample Used |
|---|---|
| ▪ **Stakeholders' perceptions** | ▪ All participating organizations in all 20 RHPs |
| ▪ Overall effects of Program on **collaboration** among RHP participants | ▪ All DSRIP participants in all 20 RHPs |
| ▪ DSRIP project effects on **cost, quality, and health** outcomes | ▪ 10 DSRIP ED care navigation project sites and 10 comparison sites |
| ▪ Trends in **Uncompensated Care** claims | ▪ All hospitals submitting UC claims |

# Stakeholder Findings

DSRIP Strengths

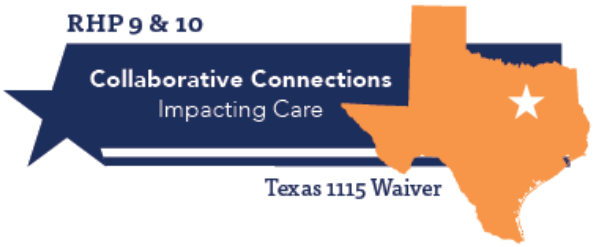
- Resources to serve more patients/clients
- Opportunity to design innovative projects
- Collaboration with other organizations in area/community
- Access to health services program
- Opportunity for system reform

TEXAS Health and Human Services Commission

# CMS Led Nationwide DSRIP Evaluation Questions

- What is the effect of the DSRIP demonstration funding paid to provider systems on the transformation of the delivery system, clinical quality, population health, use of value based payments, and per capita costs?
- Have DSRIP programs led to:
  - Transformation of the delivery system?
  - Improved clinical care at the individual level?
  - Improved health of low-income populations?
  - Value-based payment among safety-net providers?
  - Lower growth in Medicaid costs?
  - Sustained changes in any or all of the areas above?
- How are outcomes associated with program characteristics?

# Waiver Renewal Updates



# Pool Transition Plan

- STC 48 – HHSC was required to submit by March 31, 2015, a pool transition plan that addressed the following:
  - Experience with the DSRIP pools,
  - Actual uncompensated care trends in the State, and
  - Investment in value based purchasing or other reform options.
- HHSC submitted the transition plan March 24, 2015.
- When Texas submits its renewal/extension request in September 2015, HHSC plans to request:
  - to continue at least the demonstration year (DY) 5 funding level for DSRIP ($3.1 billion annually) and
  - a UC pool equal to the unmet UC need in Texas.

# Pool Transition Plan

State goals for the pools for the extension period:

- Continue to support the healthcare safety net for MLIU Texans.
- Further incentivize transformation and strengthen healthcare systems across the state by building on the RHP structure.
- Maintain program flexibility to reflect the diversity of Texas' 254 counties, 20 RHPs, and over 300 DSRIP providers.
- Improve project-level evaluation to identify the best practices in DSRIP to be sustained and replicated.
- Further integrate DSRIP efforts with Texas' Medicaid managed care quality strategy and other value based payment efforts.
- Work to streamline the DSRIP program to lessen the administrative burden on providers while focusing on collecting the most important types of information.

# Timeline to Develop Renewal Request

- HHSC staff is working to develop the draft renewal packet for public stakeholder meetings in July.
  - The renewal packet will include continuation of the managed care programs in the 1115 waiver, as well as the UC and DSRIP pools.
- RHP 9 / 10 Public Stakeholder Meeting:
  - Tuesday, July 21
  - Old Red Museum of Dallas County Culture and History
  - 10am to 12pm
- HHSC will review comments and finalize the renewal packet in August and then get State Leadership signoff to submit by September 30, 2015.

# Timeline to Develop Renewal Request

- The renewal packet does not need to have the protocol revisions, although CMS would like to get them as soon as possible. HHSC plans to make changes to the two DSRIP protocols – the RHP Planning Protocol and Program Funding and Mechanics (PFM) Protocol for submission to CMS in late 2015 – early 2016.
- Many of the specific programmatic details around project continuation, requirements and funding will be included in the protocols rather than in the renewal packet.
- HHSC tentatively plans to hold a webinar on the proposed changes to the DSRIP protocols in early August and also will discuss these changes at the Statewide Learning Collaborative Summit in Austin on August 27-28, 2015.

# Renewal Request

- CMS has indicated that changes will be required to the waiver Special Terms and Conditions in order to extend the pools.
- HHSC is certain CMS will want additional changes to the waiver.
- While HHSC understands from CMS is that extensions typically are for 3 years (and sometimes 1 year), HHSC is going to request a 5 year extension to see if that might be possible.

# DSRIP Renewal Request

•HHSC plans to propose the following for DSRIP:

- Continue with the existing DSRIP program administrative structure, including the 20 RHPs and role of the anchoring entities to provide regional coordination and technical assistance.
- The majority of the current 1400+ active DSRIP projects will be eligible to continue into the extension period in order to give projects more time to demonstrate outcomes.
  - These projects may be required or encouraged to take a logical next step toward further transformation.
  - Some projects will not be eligible to continue based on review of the independent assessor and HHSC.

# DSRIP Renewal Request

•What to do with funds from the DSRIP pool not allocated to continuing projects?

- Propose alternate transformative projects from narrower menu based on lessons learned,
- Bring smallest projects up to a minimum valuation level, and/or
- Establish a shared performance bonus pool for regions that make improvements on key measures.

