

Unlocking Data to Analyze, Benchmark and Diagnose Absence Drivers, Culture and Impacts on Outcomes

March 13, 2018 – 1:15pm to 2:15pm



Today's Presentation Team

- **Beth A. Rohlfing**, The Children's Hospital of Philadelphia, Sr. Director, Total Rewards & HR Technology
- **David Spizman**, Children's Hospital Association, Vice President
- **Kimberly Mashburn**, The Hartford, National Accounts Practice Lead
- **Phil Lacy**, Trion Group, a Marsh & McLennan Agency, LLC, Absence Team Practice Leader
- **Tom Cullen**, Trion Group, a Marsh & McLennan Agency, Client Leader

Pre-Analysis

Employer Questions Pertaining To Absence?



Why are more than 10% of our people not at work?



How is absence impacting our expenses?



How does absence impact productivity?



How do we harness information to create knowledge?

Controlling The Costly Contagion of Employee Absenteeism

Employee absenteeism takes a toll on:

- Patient safety and outcomes (hospitals and health systems)
- Productivity
- Quality of care
- Managerial workforce control
- Absence costs and, in turn, the organizations bottom line

Absentee Contagion is influenced by:

- Inadequate controls, tracking tools, and data integration
- Poorly constructed or enforced plans, policies and procedures
- Abuse of policies and procedures
- Insufficient knowledge to assist with Absence Strategy

Case Study

The Children's Hospital of Philadelphia

The Situation: 10,000+ employee hospital struggling with cost of excessive absence, including impact on patient outcomes / safety.

“At anytime we have 10% of our population not at work,” COO

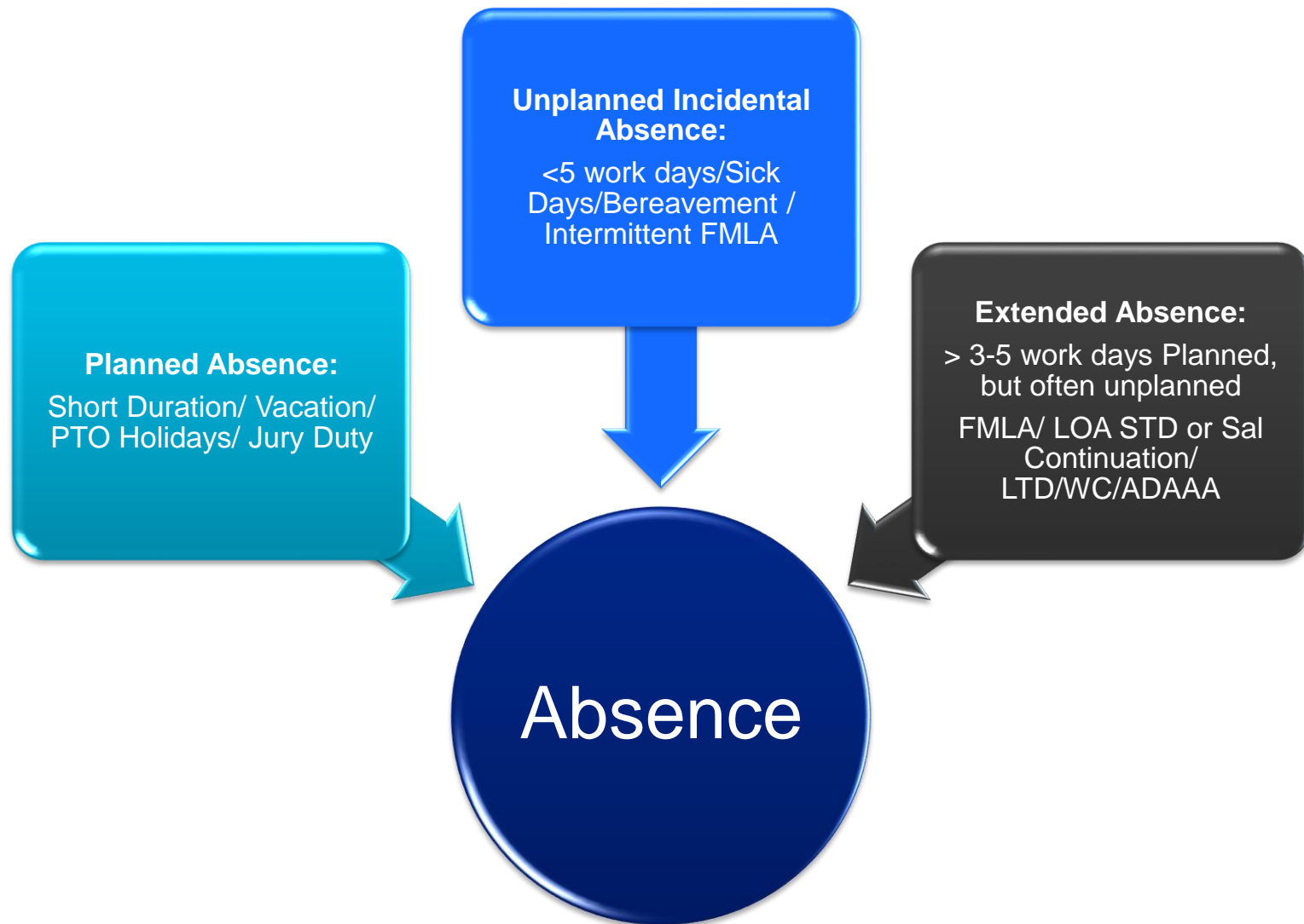
- What is absence costing us?
- What can we do to understand this?
- How do we make improvements?

Longer term question:

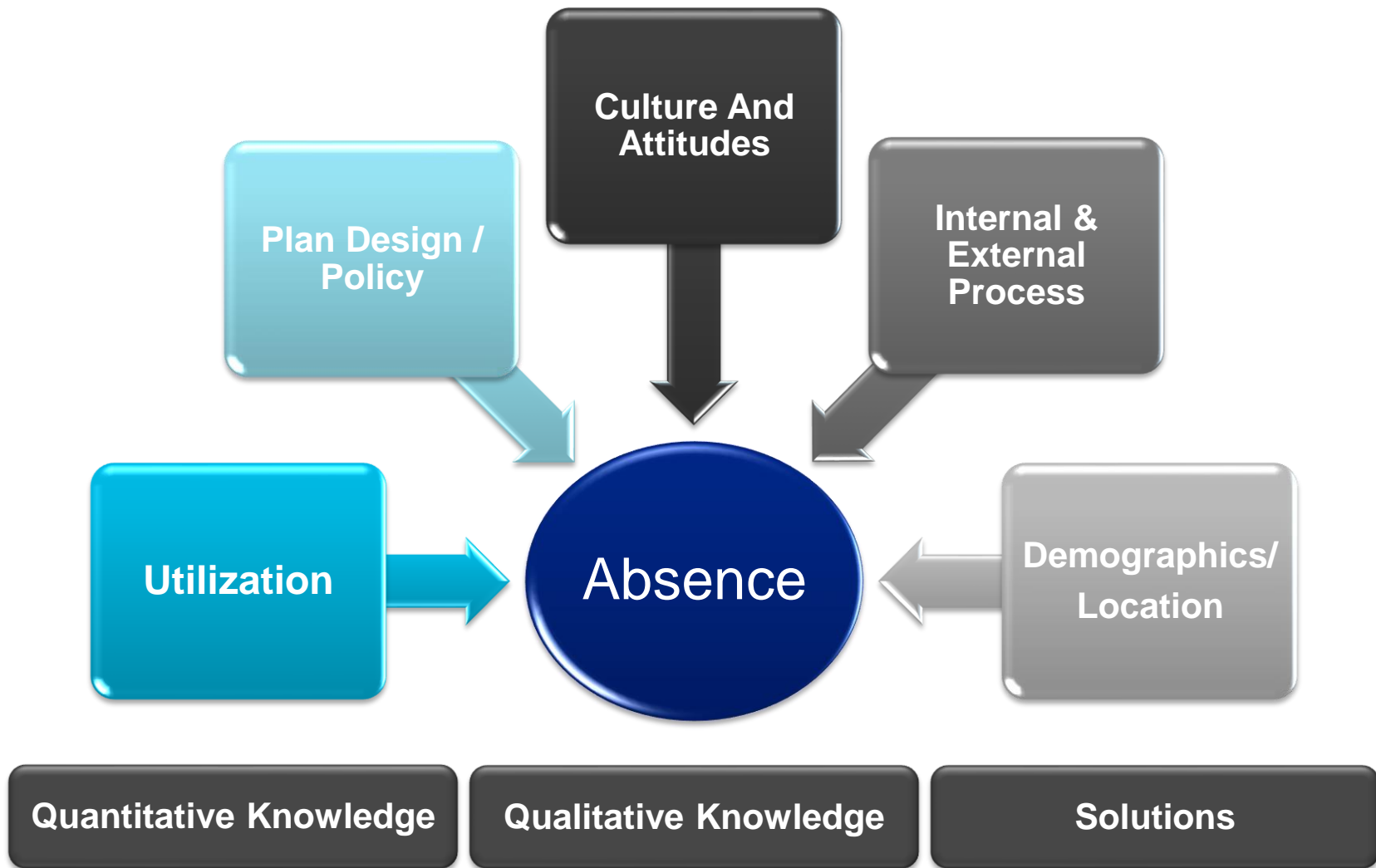
- How is absence impacting employee productivity and patient care?

Absence Study

Defining Absence / Absenteeism



Absence Program Evaluation



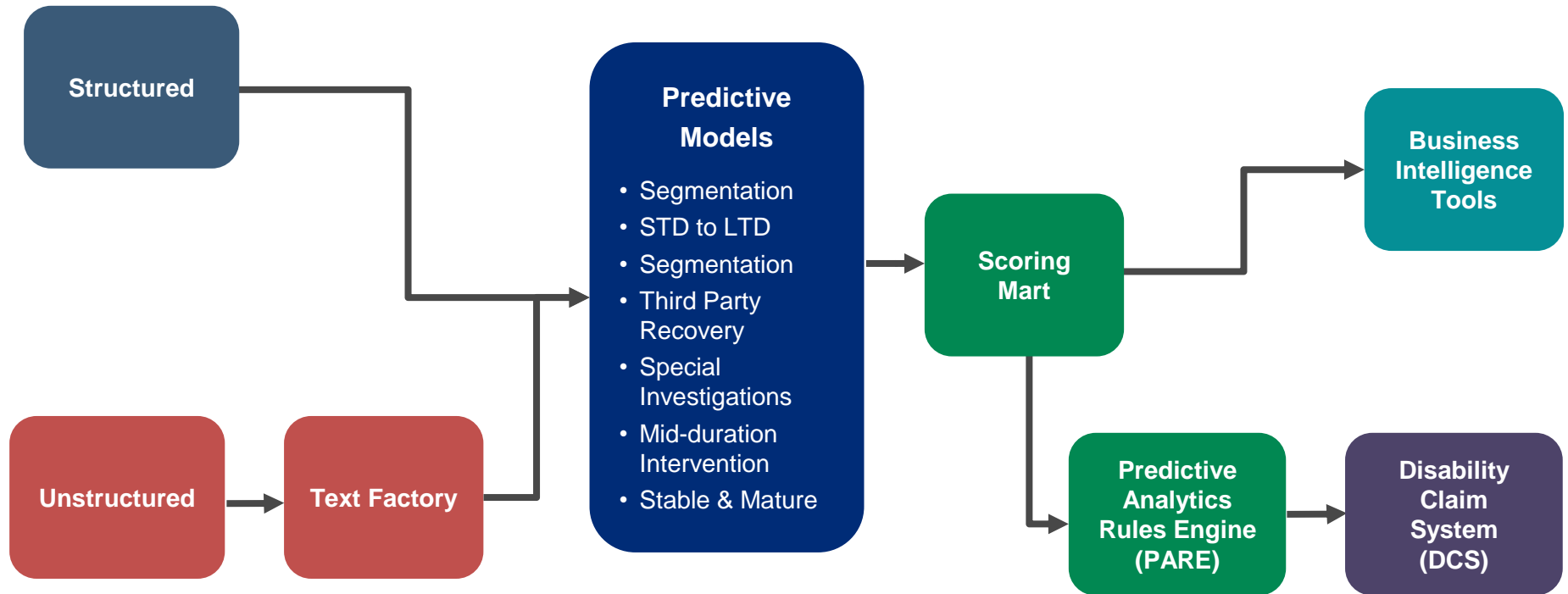
Cultural Observations and Key Themes



Claims Data Analytics

Claims Data Analytics

Predictive Analytics Lifecycle



Claims Data Analytics

Data Capture

Physical Capabilities (20)

