



Data Driven Provider Engagement Strategies

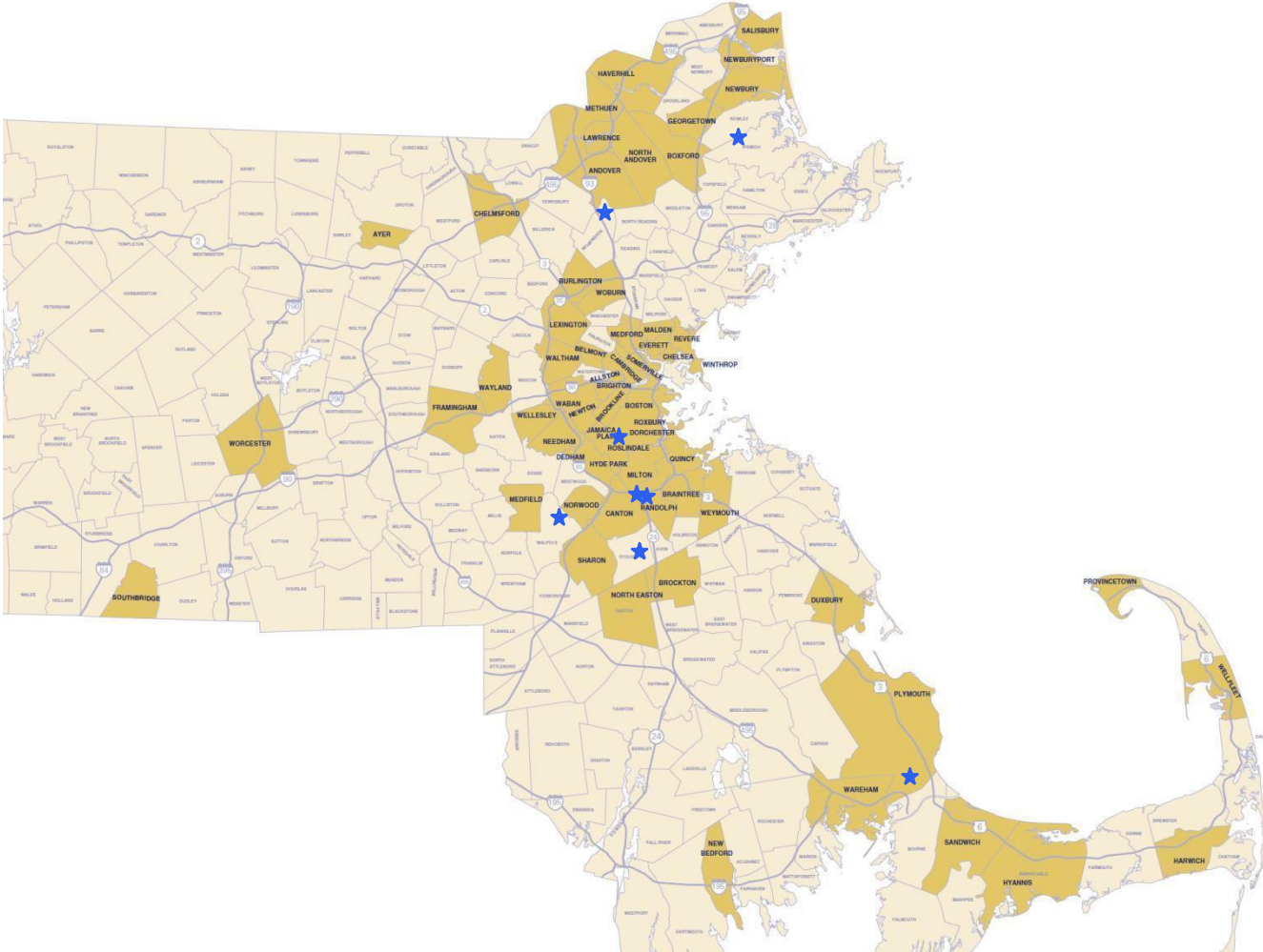
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Chief Medical Officer