# DSRIP Renewal Request

•Work to streamline the DSRIP program to lessen the administrative burden on providers while focusing on collecting the most important types of information.

- Allow certain projects to be combined into a single project to reduce reporting burden (ex – providers who are in multiple regions with same project)
- Reduce and standardize the number of metrics reported
  - Cat 1-2: QPI milestones required each year – overall QPI and one specific to Medicaid/low income uninsured
  - Cat 1-2: Optional milestones such as related to increased data exchange and project-level evaluation/sustainability planning
  - Cat 3 TBD - HHSC continues to review the Category 3 methodologies and how outcomes align with projects.
- Eliminate achievement carry forward, or possibly extend to just one reporting period beyond the DY (vs. 2), but allow for partial achievement for QPI similar to what's allowed for Cat 3 now

# DSRIP Results & Alignment with Managed Care

•Further integrate DSRIP efforts with Texas' Medicaid managed care quality strategy and other value based payment efforts.

- Develop a value based purchasing roadmap by late 2016/early 2017 for the extension period.
- Further align DSRIP and managed care quality measures where possible (e.g. consider some managed care P4Q measures for DSRIP shared performance bonus pool).
- HHSC will provide CMS Medicaid and inpatient all-payer global trend data such as PPEs from 2012 through the extension period (by managed care plans/areas and RHP) to help show whether combined efforts are having an effect on key measures.

# DSRIP Results & Alignment with Managed Care

•Other ideas to help evaluate the Medicaid impact of DSRIP projects and to further data exchange to support care coordination and systems of care

- Along with QPI information, require DSRIP projects to report Medicaid IDs of patients served by the project.
- Require all DSRIP and UC hospitals to provide admission, discharge, and transfer (ADT) information either to their regional HIE or a State-level HIE. HHSC could provide Medicaid ADT information to Medicaid MCOs for them to share with providers to improve care coordination.

# RHP 9 / 10 Public Meeting

Old Red Museum of Dallas County

Culture & History

Tuesday, July 21

10am to 12pm

QUESTIONS????

# BREAK & BREAKOUT SESSIONS

Fan Fare

Day 2 – Category 3

- Go to Breakout Session Rooms after Break – 2:15 P.M.
- After Breakout Sessions Return to Main Room

RHP 9 & 10
Collaborative Connections
Impacting Care
Texas 1115 Waiver

# Breakout by Category 3


- Table Discussion
  - How are you identifying your metrics?
  - How often are you measuring?
  - What are key success factors to capturing and meeting your metrics?
  - What have been your greatest challenges in capturing your data, how are you overcoming these challenges?

- Report Out
  - Some tables will share their discussion outcomes with the rest of the group in the room

# Mobile Health to Engage Medicaid Participants

**Jay Bernhardt, PhD, MPH**
**Founding Director Center for Health Communications**
**University of Texas at Austin**

RHP 9 & 10
Collaborative Connections
Impacting Care
Texas 1115 Waiver



# Mobile Health to Engage Medicaid Participants

## Jay M. Bernhardt, PhD, MPH

Professor and Director, Center for Health Communication
Everett D. Collier Centennial Chair in Communication

The University of Texas at Austin
Center for Health Communication
*Moody College of Communication*

# UT Center for Health Communication

Center Kickoff Meeting – September 3, 2014

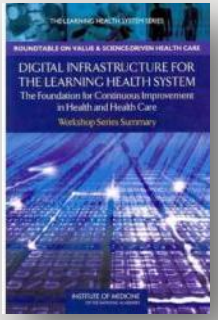
Mission:

To improve health in Texas, the United States, and globally through leadership and excellence in health communication research, education, programs, and partnerships.