- Hours Sit
- Hours Stand
- Hours Walk
- Lift
- Use of Hands
- Driving
- Height/Weight

Social Security (44)

- Compassion Allowance
- Should Apply for SS
- Represented by Attorney/Vendor
- Vendor Name
- Initial SS Decision
- Reconsideration Decision

Occupational Demands (20)

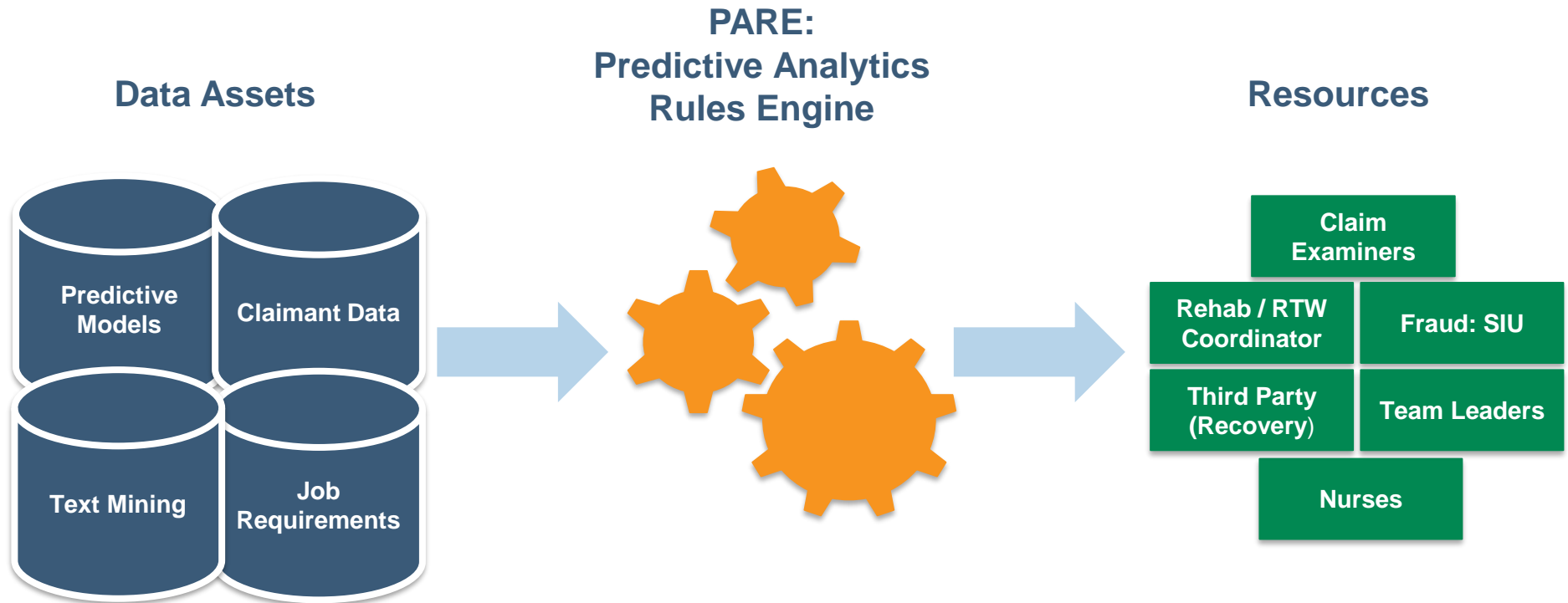
- Hours Sit
- Hours Stand
- Hours Walk
- Lift
- Use of Hands
- Driving

Text Flags (103)

- Fear
- Passivity
- Lack of Coping Skills
- Perceived Injustice
- High Blood Pressure
- Sleep Disorders

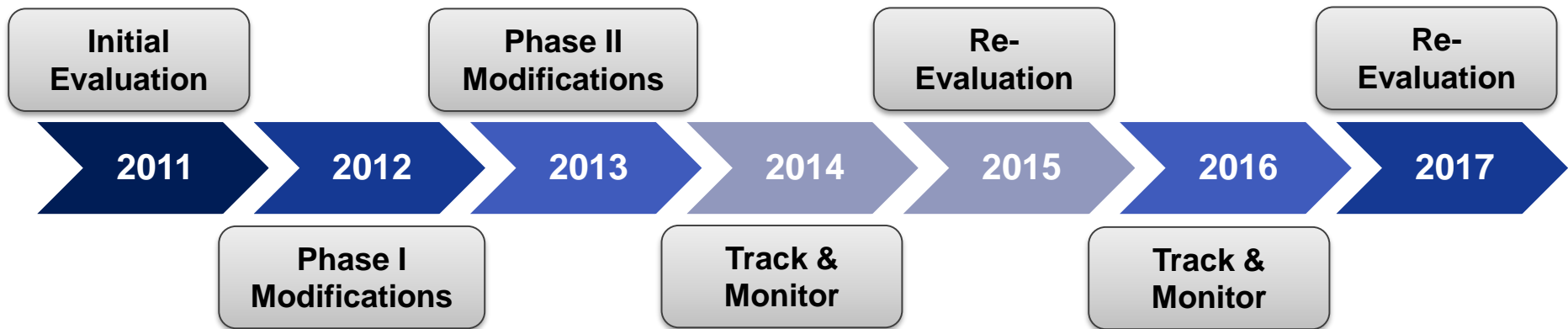
Claims Data Analytics

Actionable Intelligence



Key Learnings

Case Study Navigating Absence is a Journey



- **Our Journey.....We engaged Trion to analyze full absence and time off programs.**
 - All time off policies and procedures
 - Demographics and usage of the Paid Personal Leave (PPL), Extended Disability Leave (EDL) / Extended Sick Leave (ESL-Union), Short-term disability (STD), Long-term disability (LTD), and Family Medical Leave Administration (FMLA) programs
 - Determine utilization patterns, incidence rates and other key metrics
 - Benchmarking analysis
 - Quantitative cost analysis of the current plans, and cost implications of changes
 - On-site process and procedural review and vendor process review

Case Study

Initial 2011 baseline

Utilization and Accrual Liability:

- More than \$50M in actual cash flow paid for PPL, EDL cash out of PPL and STD benefits
 - EDL and STD was \$5.4M
- Accrual liability associated with PPL was approximately \$60 Million.

Key Focus Group Themes:

- Managers inconsistent application
- Employees teaching each other abuse techniques
- Increased FMLA around the holidays or connected to other scheduled time off
- Employees take unpaid leave to save PPL days
- Time keepers are frustrated with retroactive and manual processes
- Plan design (financial incentives) enables abuse

Case Study

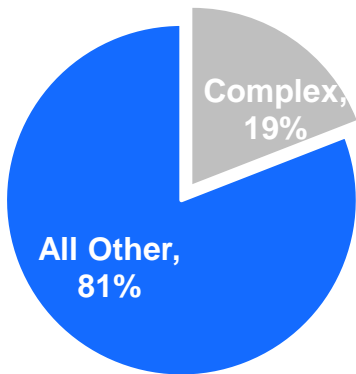
Applying what we Learned

Incorporated the findings of the initial analysis into the mid-year 2012 labor negotiations to make some key policy and plan design changes that were applied enterprise wide. These changes included.

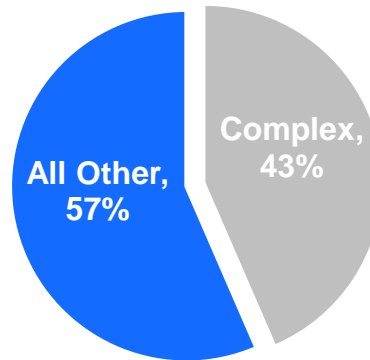
Policy	Modification
Extended Disability Leave (EDL) / Extended Sick Leave (ESL)	7/1/2012 - Eliminated the accrual of ESL for newly hired union employees 9/1/2012 – Use of ESL (union) and EDL (non-union) only permitted for continuous leave of absences (not for intermittent leaves) 1/1/2013 – ESL (union) and EDL (non-union) banks were frozen for all existing employees. 1/1/2013 – Eliminated the accrual of EDL newly hired employees
Short-term disability (STD)	Modified the short term disability plan to provide a step down approach to income replacement: <ul style="list-style-type: none">• FT: 70% wks 2-8, 60% wks 9-26• PT: 60% wks 2-8, 50% wks 9-26
Attendance policy	Changed the administration of the attendance policy from a calendar year basis to a rolling 12-month basis.

CHA LTD Segmentation

CHA LTD Claim Count



CHA LTD Claim Cost



Change in Recoveries

+48%¹

Segmentation Results

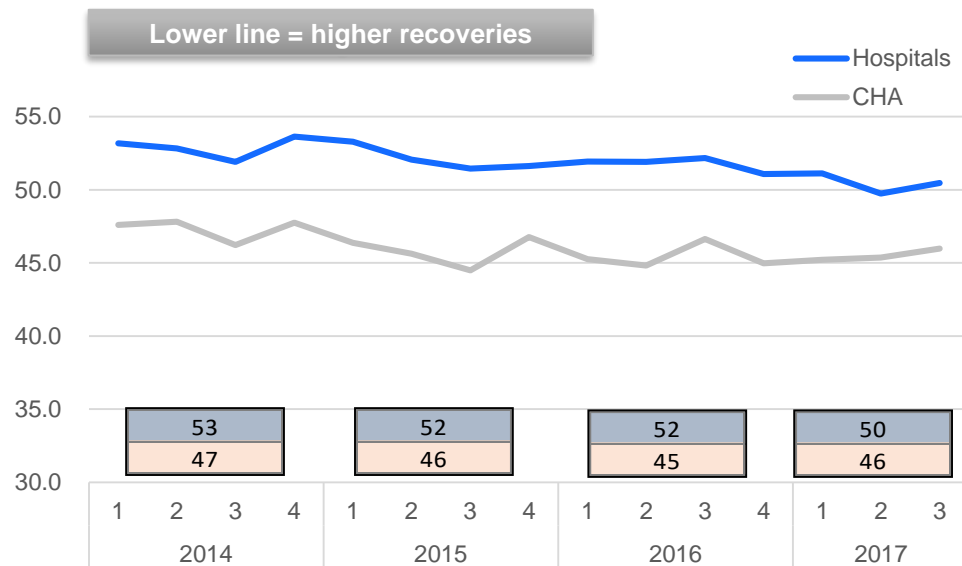
- | | |
|---|--|
| <ul style="list-style-type: none">• Patent-pending triage process segments and provides claim management plan• 31 predictive models measure likely claim path• Segmentation ensures the right resources are managing the right claims | <ul style="list-style-type: none">• Complex claims reflect 19% of total CHA claim volume• Complex claims reflect 43% of total CHA claim cost• Segmentation works – 48% increase in recoveries on our most difficult claims |
|---|--|

¹ Recoveries exclude death and expiry. Data based on comparison of pre-segmentation 2010-2012 Q3 to post-segmentation 2015-Nov 2017 CHA business.