Beth Israel Deaconess Care Organization
March 2017

About Beth Israel Deaconess Care Organization

- BIDCO is a value-based, physician and hospital network and Accountable Care Organization (ACO) in Massachusetts
 - **649 bed AMC, major Affiliate of Harvard Medical School and 7 other hospitals**
 - **2,500 physicians, including 900 full-time Harvard Medical School faculty exclusively affiliated with BIDMC**
 - **600 PCPs**
- Our ACO risk population includes Commercial, Medicare Advantage, Medicare and Medicaid.
- Our mission is to move health care forward by engaging providers in their communities to achieve success in a value-based delivery system
- We are committed to creating innovative, industry- leading best practices in the clinical, administrative, and financial aspects of health care

Beth Israel Deaconess Care Organization(BIDCO)



Hospitals

- Anna Jaques Hospital
- BIDMC
- BIDH-Milton
- BIDH-Needham
- BIDH-Plymouth
- Cambridge Health Alliance
- Lawrence General Hospital
- New England Baptist Hospital

Physicians

- API (independent)
- CHA Physicians Organization
- HMFP
- Joslin Diabetes Center
- Lawrence General IFA
- Milton PO
- Whittier IFA
- Jordan Physician Associates
- NEB-CIO



BIDCO Structure and Governance

For Financing Systems, Communication and Execution On Clinical Initiatives



BIDCO Clinical Champions

PCPs grouped
into Pods



Pod Leader



MonthlyPod
meeting

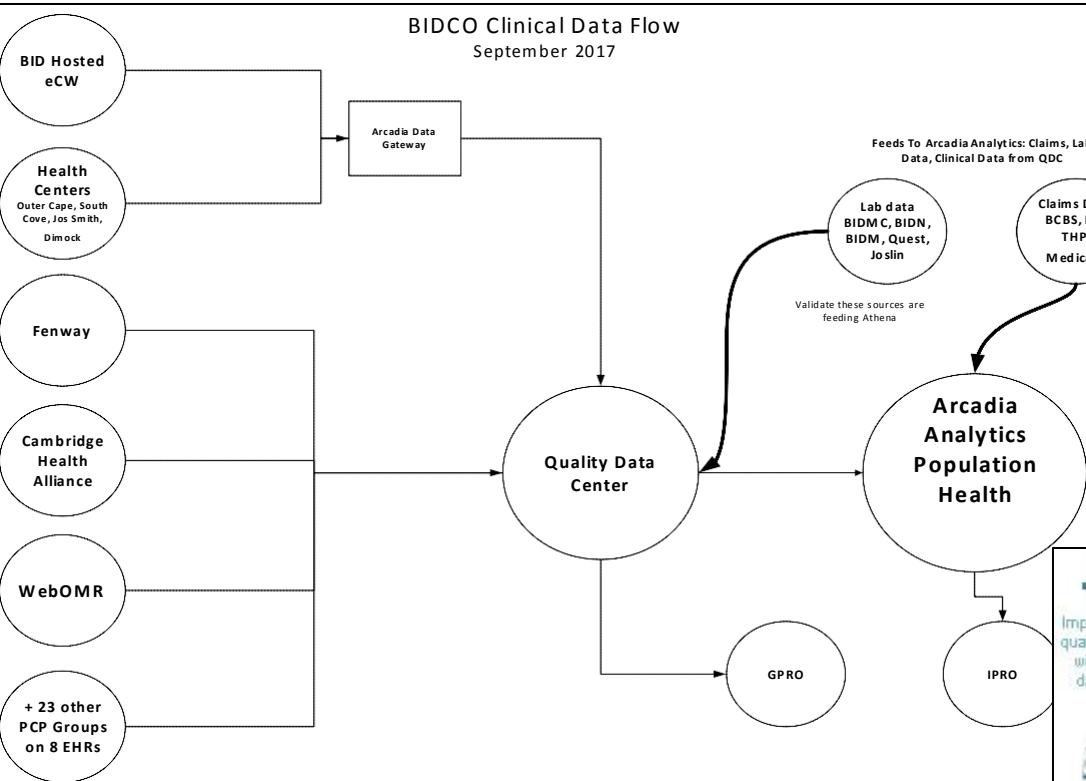


Monthly Pod Leader
meeting

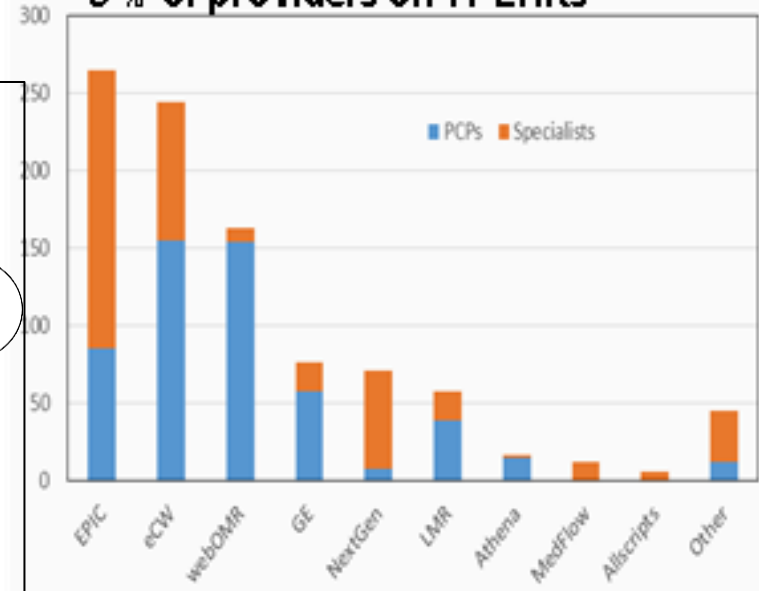


BIDCO Population Health Platform

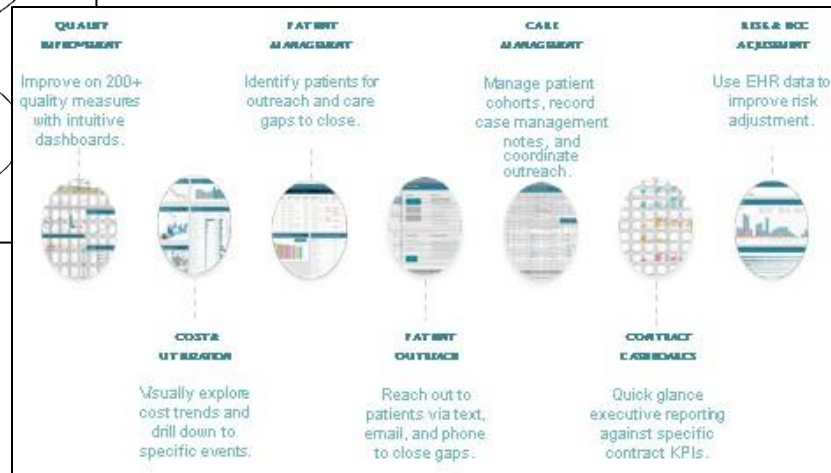
BIDCO Clinical Data Flow
September 2017



95% of providers on 9 EHRs
5 % of providers on 17 EHRs



Single sign on with 6 main EMRs for point of care analytics



Provider Engagement

- Find a Common Purpose
- Align value based goal with a common purpose
- Align performance metrics and financial systems
- Identify Clinical Champions
 - Endorse the concepts of the interventions with patients.
 - Participate in reporting and data exchange included in the program.
 - Identify interventions needed for patients.
 - Disseminate positive message
- Use Data/reporting based on Principles Economics
 - Immediacy
 - Relative social ranking
 - Goal gradients and Threshold effects
 - Overcoming status quo bias



Emanuel EJ, et al. Ann Intern Med. 2016 Jan 19;164(2):114-9.