http://moody.utexas.edu/healthcomm

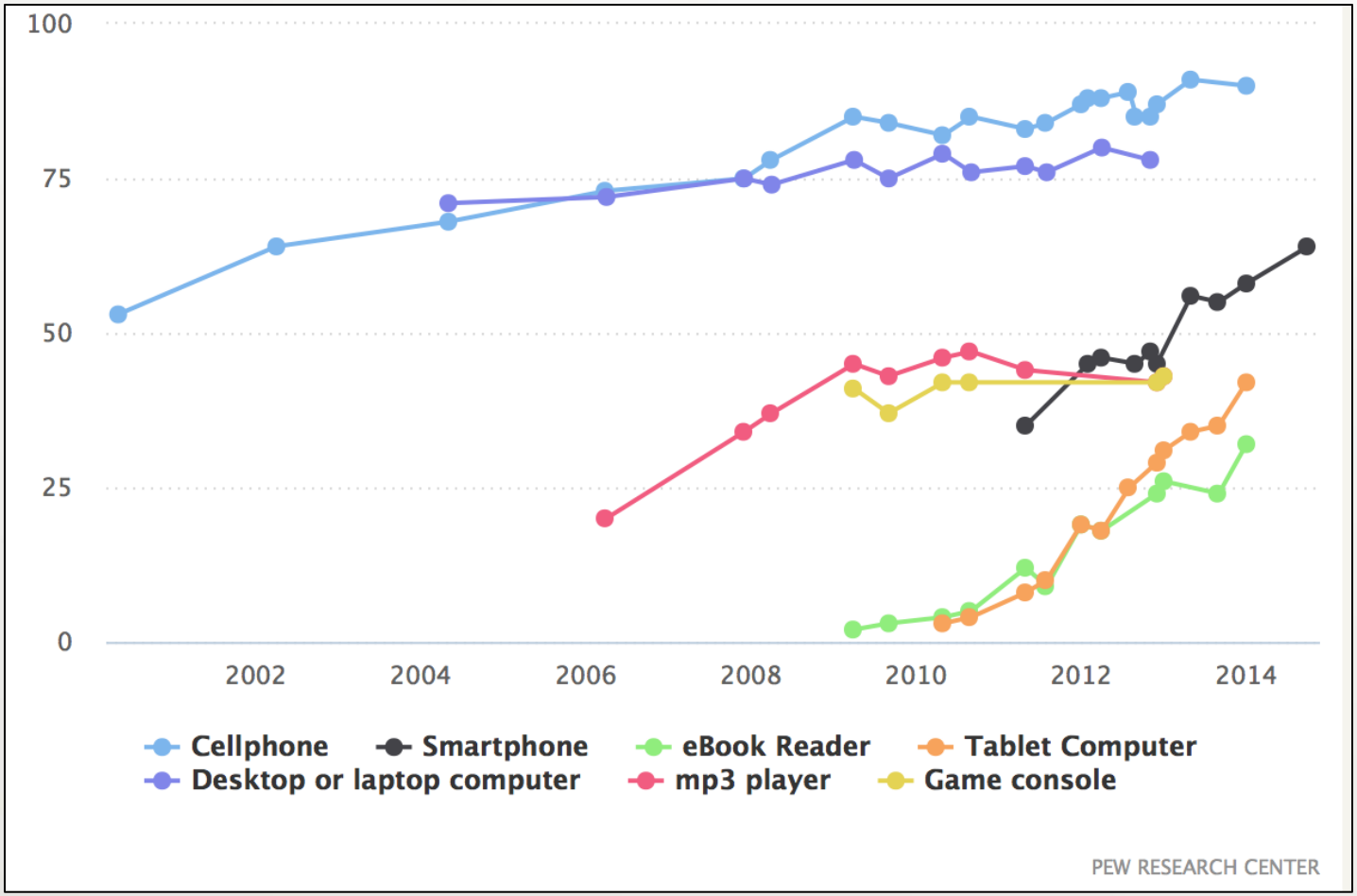
# Health IT and Health Disparities

Health Information Technology (HIT) "…provides an opportunity for engaging populations not historically well served by the traditional health community… The impact of facilitating patient and population contribution to, and control of, their health information has the potential to provide further insights into, and opportunities to address, disparities in underserved populations"

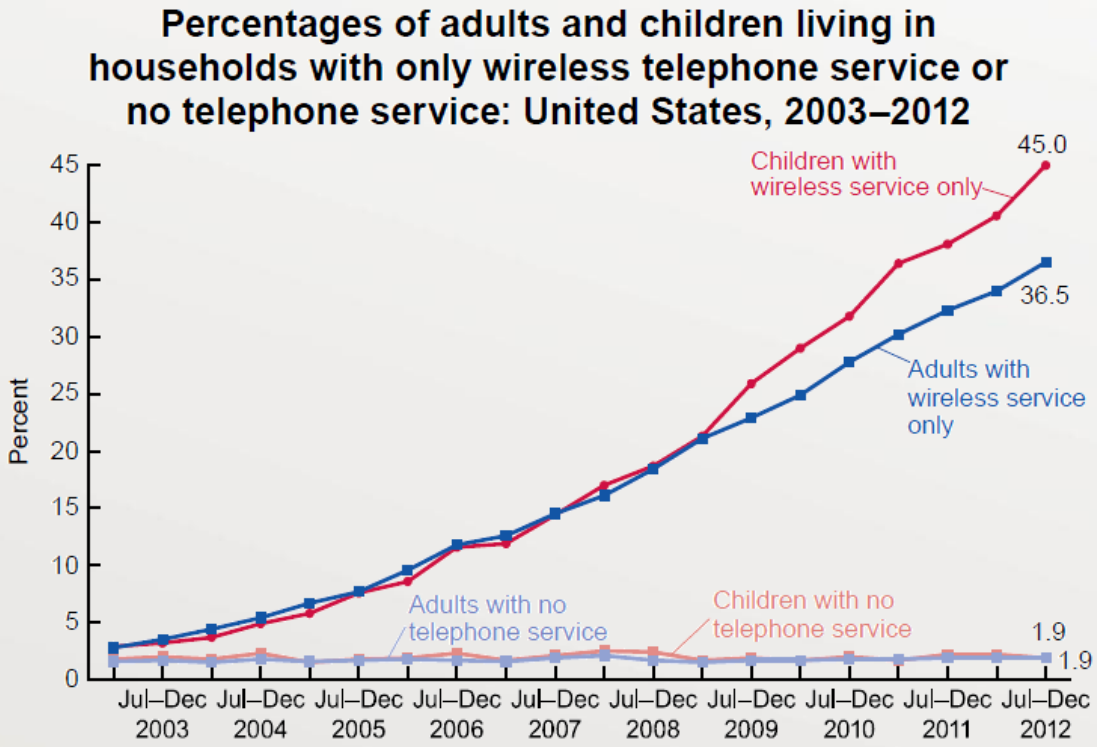



– Institute of Medicine (2010). Digital Infrastructure for the Learning Health System. Washington, DC: National Academies Press, p. 31.