Short Term Disability

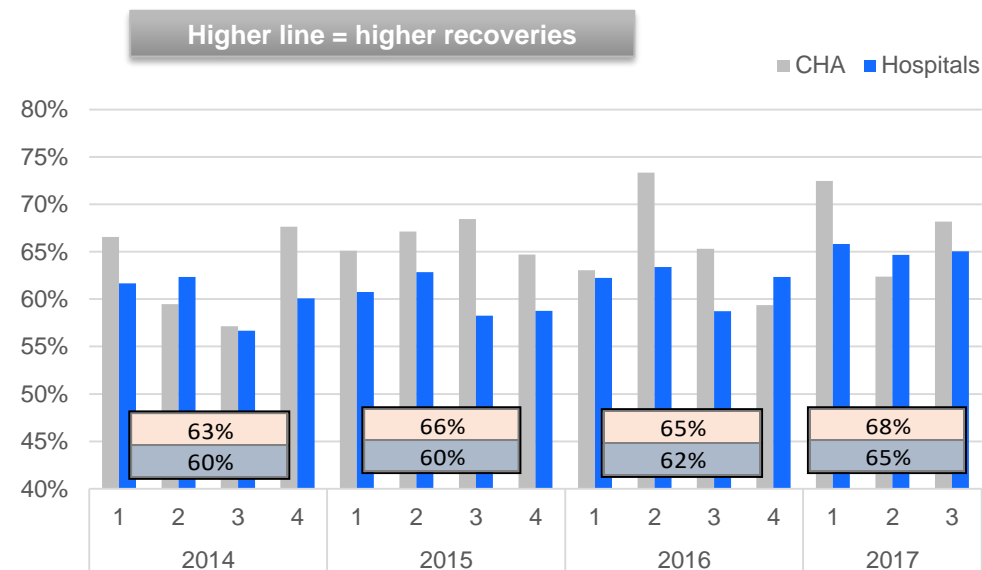
Average Duration

- Durations have trended down due to strong claim management, with CHA's results has out performed their peers



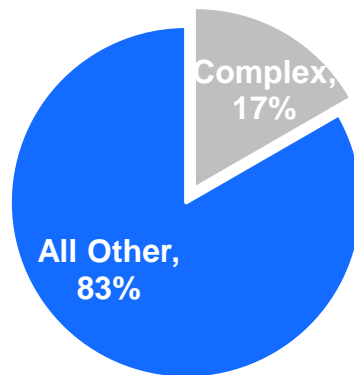
Recovery from Midpoint

- The likelihood the claimant recovers prior to LTD for claims with LTD Potential that have reached their midpoint, CHA's results have out performed their peers

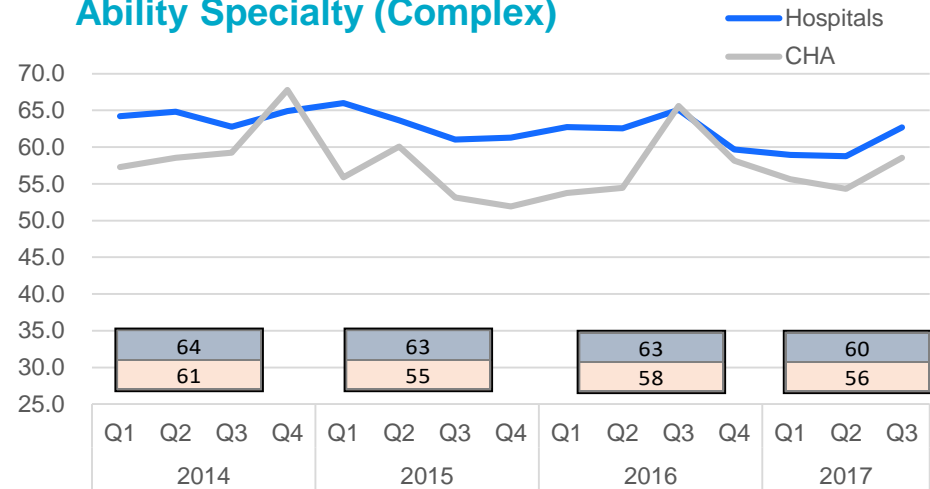


STD Durations by Claim Segment

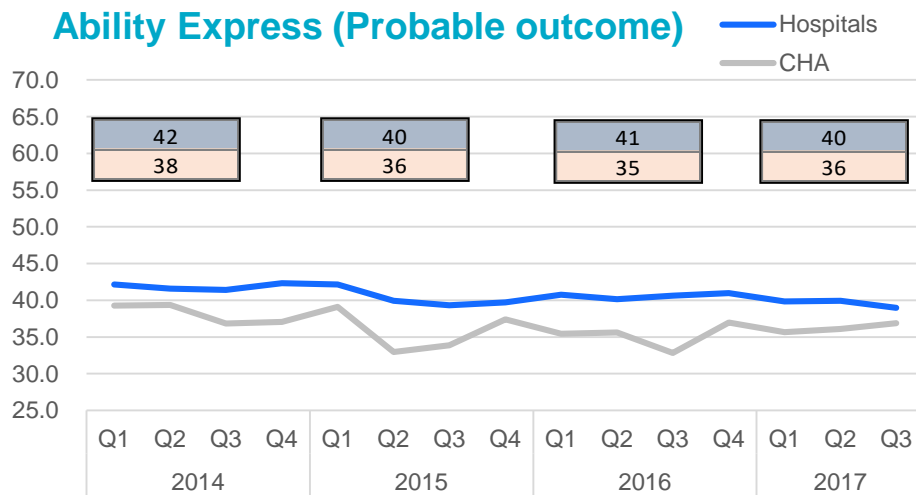
STD Claim Count



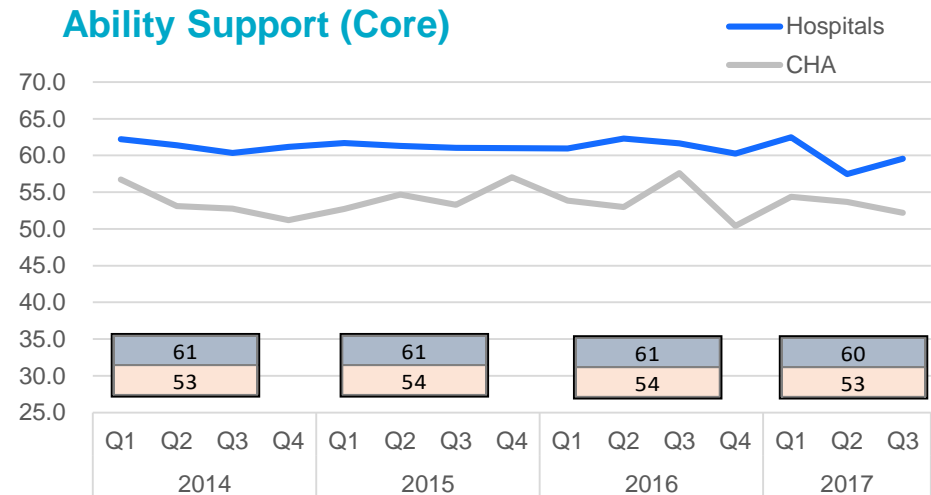
Ability Specialty (Complex)



Ability Express (Probable outcome)

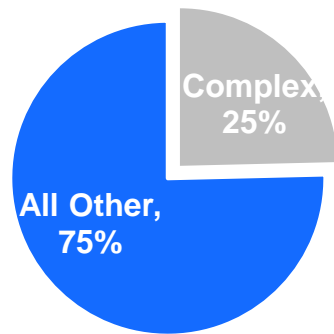


Ability Support (Core)



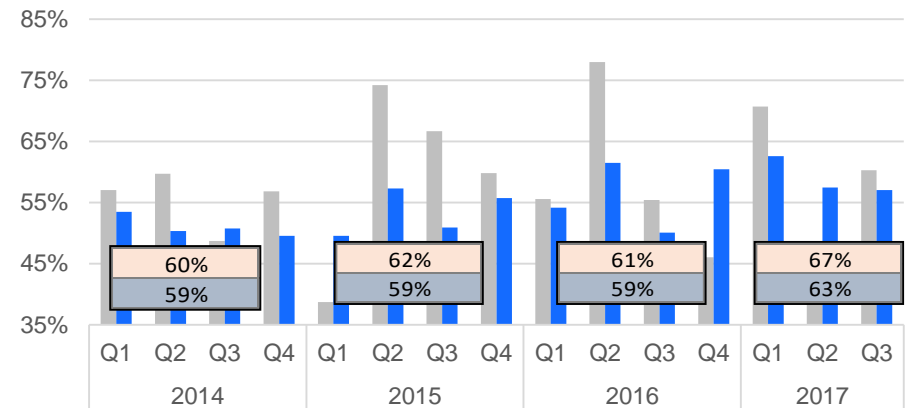
STD Recovery from Midpoint by Claim Segment

STD Claim Count (to Midpoint)



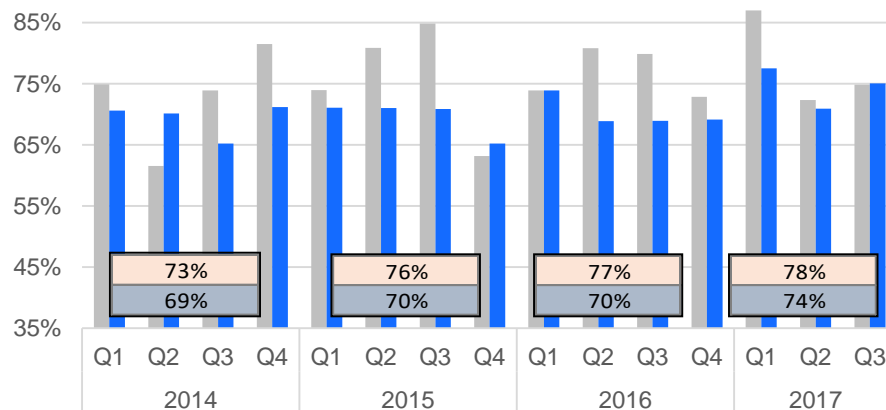
Ability Specialty (Complex)

■ CHA ■ Hospitals



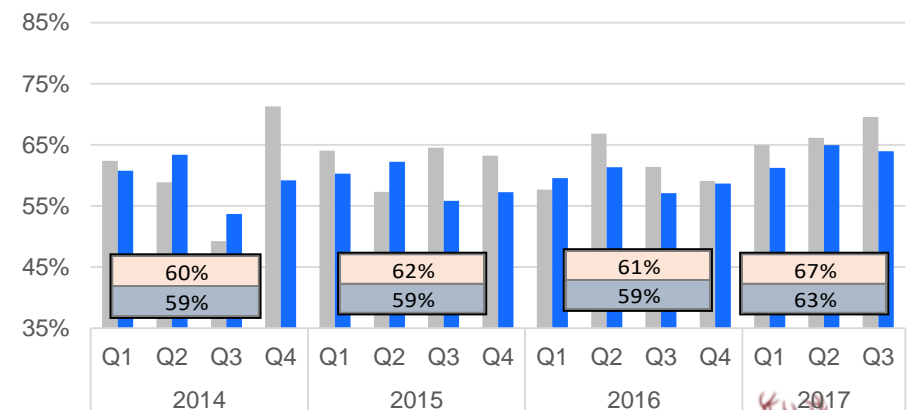
Ability Express (Probable outcome)