Find a Common Purpose: The need for a network wide care retention and outmigration system strategy

- Accountable Care Organizations (ACOs) across the US are struggling in managing beneficiary care seeking patterns across the care continuum
- Recent research has found that in-network care can generate proactive coordination in chronic and complex diseases that results in higher quality and fewer hospital admissions
- Often times critical systems are either absent or inadequate thereby resulting in higher costs or delayed care (e.g. unnecessary or misdirected referrals)

Increasing retention within our network in both risk and non-risk populations allows us Win / Win for fee-for-value and fee-for-service and keeps 'care in the community'

Align value based goal to common purpose:

Care retention: Improved quality and TME for patients by improving coordination and keep most care in the community.

Risk Unit	Leaked Total Medical Expense CY16 Related to Care Retention and Outmigration Goals (% of total TME)					
	Outpatient			Inpatient		Grand Total
	ED	OP	Specialist Visits	Med/Surg	OB	
	57%	32%	33%	38%	38%	38%
	44%	41%	54%	39%	63%	42%
	58%	35%	24%	39%	54%	40%
	38%	40%	64%	30%	45%	34%
BID System	52%	35%	41%	37%	44%	38%

Source: Athena claims warehouse. Measurement period = 4/1/16 to 3/31/17. SQL based data pull on 7/22/17. Queries run off of fact tables. All risk payers. BID Risk Units. Outpatient Procedures include Ambulatory Procedures, Major Procedures, Endoscopy, and any related to Cardiovascular. Inpatient elective and emergent are included.

Refining the Data Driven Approach

Close partnership with primary care physicians, and specialists refining an analytical methodology

Multi service line BIDCO wide opportunity across care continuum

Multi service line BID System opportunity across care continuum

Data driven informed discussions with PCPs to understand patient & provider opportunities

Multipronged care retention Action Plans

Continuously refine care retention and outmigration methodology, strategy and action plans at BIDCO •

- State analyses' **assumptions** and **limitations** upfront (e.g. data available, real time vs lag, etc)
- Address **known concerns** (e.g. patient risk, distance)
- Include **key stakeholders** in data discovery and vet data with physician leads
- Promote **knowledge sharing** across stakeholder groups (e.g. Pod Leaders; Medical Directors; Specialists; Regional Managers; Senior Leadership)
- Benchmark **performance** across Pods/Practices/PCPs and create **targets**
- Leverage **best practices** from literature and within our practices in system
- Provider **reporting dashboards** to follow performance

Immediacy

- Immediacy enhances response, whereas delayed gratification dampens it. Giving clinicians frequent interim feedback affords them an opportunity to modify their behavior and learn more quickly whether the modifications improve performance. The optimal frequency, however, is unknown.

	Commercial		
	Inpatient Medical	Inpatient Surgical	Emergency Department
Admits/1000			
Prior Year	11.9	7.5	276.7
Current Year	13.0	7.2	261.8
% Change	8.8%	-3.4%	-5.4%
Care Retention Rate			
% Care Retention	52.4%	54.4%	
% Leakage	47.6%	45.6%	
Leakage Rate			
% Emergent	97.2%	36.7%	
% Elective	2.8%	63.3%	

Risk unit/practice/patient level drill down reports every other month

- Leakage reports with drill down by subservice line
- Practices by PCP whether elective or emergent.

Inpatient Med/Surg - Commercial					
Leakage			Keepage		
62.5%	\$154,257	5.1	37.5%	3.1	
35.5%	\$297,216	10.6	64.5%	19.2	
66.7%	\$25,109	7.3	33.3%	3.6	
0.0%	\$0	0.0	100.0%	0.0	
41.7%	\$70,077	8.3	58.3%	11.6	
0.0%	\$0	0.0	100.0%	0.0	
77.8%	\$215,015	17.0	22.2%	4.9	
0.0%	\$0	0.0	100.0%	0.0	
31.4%	\$150,800	7.8	68.6%	17.1	
100.0%	\$10,214	2.4	0.0%	0.0	
28.2%	\$364,445	9.3	71.8%	23.6	
75.0%	\$321,663	19.7	25.0%	6.6	
0.0%	\$0	0.0	100.0%	0.0	
50.0%	\$184,770	10.6	50.0%	10.6	
50.0%	\$99,670	6.9	50.0%	6.9	
63.3%	\$478,453	15.9	36.7%	9.2	
0.0%	\$0	0.0	100.0%	144.3	
44.7%	\$2,371,689	9.8	55.3%	12.1	
36.6%	\$29,729,435	13.0	63.4%	22.6	