# Adult Gadget Ownership (2002-2014)



# Mobile Only Households




NOTE: Adults are aged 18 and over; children are under age 18.
SOURCE: CDC/NCHS, National Health Interview Survey.

- Hispanic adults (51%) more likely than non-Hispanic white adults (33%) or non-Hispanic black adults (39%) to be mobile only
- Renters (54%) more mobile only than home owners (25%)
- People in mobile-only households exhibit more risk behaviors
- Source: CDC NCHS Wireless Substitution Early Release of Estimates from the National Health Interview Survey, July – December 2012

# Smartphone Ownership Patterns

*% of U.S. adults in each group who own a smartphone*

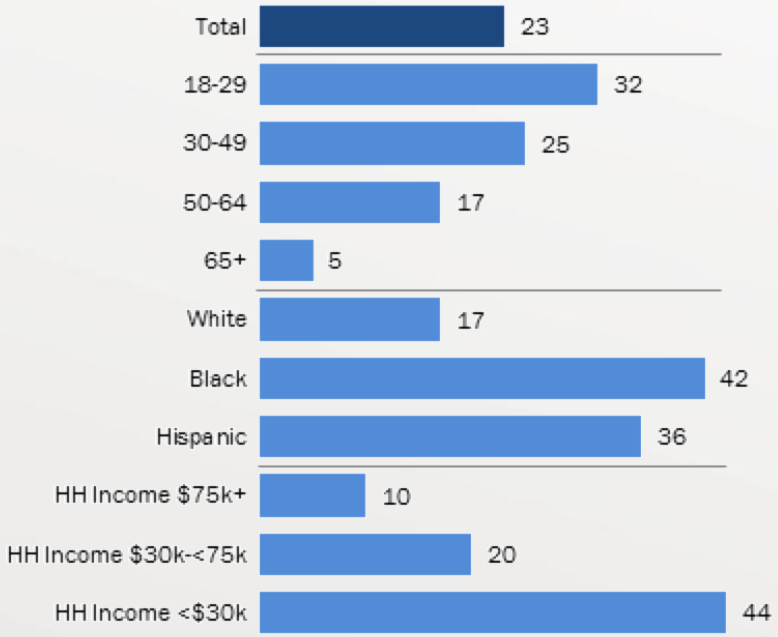
| | |
|---|---|
| **All adults** | **64%** |
| Male | 66 |
| Female | 63 |
| 18-29 | 85 |
| 30-49 | 79 |
| 50-64 | 54 |
| 65+ | 27 |
| White, non-Hispanic | 61 |
| Black, non-Hispanic | 70 |
| Hispanic | 71 |
| HS grad or less | 52 |
| Some college | 69 |
| College+ | 78 |
| Less than $30,000/yr | 50 |
| $30,000-$49,999 | 71 |
| $50,000-$74,999 | 72 |
| $75,000 or more | 84 |
| Urban | 68 |
| Suburban | 66 |
| Rural | 52 |

Combined analysis of Pew Research Center surveys conducted December 4-7 and 18-21, 2014.

PEW RESEARCH CENTER

**Lower-income and Minority Smartphone Owners are Especially Likely to Have Canceled or Cut Off Service**

*% of smartphone owners who have canceled or cut off service for a period of time because maintaining their service was a financial burden*




Pew Research Center American Trends Panel survey, October 3-27 2014.

PEW RESEARCH CENTER

# Daily SMS Use (2011)

| | Mean | Median |
|---|---|---|
| **All text messaging users** | **41.5** | **10** |
| **Gender** | | |
| Men | 40.9 | 10 |
| Women | 42.0 | 15 |
| **Age** | | |
| 18-29 | 87.7 | 40 |
| 30-49 | 27.0 | 10 |
| 50-64 | 11.4 | 3 |
| 65+ | 4.7 | 2 |
| **Race/Ethnicity** | | |
| White, non-Hispanic | 31.2 | 10 |
| Black, non-Hispanic | 70.1 | 20 |
| Hispanic | 48.9 | 20 |
| **Household Income** | | |
| Less than $30,000 | 58.7 | 20 |
| $30,000-$49,999 | 40.2 | 15 |
| $50,000-$74,999 | 25.9 | 10 |
| $75,000+ | 31.9 | 10 |
| **Education level** | | |
| Less than high school | 69.4 | 20 |
| High School diploma | 45.4 | 15 |
| Some College | 53.0 | 15 |
| College+ | 23.8 | 10 |