■ CHA ■ Hospitals



Ability Support (Core)

■ CHA ■ Hospitals

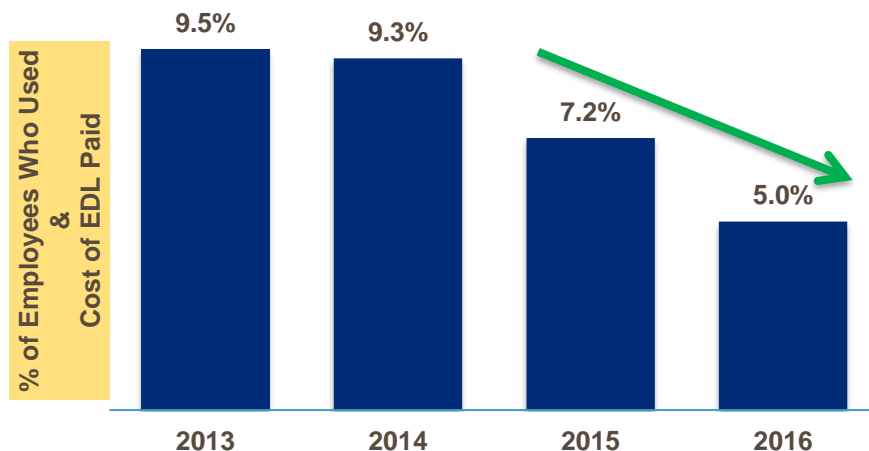


Change Impact

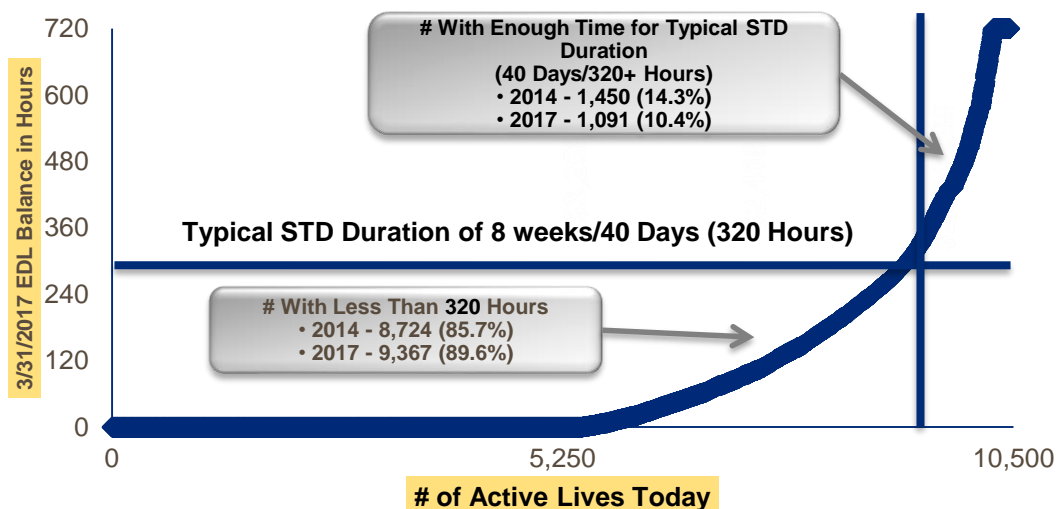
Case Study

Have we seen improvements as a result of these changes?

Changes to Extended Disability Leave (EDL) and Extended Sick Leave (ESL) policy.



- Incidence rate dropped to 9.5% in 2013 & 5.0% in 2016
- EDL/ESL usage was 8% lower in 2013 vs. 2011, utilization cost reduced by \$1.1M between 2013-16
- Effective 1/1/2013, EDL accruals stopped & banks frozen
- Effective 9/1/2012, EDL could no longer be used for intermittent leave



EDL Balance Summary	
Date	Estimated Cost of Balance
12/31/2013	\$56,179,675
2/28/2014	\$55,680,288
3/31/2017	\$43,113,804

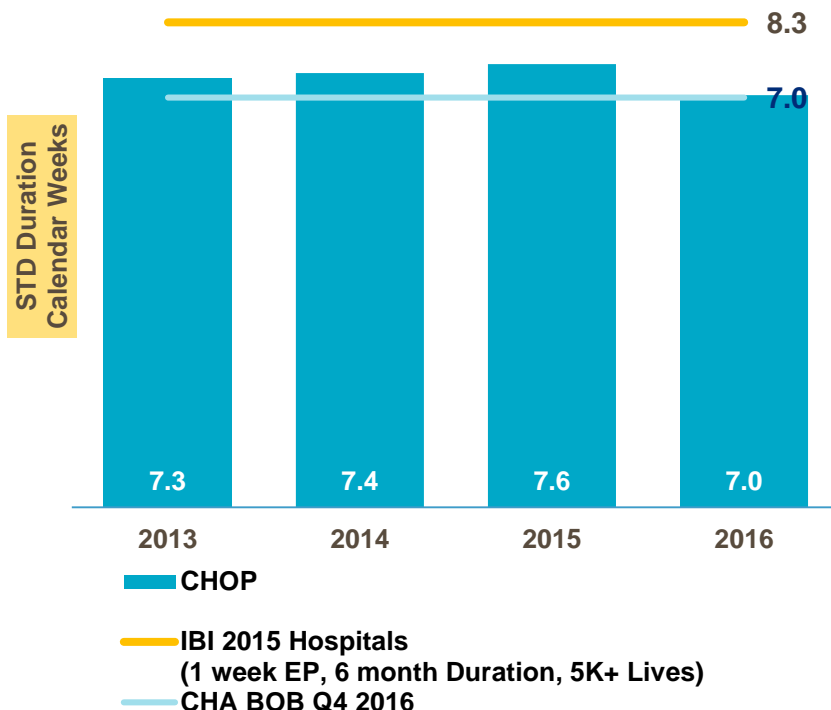
Reduction of
\$13.1M

Case Study

Have we seen improvements as a result of these changes?

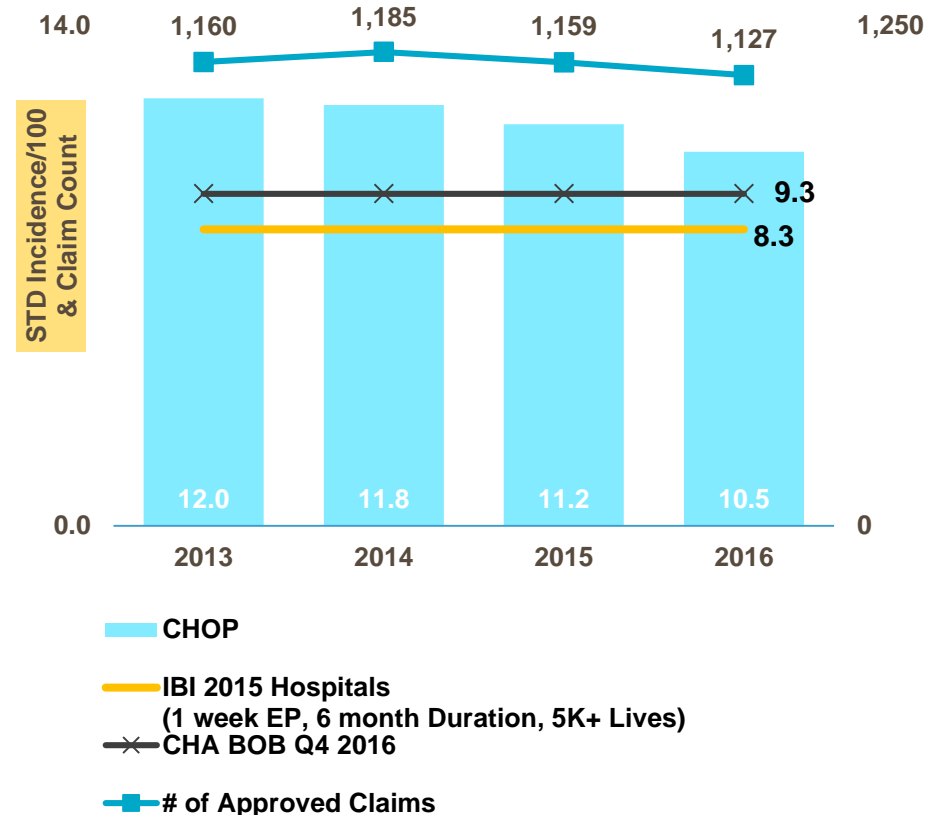
Changes to Short-Term Disability plan design (STD)

Short Term Disability Duration



With the elimination of accruals of EDL and ESL, and the changes to the STD plan (step down in weeks 9-26) **STD average duration held steady and below benchmark since 2013.**

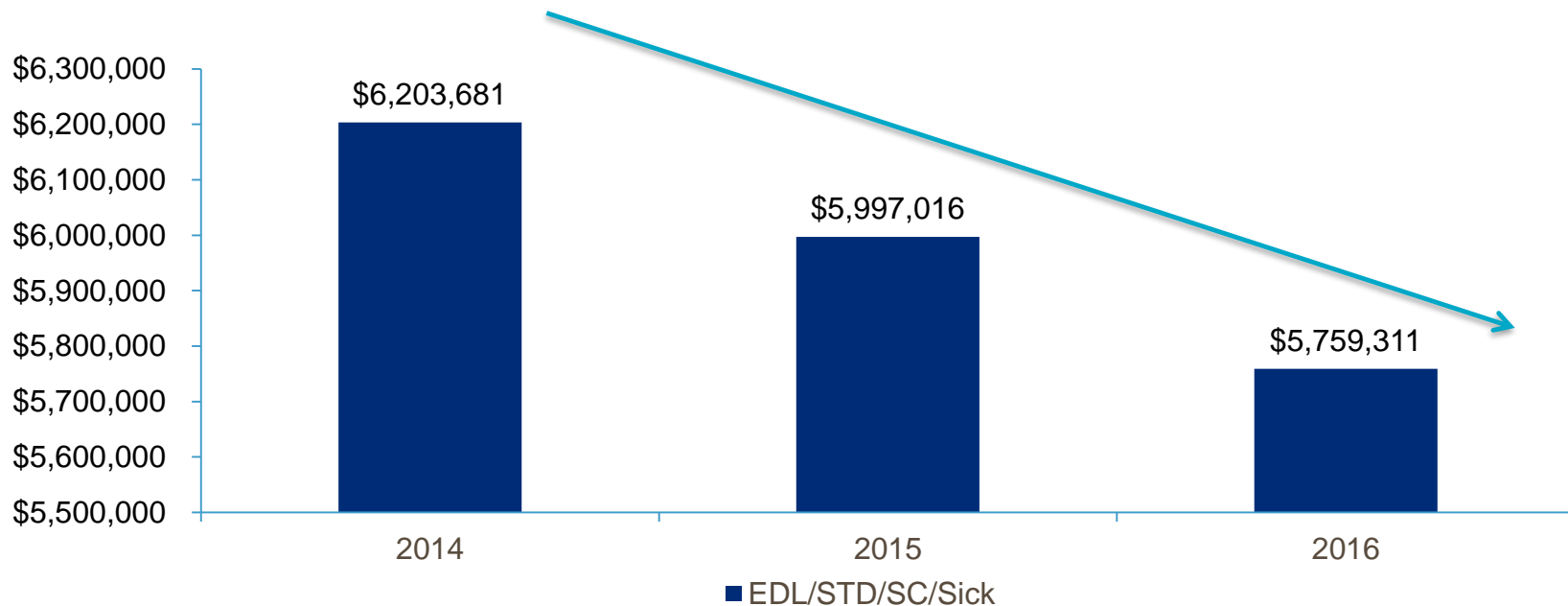
Short Term Disability Incidence



We have also observed a **steady decrease in STD incidence from 2013 (from 12.0 to 10.5).**