Relative Social Ranking

- People are heavily influenced by their perception of how their performance compares with those around them. Physicians' sense of competitiveness can be deployed by distributing identified rankings to physicians within one's group, or even to the general public.
- Social comparison approaches can recognize team-based outcomes and not only individual-level outcomes, potentially facilitating collaboration to improve patient care while preventing competition among team members.

Pod	Admits	% Keepage*
[1	2	100.0%
[1	5	100.0%
[0	1	100.0%
[2	39	82.1%
U	5	80.0%
[0	10	80.0%
[1	9	77.8%
SE		
[4	19	73.7%
[0	14	71.4%
[1	7	71.4%
[3	16	68.8%
[0	6	66.7%
[0	6	66.7%
[4	17	64.7%
A		
[1	8	62.5%
B		
[0	7	57.1%
[4	28	50.0%
[2	6	50.0%
[3	12	41.7%
[3	8	37.5%
[2	3	33.3%
BIDCO	228	67.1%

Kolstad J Information and quality when motivation is intrinsic: evidence from surgeon report cards
 Am Econ Rev 2013;103: 2875-2910

Goal Gradients and ‘Threshold effects’

Target Performance Metric

- As people approach a goal, they try harder to achieve it, but once they reach the threshold, effort may drop—a phenomenon known as the —threshold effect. Poorer performers, concluding that they cannot reach the targeted threshold, may stop trying to improve. Recognition of improvements in performance as well as overall performance is important to encourage participation by those who are further away from the desired thresholds.

Inpatient Medical and Surgical Admission

Elective

LOB: Commercial

CY2016

Excludes: Out of State/Transplants

Retention Goal : 56.3 %(<43.7% leakage)
Floor 53.1% (<46.9 % leakage)

Risk Units ⁽¹⁾	competitor	network	Grand Total	Leakage Rate	30th Percentile	40th Percentile	50th Percentile	60th Percentile	75th Percentile
E	73	225	298	24.5%					
E	39	227	266	14.7%					
A	83	96	179	46.4%					
E	56	121	177	31.6%					
E	31	121	152	20.4%					
E	72	47	119	60.5%					
E	24	66	90	26.7%					
C	32	55	87	36.8%					
E	22	31	53	41.5%					
E, Outpatient	5	31	36	13.9%					
Grand Total	437	1,020	1,457	30.0%	36.8%	31.6%	30.0%	26.7%	22.4%