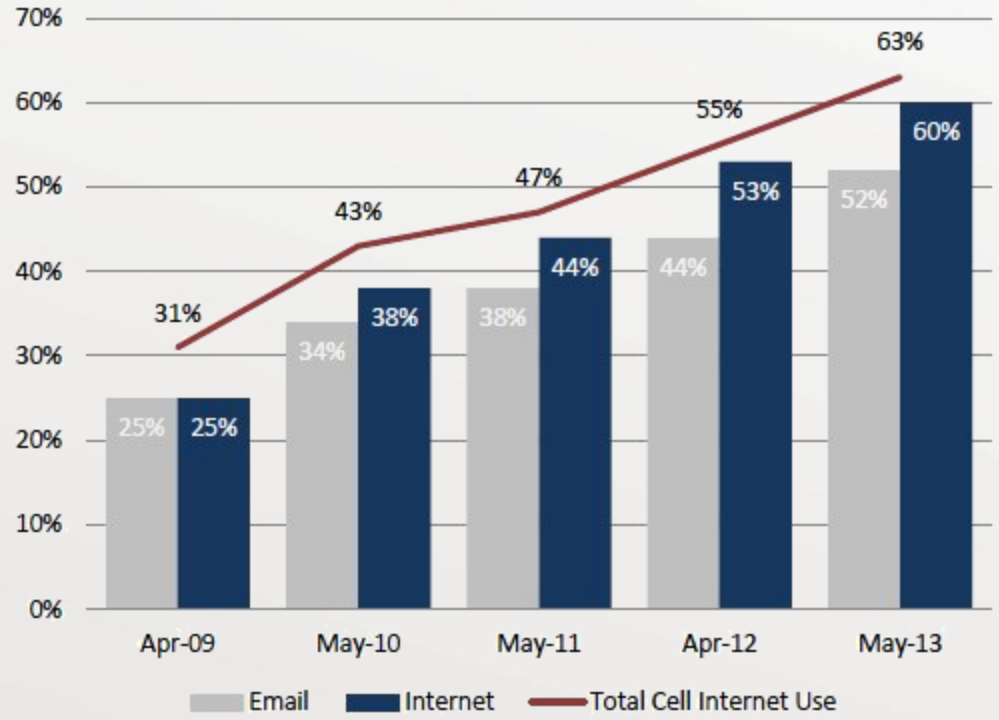
**Source:** The Pew Research Center's Internet & American Life Project, April 26 – May 22, 2011 Spring Tracking Survey. n=2,277 adult internet users ages 18 and older, including 755 cell phone interviews. Interviews were conducted in English and Spanish.

- Almost 10 trillion SMS messages sent in 2012
  - 80% of all US cell phone owners text
  - 92% of US smart phone owners text
  - US SMS users average 35 texts per day
- 99% of received SMS are opened and 90% read within 3 minutes of being received
- Messaging Apps growing while SMS very slightly declining (but still very high)
  - Kik, WhatsApp, SnapChat

http://www.factbrowser.com/tags/sms
http://www.tatango.com/blog/sms-open-rates-exceed-99/

## Almost two-thirds of cell owners go online using their phones

*Among cell phone owners, the % who use the internet or email on their phone*




**Source:** Pew Internet & American Life Project Spring Tracking Survey, April 17-May 19, 2013. N=2,076 cell phone owners ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. The margin of error for results based on cell phone owners is +/- 2.4 percentage points.

## Demographics of cell-mostly internet users

*Among cell internet users, the % who mostly use their phone to go online*

| | | % who mostly go online using their cell phone |
|---|---|---|
| **All cell internet users (n=1,185)** | | **34%** |
| a | Men (n=598) | 34 |
| b | Women (n=587) | 34 |
| **Race/ethnicity** | | |
| a | White, Non-Hispanic (n=762) | 27 |
| b | Black, Non-Hispanic (n=158) | 43[a] |
| c | Hispanic (n=157) | 60[ab] |
| **Age** | | |
| a | 18-29 (n=336) | 50[bcd] |
| b | 30-49 (n=405) | 35[cd] |
| c | 50-64 (n=304) | 14 |
| d | 65+ (n=109) | 10 |
| **Education attainment** | | |
| a | Less than high school/High school grad (n=333) | 45[bc] |
| b | Some College (n=306) | 34[c] |
| c | College + (n=541) | 21 |
| **Household income** | | |
| a | Less than $30,000/yr (n=238) | 45[cd] |
| b | $30,000-$49,999 (n=175) | 39[d] |
| c | $50,000-$74,999 (n=171) | 30 |
| d | $75,000+ (n=429) | 27 |
| **Urbanity** | | |
| a | Urban (n=436) | 33 |
| b | Suburban (n=571) | 35 |
| c | Rural (n=176) | 30 |

**Source:** Pew Internet & American Life Project Spring Tracking Survey, April 17-May 19, 2013. N=1,185 cell internet users ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. The margin of error for results based on cell internet users is +/- 3.3 percentage points.
**Note:** Percentages marked with a superscript letter (e.g., [a]) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

# Mobile Use Summary

- Mobile phone access is ubiquitous, even among lower income and minority populations
- Texting and mobile web access is highest among minority and lower income populations
- Smartphones are rapidly replacing feature phones among all population groups

# mHealth vs. eHealth

- mHealth (aka m-health or mobile health)
  - Application of mobile devices including phones, tablets, and integrated monitoring devices to support all aspects of healthcare and public health

- eHealth (aka health information technology [HIT], health or medical informatics)
  - Application of information technology to health systems including electronic health records, information management systems, surveillance