Case Study

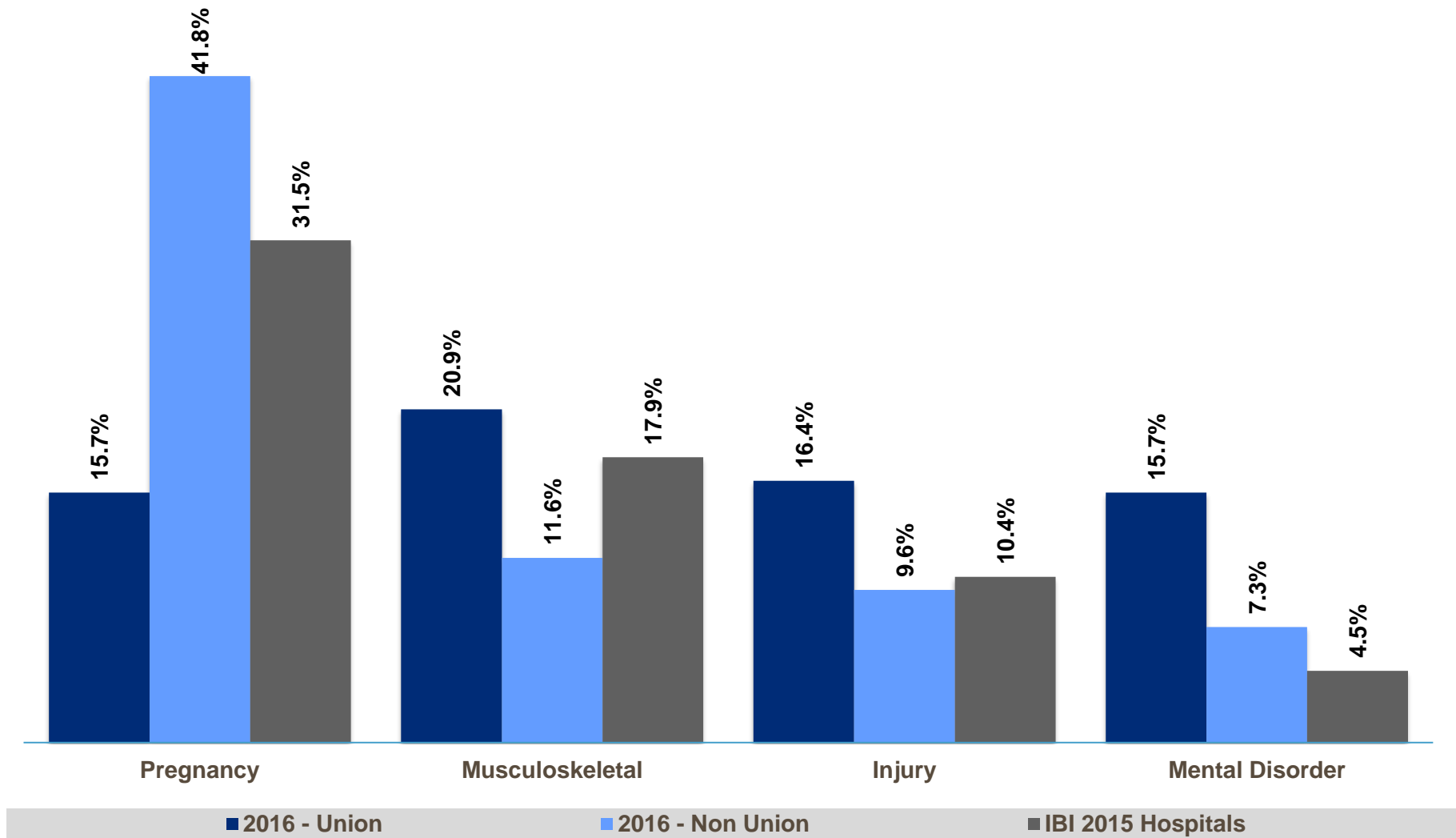
EDL, STD, Salary Continuation and Sick Time - Total Utilization Cost by Year



Utilization Cost Decreased \$444,370, despite increased employee population increase (approx +3%) and average salary (approx +3.9%).

Case Study

Short Term Disability – Union vs. Non-Union Diagnosis



Case Study

FMLA continued challenges

- Utilization **significantly different between Union and Non Union.**
- Union represents 10% of workforce, but >18% of total leaves
- Union intermittent leaves represent 60% of leaves vs. 25% for non-union population
- % of employees taking unpaid leave time is significantly higher for the union population
- Overall, FMLA incidence rates have trended down between 2014-16, but intermittent up in 2016

Total Population								
FMLA Incidence			FMLA Average Lost Work Days			FMLA % Intermittent		
2014	2015	2016	2014	2015	2016	2014	2015	2016
18.7	18.0	16.6	24.2	24.0	21.7	30.3%	28.5%	36.4%

	Non-Union Population	Union Population
% of CHOP Population	90%	10%
% of Total Leaves in 2016	81%	>18%
Incidence by Unique Leave	15%	41%
% Intermittent Leaves	25%	60%
Leave Duration	Shorter duration	Longer duration
Use of Unpaid time		
• % Who used unpaid time	3.9%	22.1%
• Days Used	10.2	12.3

Case Study

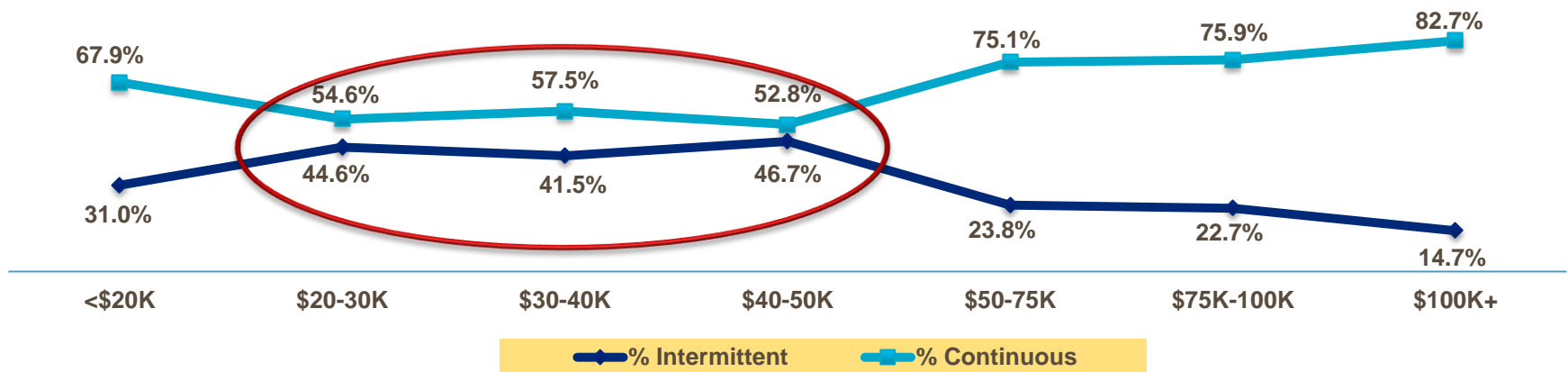
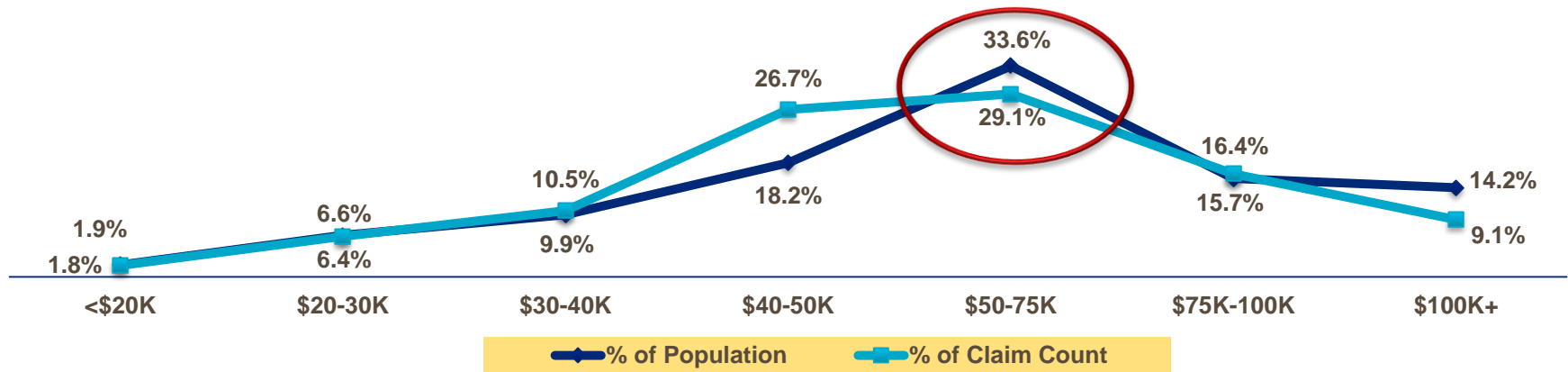
Snapshot of Full Department Analysis – STD & FMLA

Departments with the Highest Utilization

Department	STD Incidence			STD Duration (weeks)			FMLA Incidence			FMLA Average Lost Work Days			FMLA % Intermittent		
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
ENVIRONMENTAL SVCS	13.5	13.2	10.0	7.6	9.7	8.4	42.5	39.9	43.4	19.0	26.7	19.0	57.8%	53.8%	63.9%
NURSING - PERIOP & SURGICAL	17.1	11.7	12.3	7.6	7.7	8.4	32.6	21.0	28.8	21.5	21.3	21.5	48.0%	39.3%	45.6%
PARC	9.8	9.9	8.7	7.9	7.5	5.9	22.7	22.9	23.1	16.7	21.6	16.7	53.4%	47.3%	60.4%
FOOD SERVICES	10.9	12.1	7.9	8.4	7.7	8.2	31.7	37.2	34.5	15.1	22.7	15.1	42.5%	54.2%	52.5%
Total Population	10.6	9.7	8.8	7.4	7.6	7.0	18.7	18.0	16.6	24.2	24.0	21.7	30.3%	28.5%	36.4%
FMLA 3 year average							18.5			23.3			31.7%		
IBI Benchmark							23.0			24.6			30.0%		

Case Study

FMLA – Usage by Income Level (2014-2016 Average)



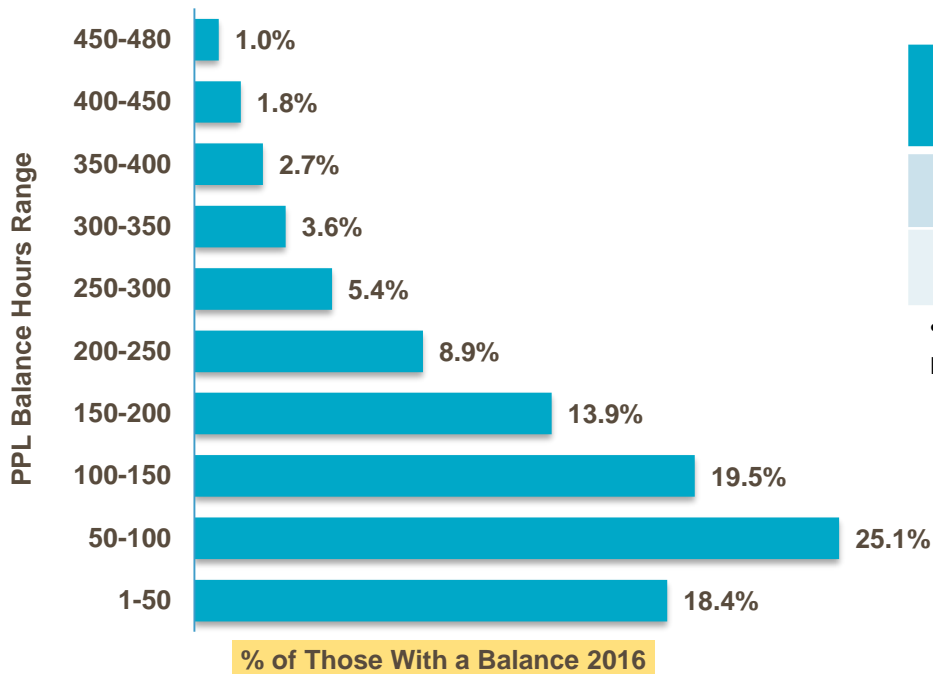
Case Study

PPL – Balance

Opportunity for additional Program Cost Control:

PPL Balance Summary					
Date	# With a Balance	% With a Balance	Average Balance Hours/EE	Est. Average Balance Days/EE	Estimated Cost of Balance
12/31/2013	9,400	86.2%	120.2	15.0	\$50,177,354
12/31/2016	10,504	89.7%	125.7	15.7	\$57,539,846

- Average balance per employee is inclusive of those with zero balances.