Achieved Target

7 of 10

6 of 10

5 of 10

5 of 10

3 of 10

70.0%

60.0%

50.0%

50.0%

30.0%

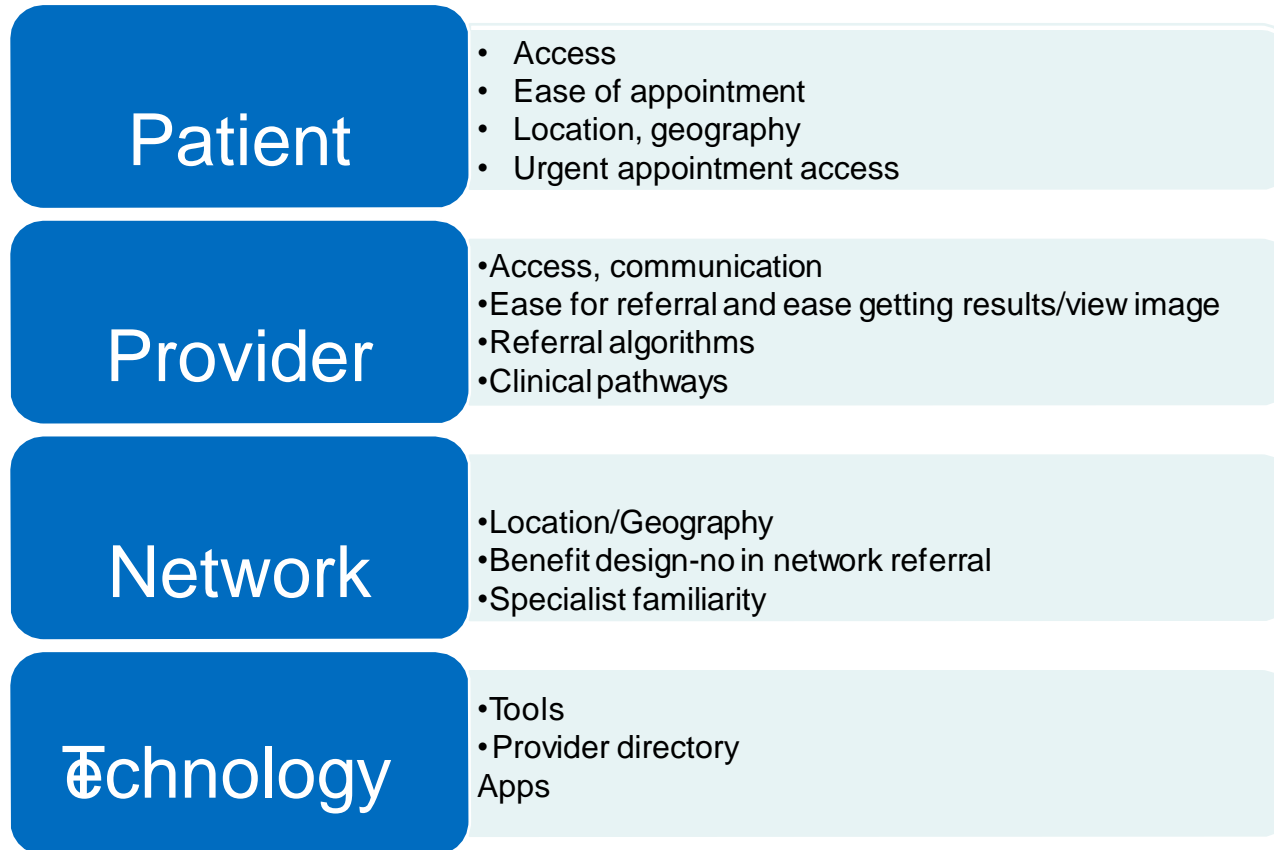
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Align Goal with Performance Metric

Reward PCPs

- Earnable PMPM on commercial membership
- Performance-based and measured at Pod level
 - Metric
 - Care Retention elective adult medical & surgical admissions
 - Funding
 - First cut aggregate surplus
 - Monies unearned by Pods flow back to aggregate surplus pool

Clinical Champions: Pod Leader creation of 'Best Practice Tool Kit:' (Orthopedics)- What Matters!