# Taxonomy of mHealth Applications

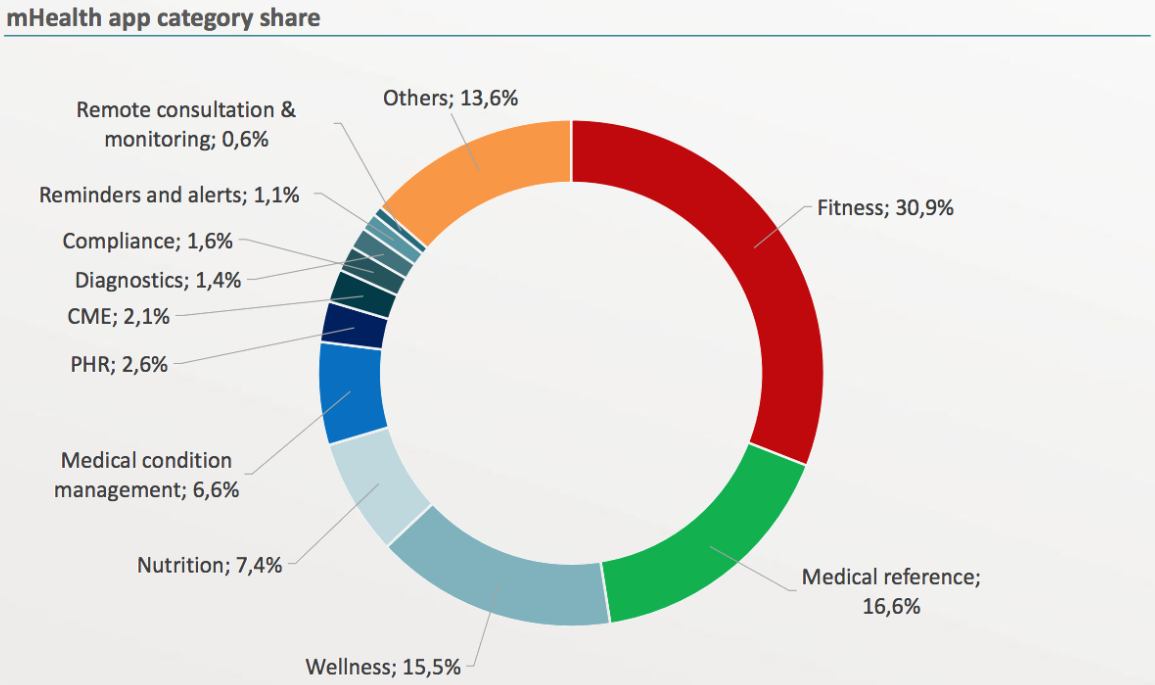
**SYSTEMS:**
**Data collection tools, Medical records, Test results notification, Appointment reminders**


**MEDICAL CARE:**
**Clinical decision support systems, Medical education, Disease monitoring, Acute disease management**

**PREVENTION/HEALTH PROMOTION:**
**Treatment programs, Chronic disease management, Medication adherence, Health behavior change programs, Untargeted mass health promotion**