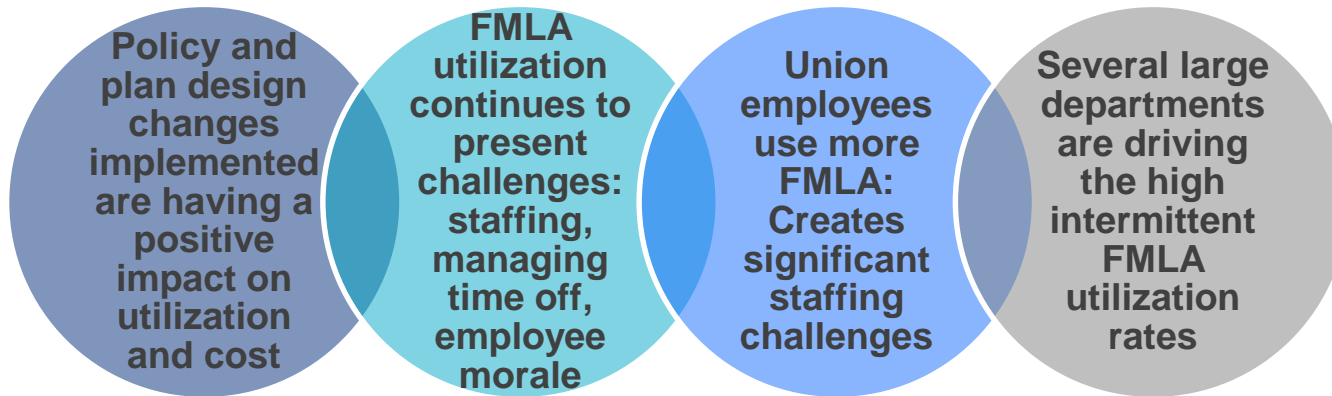
PTO Max Bank Options	Change Maximum Bank to a Flat 320 Hours
Estimated \$ Savings	-\$2,435,434
Estimated % Savings	-4.2%

- Potential for savings exists if the maximum banks are reduced from the current plan (2x the annual accrual).

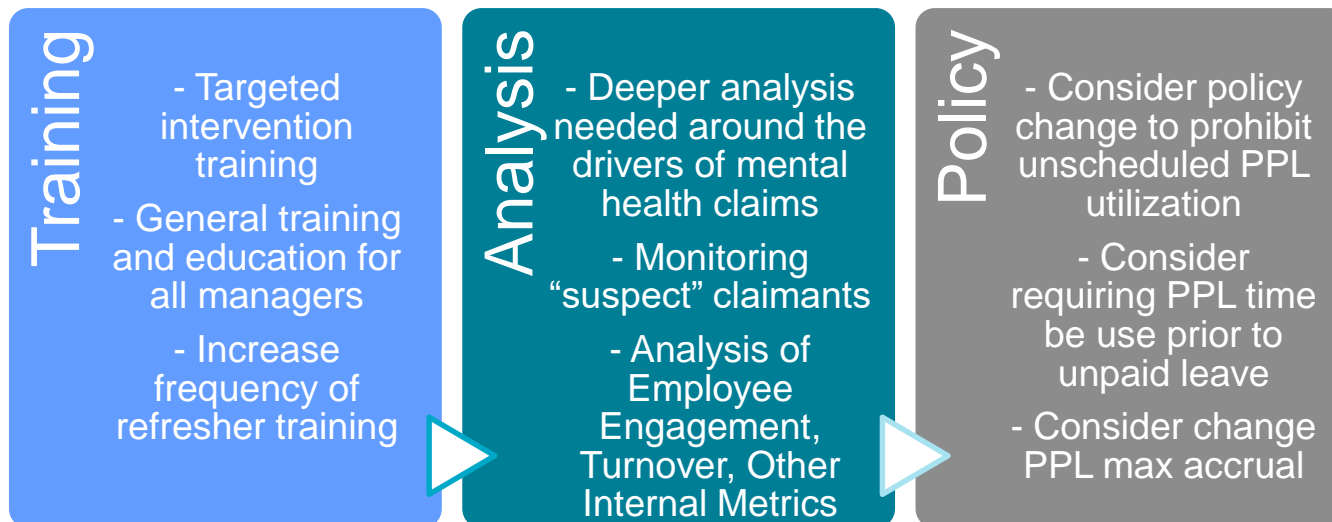
Case Study

Next Steps

So what does all of this data tell us?

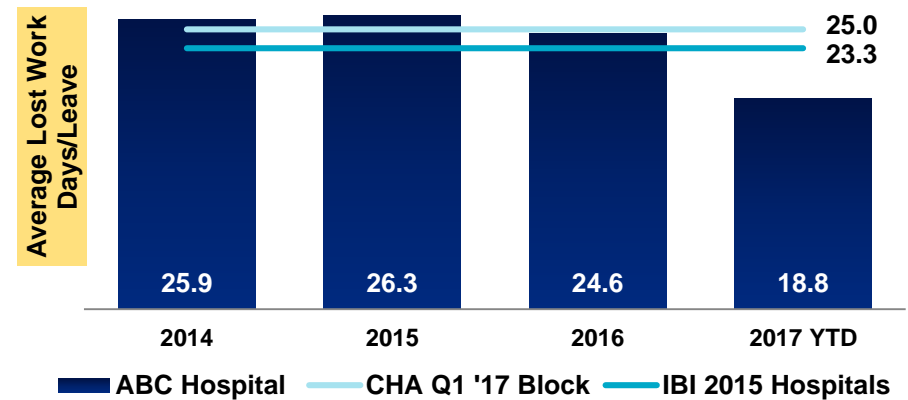
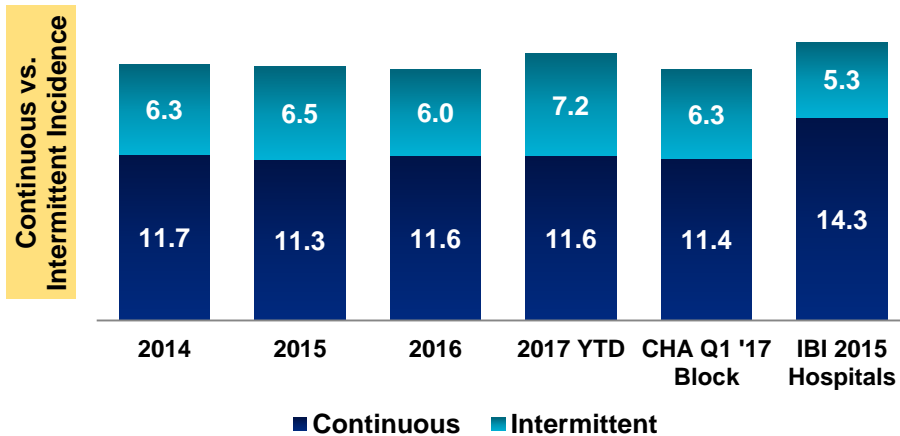
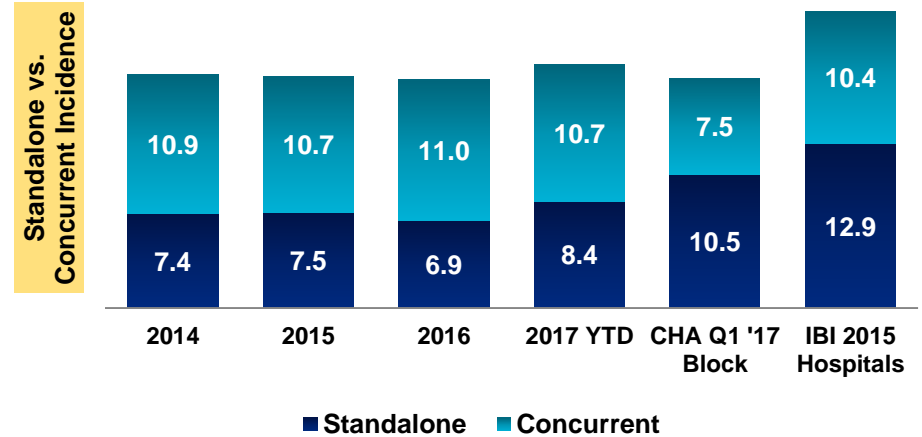
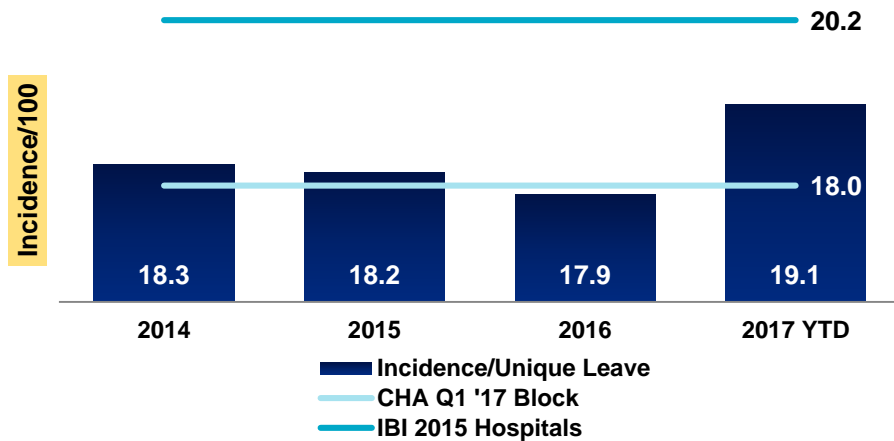


What next?