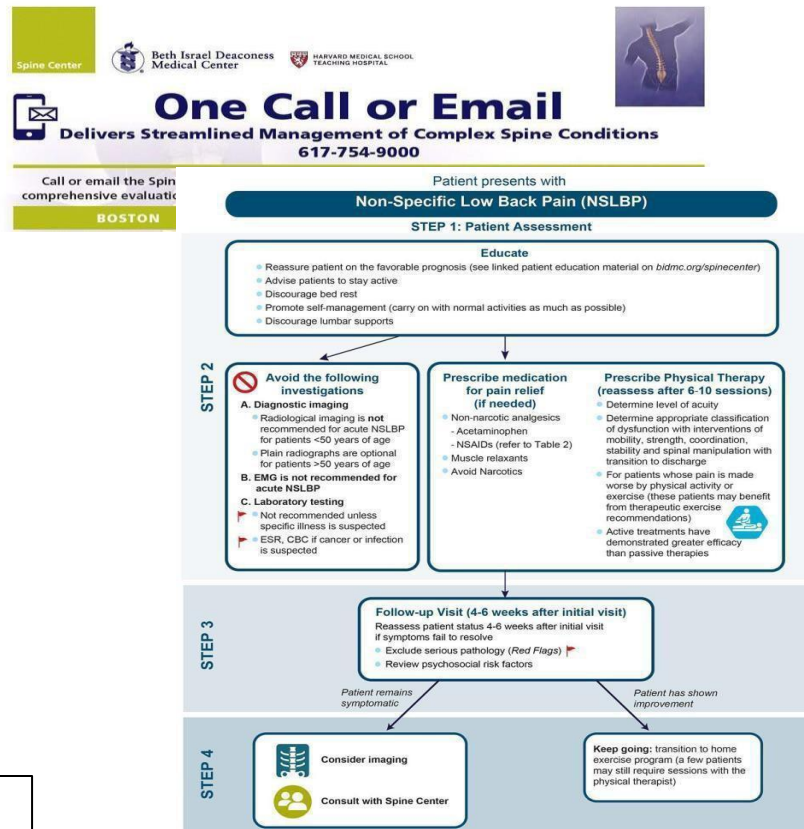


Overcoming 'Status Quo Bias'

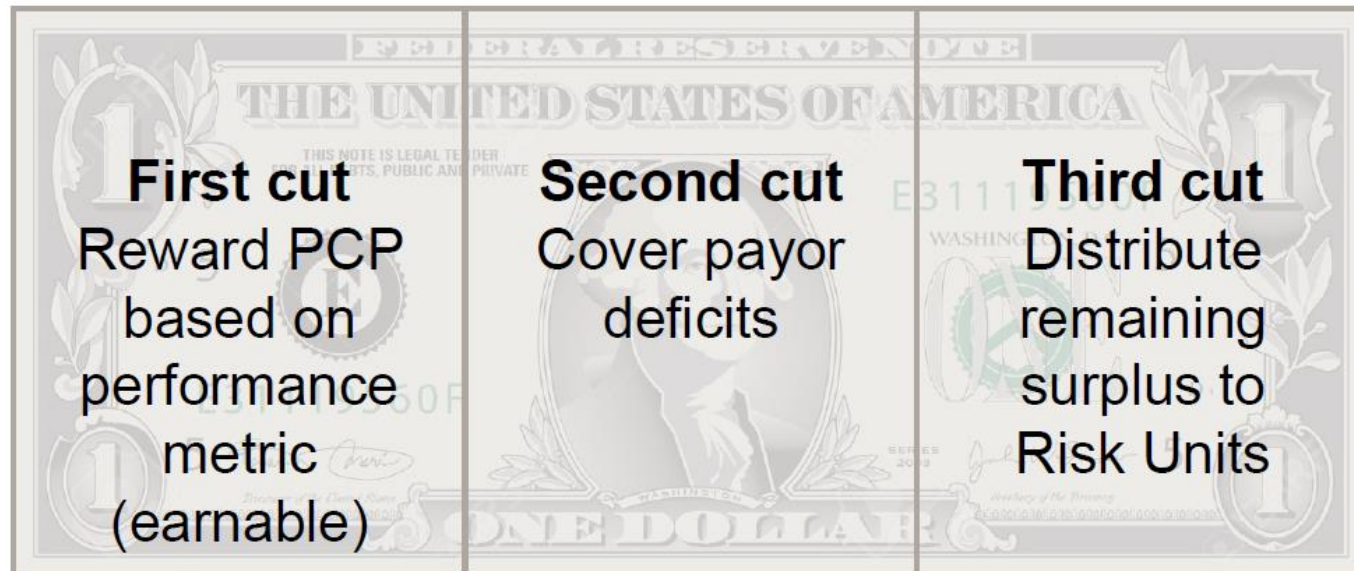
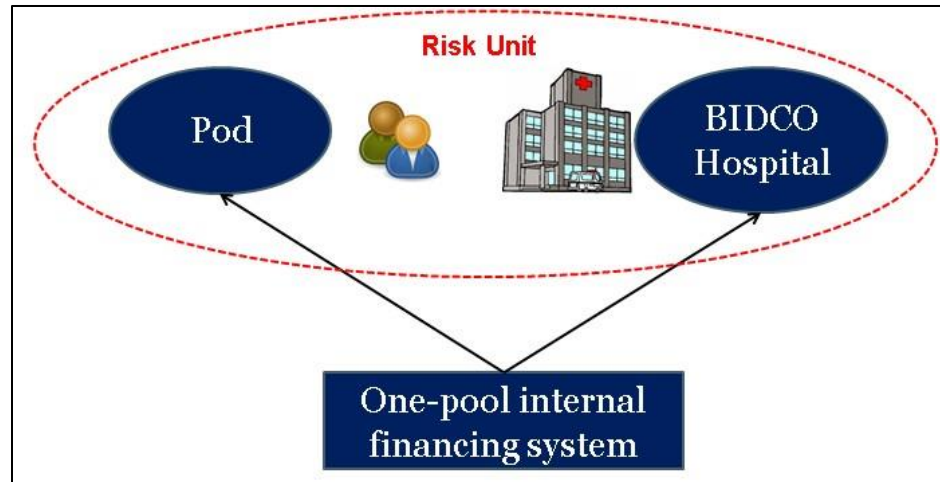
- When making choices, people typically demonstrate a status quo bias
- Changing habits and settled practices usually requires explicit efforts and policies, such as implementing new defaults. Thus, it is important to structure a decision-making environment that makes it easy to provide high-quality, cost-effective care