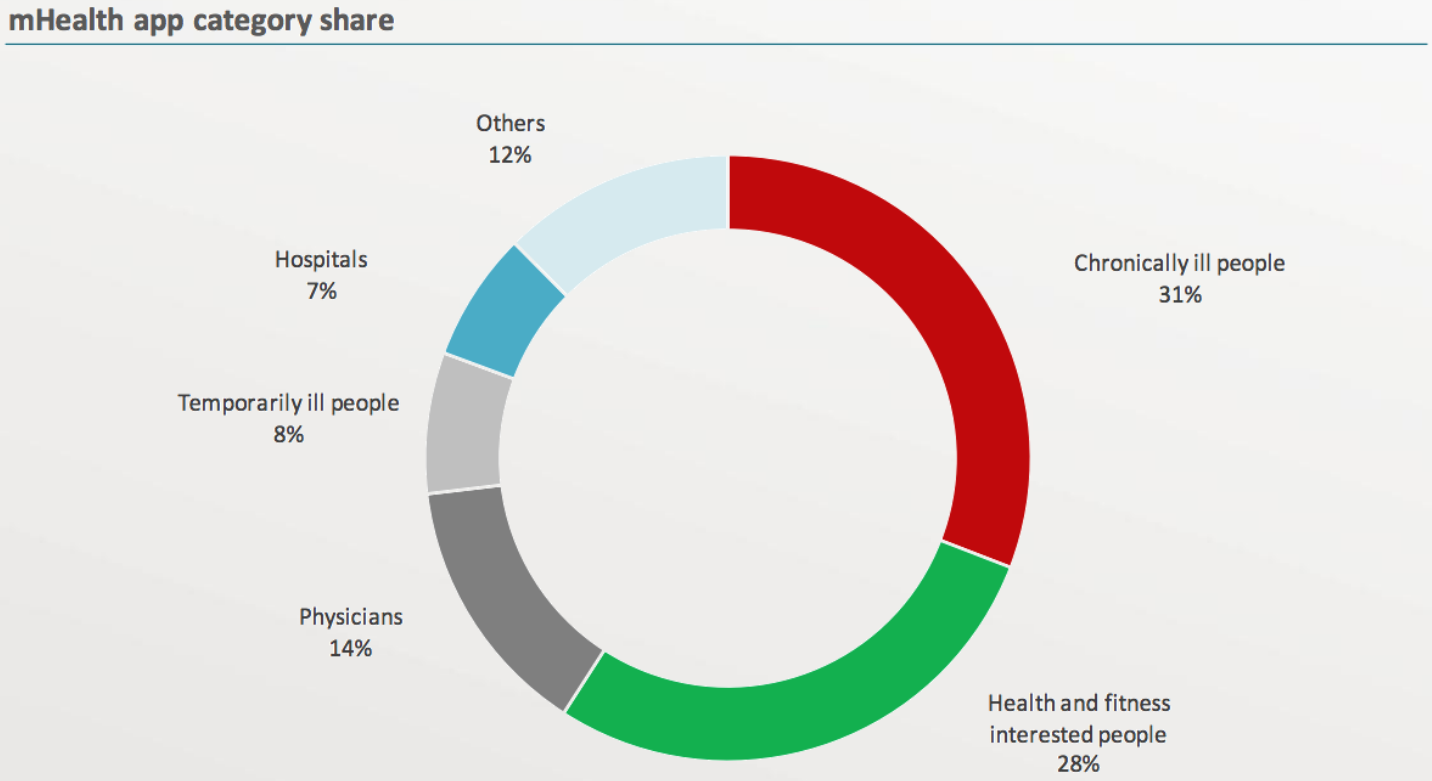
# mHealth and Apps

- > 100,000 health-related apps available
- Spending at $4B/year
- $25B+ by 2017?




Source: research2guidance, 808 apps form Apple App Store, Goolge Play, BlackBerry App World and Windows Phone Store (March 2014)

# Who Uses mHealth apps?




Source: reserch2guidance mHealth App Developer Economics survey 2014, n=2032

# Why Don't Health Apps Work?

- The fatal flaw of health apps is not the design, accessibility, functionality, interoperability, etc.

*The fatal flaw of health apps is the user!*

# mHealth via Mobile Web (mWeb)



- Almost two-thirds of mobile phone owners go online
- Few health sites have a mobile optimized websites
- Requires “responsive design” or create a mobile layer of critical content

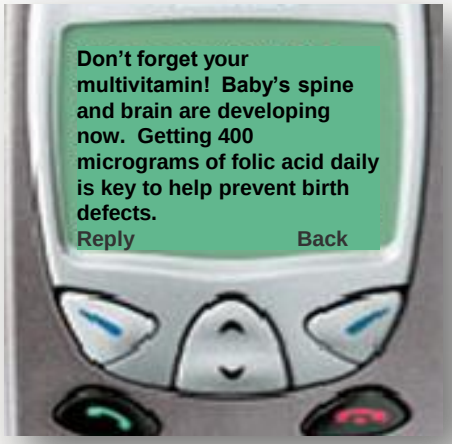
# Why is healthcare behind on mWeb?

- Lack of expertise and cost for CMS, SEO, and responsive design has not exceeded benefits
- More search and access from mobile than PC
- Major opportunities for impact using mWeb
- Every organization needs a mWeb strategy!

# mHealth via SMS


smokefreeTXT


BEDSIDER




text4baby℠
A free service of the National Healthy Mothers, Healthy Babies Coalition

# mHealth for Patient Reminders

- Reviewed 29 studies with 33 interventions
  - Study sizes: n=325-2864
  - Study durations: 2-7 months
- 32 of 33 interventions showed benefits of sending reminders prior to appointments
  - Manual calls more effective than automated reminders (39% vs. 29%) but at higher cost
  - No differences on reminder timing


Hasvold & Wooton (2011) Use of telephone and SMS reminders to improve attendance at hospital appointments: A systematic review. *Journal of Telemedicine and Telecare.*

# mHealth for Type 2 Diabetes

- Reviewed 13 telehealth interventions for T2
  - 4 studies showed improved glycemic control
  - 5 of 8 showed improved dietary adherence
  - 5 of 8 showed improved physical activity
  - 3 of 8 showed improved blood glucose monitoring
  - 3 of 8 showed improved medication adherence
- Conclusion: Behavioral telehealth has promise

Cassimatis, M. & Kavanagh, D.J. (2012). Effects of type 2 diabetes behavioural telehealth interventions on glycaemic control and adherence: a systematic review. Telemedicine and Telecare, 18, 8, 447-450.

# SMS-Based mHealth Findings

- Reviewed 12 studies (17 articles) using SMS
  - Intervention length ranged from 3-12 months
  - Sample sizes (n=16-126, + 1,705)
  - Disease management: Diabetes, Asthma
  - Disease prevention: Medication adherence, Weight loss, Physical activity, Smoking cessation
  - 8 of 9 powered studies found evidence of significant behavior change


Cole-Lewis & Kershaw (2010) Text messaging as a tool for behavior change in disease prevention and management. *Epidemiologic Review.*

# SMS Systematic Review of Reviews

- Reviewed 15 systematic reviews and meta-analyses
  - Explored 89 individual studies using SMS for public health
  - SMS-based interventions were effective for diabetes self-management, weight loss and physical activity, smoking cessation, medication adherence for antiretroviral therapy
  - Limited consistent evidence across the studies and reviews to inform recommended intervention characteristics.
  - Additional research needed to establish longer-term intervention effects, identify recommended intervention characteristics, and explore issues of cost-effectiveness.