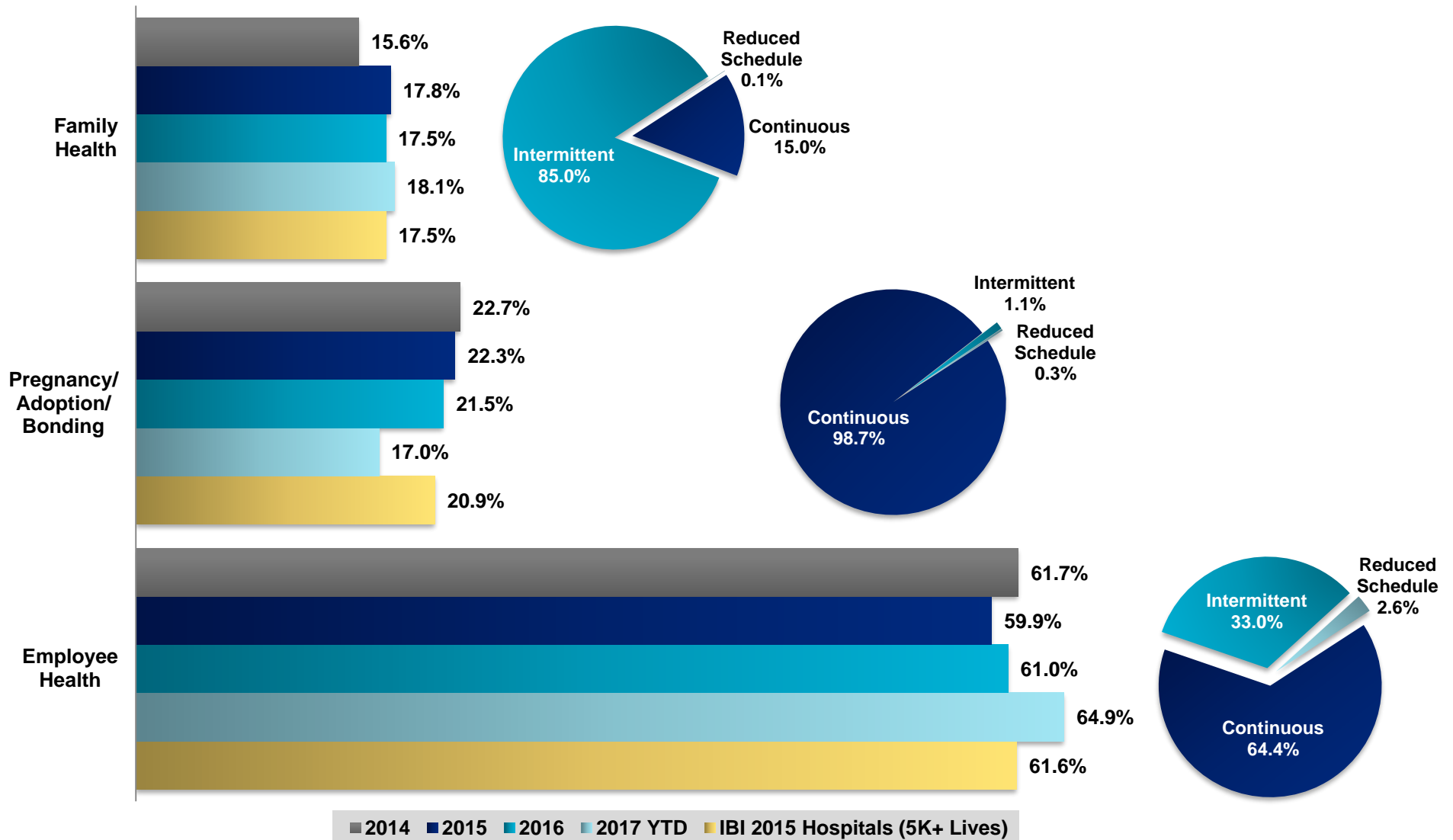
Executive Team Engagement

FMLA Analysis Usage



FMLA Analysis

Usage by Claim Type



Claim Observations Short Term Disability

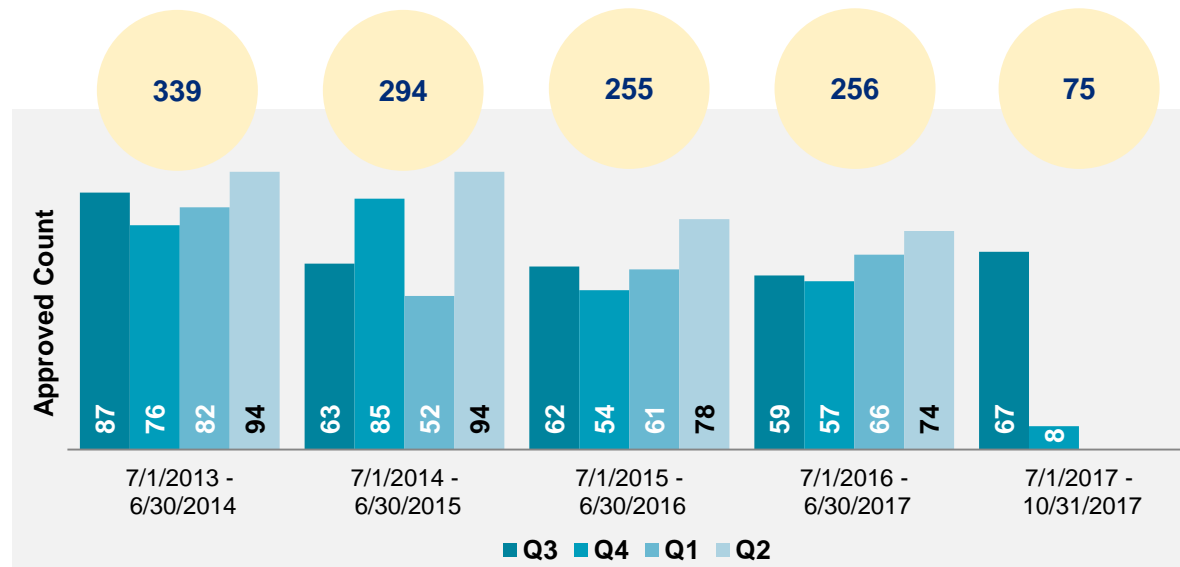
1,219 approved claims July '13 - Oct. '17

281 average STD claims/year

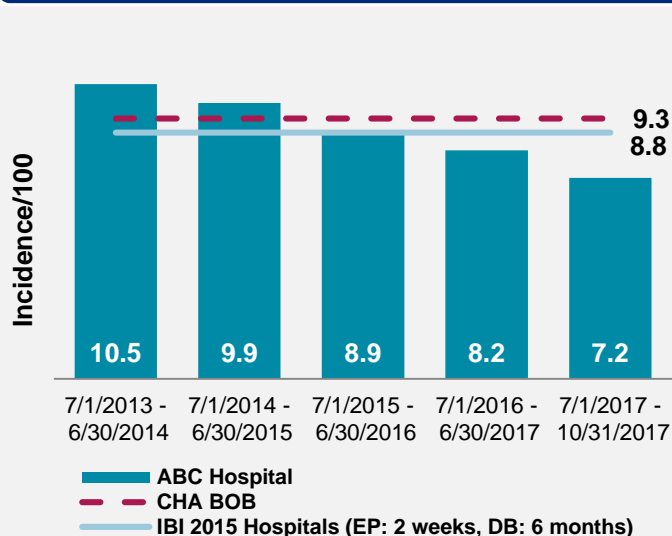
9.2 overall incidence rate/100

***9.8** overall average duration weeks

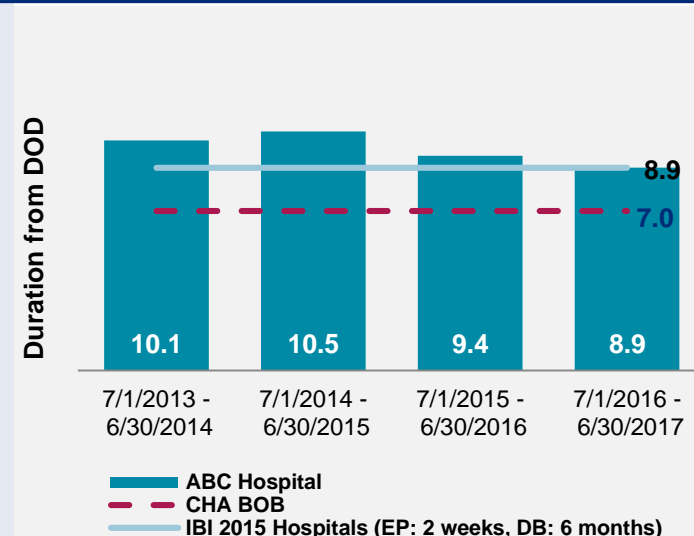
**Represents claims from 7/1/2013-6/30/2017*



BENCHMARKS



- STD plan is voluntary with 57% participation (based on 2015 census).
- Incidence is above the benchmark for 2 out of the 5 periods but is showing the same downward trend as the loss ratios.
- Duration is at or above the benchmark for all periods.



Claim Observations

Short Term Disability

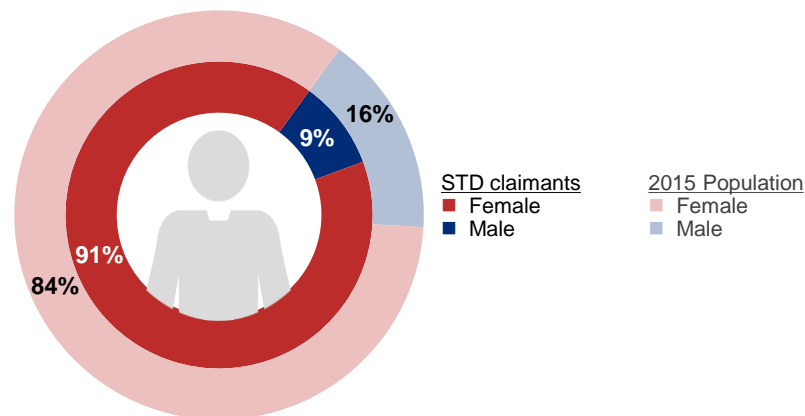
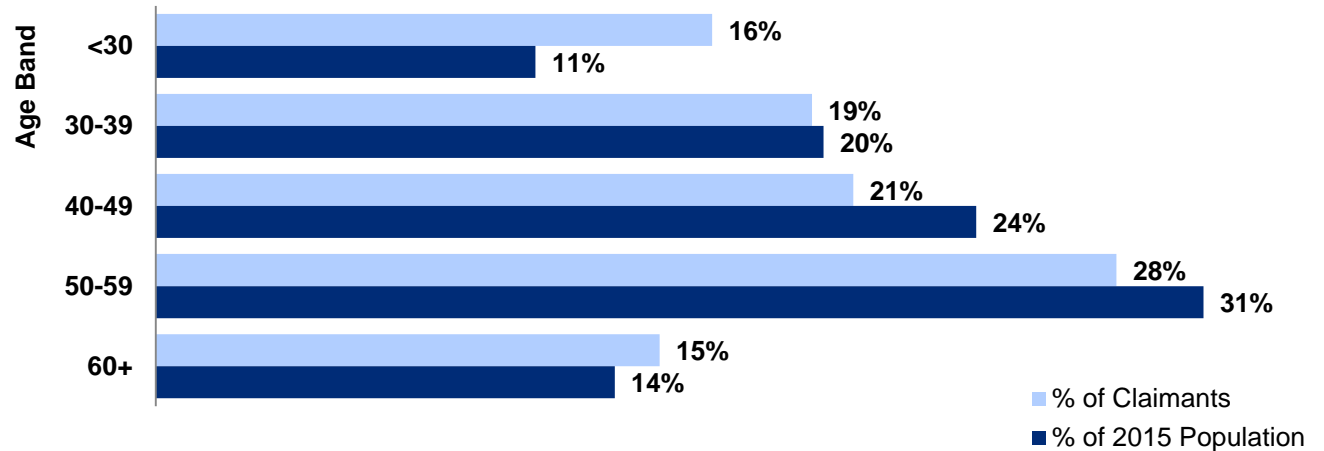
CLAIMANT DEMOGRAPHICS