- Spine Center Care pathways to help support PCPs in the management of patients who present with back pain
- Development of Acute Back Pain Clinic with Psychiatrist and PT
- Open for urgent referrals – 9/2016
- One call or e-mail
- Patient facing materials
 - Helps PCP set expectations
 - Developed in consultation with Outpatient PT and PCPs

Johnson EJ Goldstein D Medicine. Do defaults save lives?
Science 2003; 302:1338-9



Aligning Metric with Internal Financing System



Q3 2017 Outcomes

Care Retention: Elective Adult Inpatient Medical/Surgical Admissions

Outcomes
Trend 2016:2017
Increased
Retention overall
and decreased
Leakage across 4 out
of 7 Risk units

Care Retention Trend 2016:2017	
Unit of Analysis	Inpatient Med/Surge
	6.3%
	-2.9%
	-0.1%
	-14.2%
	2.9%
	-1.7%
	5.7%
	2.5%

Risk Unit	Admits	% Keepage*	ALOS	Cost / Admit
	37	78.4%	3.9	
	115	76.5%	3.8	
	43	74.4%	3.5	
	84	71.4%	4.1	
	35	68.6%	3.7	
	68	66.2%	3.5	
	29	51.7%	4.3	
	31	45.2%	3.8	
	68	39.7%	4.2	
	41	29.3%	3.9	
	551	62.8%	3.9	

2016 CY: 2017 Jan – Oct

At Risk Population

Q 3 Outcome on Care retention
Performance metric
6 out of 7 pods meet metric

Summary: Data Driven Population Health Program Strategy From Concept to System Wide Intervention



- | | | | |
|---|---|--|--|
| <ul style="list-style-type: none"> • Value based Goal • Analytics driven problem identification | <ul style="list-style-type: none"> • Root Cause Analysis • Workgroup Inception • Data sharing and refining definitions and reports • Best practice review • Customized detailed intervention toolkit with clinical and local knowledge | <ul style="list-style-type: none"> • Customized interventions based on local feedback <ul style="list-style-type: none"> • -People • -Process • -technology • Identify clinical champions and execute • Measuring improvement | <ul style="list-style-type: none"> • Expand solution to include across care continuum and system • Trigger new potential areas for analysis, review and intervention |
|---|---|--|--|

Continuous Pod Workgroup Review and Support

Questions?

Thanks !

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