Hall, A.K., Cole-Lewis, H. & Bernhardt, J.M. (2015). Mobile Text Messaging for Health: A Systematic Review of Reviews. *Annual Review of Public Health.*

ANNUAL REVIEWS

# SMS Example: text4baby

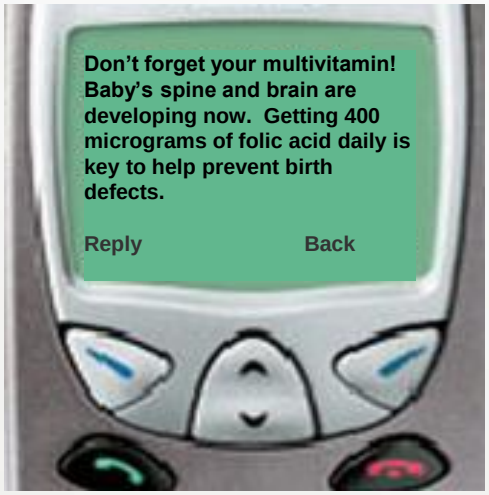
- **Goal:** To reach women at high risk of having poor birth outcomes
- Free program from National Healthy Mothers, Healthy Babies Coalition with J&J and 900+ partners
- Over 475,000 mothers since 2010
- Three free text messages per week
- Health tips timed to due/birth date
- Available in both English and Spanish

healthy mothers, healthy babies®

Adapted from Bushar & Kendrick (2013). Text4baby Just Turned Three! What Have We Learned? DHCX 2013 Presentation.

# SMS Example: text4baby

- Process Evaluations
  - Users: 53% pregnant, 46% delivered
  - Referrals 23% MD/RN, 23% media, 16% HD
  - Good at reaching moderately low income
- Outcome Evaluations
  - Increases self efficacy among moms
  - Helps remind about vaccines
- Program Improvements
  - More 2-part (longer) messages
  - Links to mWeb sites




text4baby℠
A free service of the
National Healthy Mothers, Healthy Babies Coalition

# SMS Pilots Focused on Health Disparities

- Formative research on SMS for health (Kharbanda et al, 2009)
  - SMS immunization reminders were OK among urban parents
- SMS Pilot on Diabetes Self Management (Dick et al, 2011)
  - Older adult urban African American population (n=18)
  - Although ½ of respondents were initially uncomfortable with SMS messages, treatment adherence and self-care confidence improved
- SMS on influenza vaccine (Stockwell etl al, 2012)
  - SMS increased vaccine uptake urban, low income pediatric patients
- Despite the potential, limited mHealth research focused on underserved patients and populations has been published

# Wearables for Medicaid Participants?


- Rapid sales growth
- Frequent innovation
- Crowdfunding success
  - Kickstarter/Indiegogo
- CES 2014 & 2015

# Use Cases for Health Wearables

- Fitness and Wellness
  - Steps, speed, and distance traveled (calories burned)
  - Heart rate and recovery
  - Skin and body temperature
  - Posture and body position
  - Sleep patterns and quality
  - Sun/UV ray exposure
- Chronic Disease Self-Management
  - Obesity and Overweight (Fitness and calories)
  - Arthritis (Gate and steps)
  - Diabetes (Blood glucose)
  - Epilepsy (Seizure sensor)
  - Dimentia (Memory aids)

# Research on Self Monitoring

- Weight Loss
  - Consistent significant association between self-monitoring (diet, weight, exercise) and weight loss (Burke et al., JADA, 2011)
- Diabetes
  - Self-monitoring of blood glucose may lead to improvements in diabetes self management (McAndrew et al., The Diabetes Educator, 2007)
- Physical Activity
  - 12 of 14 studies showed increased activity among youth wearing pedometers (Lubans et al., Prev Med, 2009)

# Wearable Game Changer?


*"…the most personal device we've ever created." – Tim Cook*

# Microsoft Band


# What Did We Learn Today?

# mHealth for Medicaid Participants

- High access among hard-to-reach patients
- Facilitates accessible, sustainable, sharable, social, multimedia, multi-directional, personalized, and engaging messages
- Relatively low cost for high reach and impact
- Potential for EHR interoperability/integration
- SMS has strongest evidence of efficacy

# mHealth for Medicaid Participants

- Few studies of mHealth use mobile web or apps
- Mostly pilot studies using SMS or mHealth with underserved (except for Text4Baby)
- Programs should be targeted and customized for patient and community needs
- Privacy and HIPAA rules must be considered
- Research on cost and sustainability needed

"We will soon be saying

'mHealth is dead'

because all healthcare and
public health functions will use

mobile technologies!"

*- @jaybernhardt*


# THANK YOU


**Jay M. Bernhardt, PhD, MPH**

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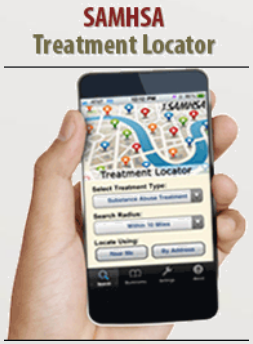
moody.utexas.edu/healthcomm




# Collaborative Connections Improving Care

Day 2 - Final Thoughts