91% Female,
9% Male

(2015 population is
84% Female)

Average Age:
45.5

(45.0 for Females,
51.0 for Males)

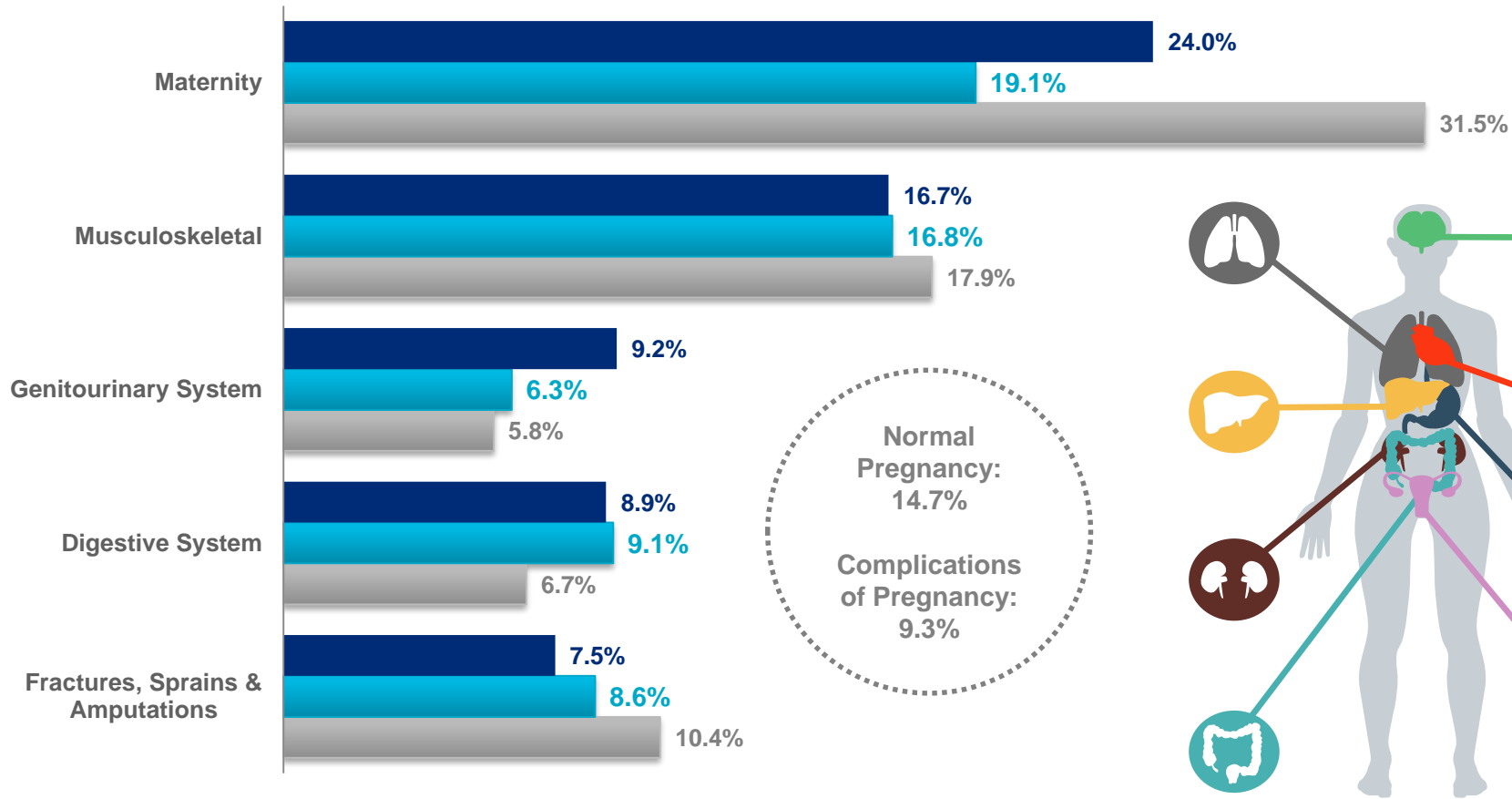


Claim Observations

Short Term Disability

Top Claim Diagnoses

■ ABC Client ■ Carrier BOB ■ IBI 2015 Hospitals



• IBI benchmarking data is based on closed claims only. The "Fractures, Sprains & Amputations" diagnosis is categorized as "Injury & Poisoning" under the IBI benchmark.

FMLA Manager Analysis

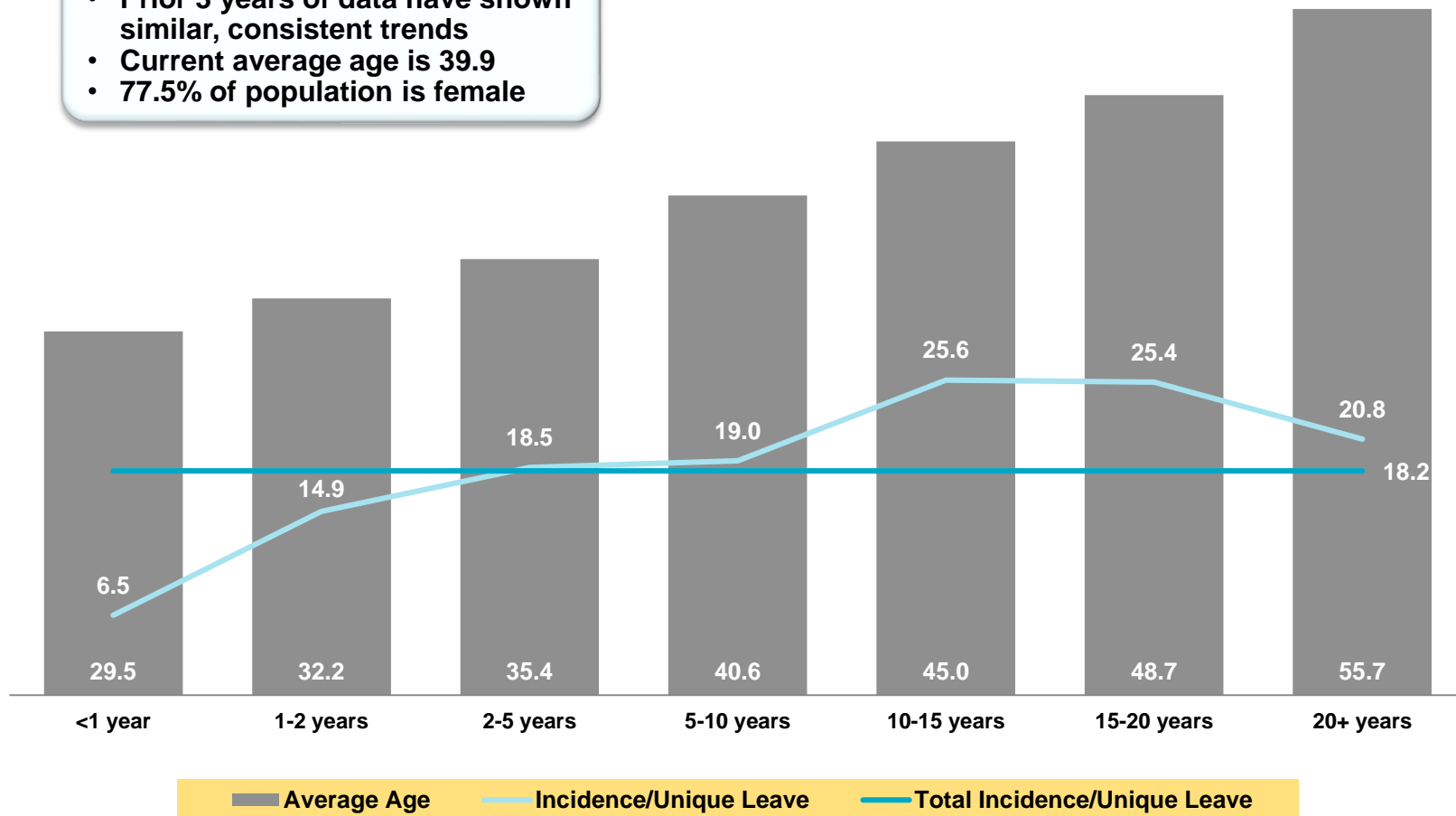
Snapshot: 20 departments FMLA Utilization by Manager

Manager Analysis Summary		Incidence Rate/Occurrence				Lost Work Days/Occurrence (Duration)				% Intermittent			
Manager Name	# Lives Today	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
A	209	0.0%	1.7%	0.6%	3.8%	0.0	18.5	0.0	22.5	0.0%	0.0%	0.0%	0.0%
B	140	19.0%	21.1%	21.3%	20.0%	26.8	24.5	30.7	15.2	14.3%	15.6%	9.1%	28.6%
C	86	33.3%	29.8%	21.6%	14.0%	15.6	13.4	16.8	17.6	26.1%	32.0%	38.1%	33.3%
D	79	4.1%	10.0%	11.7%	0.0%	32.8	36.1	46.8	0.0	33.3%	12.5%	22.2%	0.0%
E	77	33.3%	29.1%	32.9%	31.2%	17.2	26.3	21.7	10.6	51.7%	44.0%	46.4%	50.0%
F	75	23.5%	17.5%	16.5%	0.0%	32.3	29.5	20.0	0.0	25.0%	36.4%	23.1%	0.0%
G	75	10.7%	11.3%	8.2%	0.0%	33.4	32.7	38.3	0.0	0.0%	11.1%	0.0%	0.0%
H	71	19.6%	28.1%	15.9%	28.2%	27.6	9.3	11.4	4.5	20.0%	25.0%	0.0%	20.0%
I	67	2.5%	4.3%	6.2%	0.0%	25.5	43.3	11.1	0.0	0.0%	0.0%	25.0%	0.0%
J	63	20.4%	19.7%	19.4%	19.0%	16.9	18.6	24.4	6.9	27.3%	53.8%	57.1%	100.0%
K	62	34.8%	22.4%	35.8%	38.7%	26.1	15.1	16.8	13.7	34.8%	60.0%	41.7%	66.7%
L	58	42.3%	47.4%	33.3%	27.6%	22.9	17.4	23.0	17.5	22.7%	33.3%	33.3%	50.0%
M	56	21.2%	23.3%	31.0%	21.4%	25.8	12.1	17.9	2.0	14.3%	10.0%	33.3%	0.0%
N	54	35.3%	31.0%	27.3%	29.6%	26.6	23.3	20.7	18.8	33.3%	44.4%	26.7%	50.0%
O	53	13.8%	25.4%	38.2%	52.8%	29.2	18.0	29.9	12.5	12.5%	20.0%	14.3%	42.9%
P	52	25.9%	14.3%	16.3%	15.4%	30.7	31.2	15.1	5.3	14.3%	0.0%	14.3%	50.0%
Q	51	21.3%	17.2%	25.9%	15.7%	27.5	13.8	26.6	19.3	23.1%	50.0%	14.3%	50.0%
R	51	41.8%	22.2%	36.4%	31.4%	20.1	18.5	17.5	10.3	56.5%	50.0%	45.0%	75.0%
S	50	19.6%	19.2%	10.5%	0.0%	22.2	21.1	14.4	0.0	44.4%	60.0%	83.3%	0.0%
T	50	22.4%	38.5%	24.1%	56.0%	23.5	26.0	24.2	16.6	46.2%	32.0%	28.6%	42.9%
		18.3%	18.2%	17.9%	19.1%	25.9	26.3	24.6	18.8	34.5%	35.9%	33.5%	37.7%

FMLA Analysis

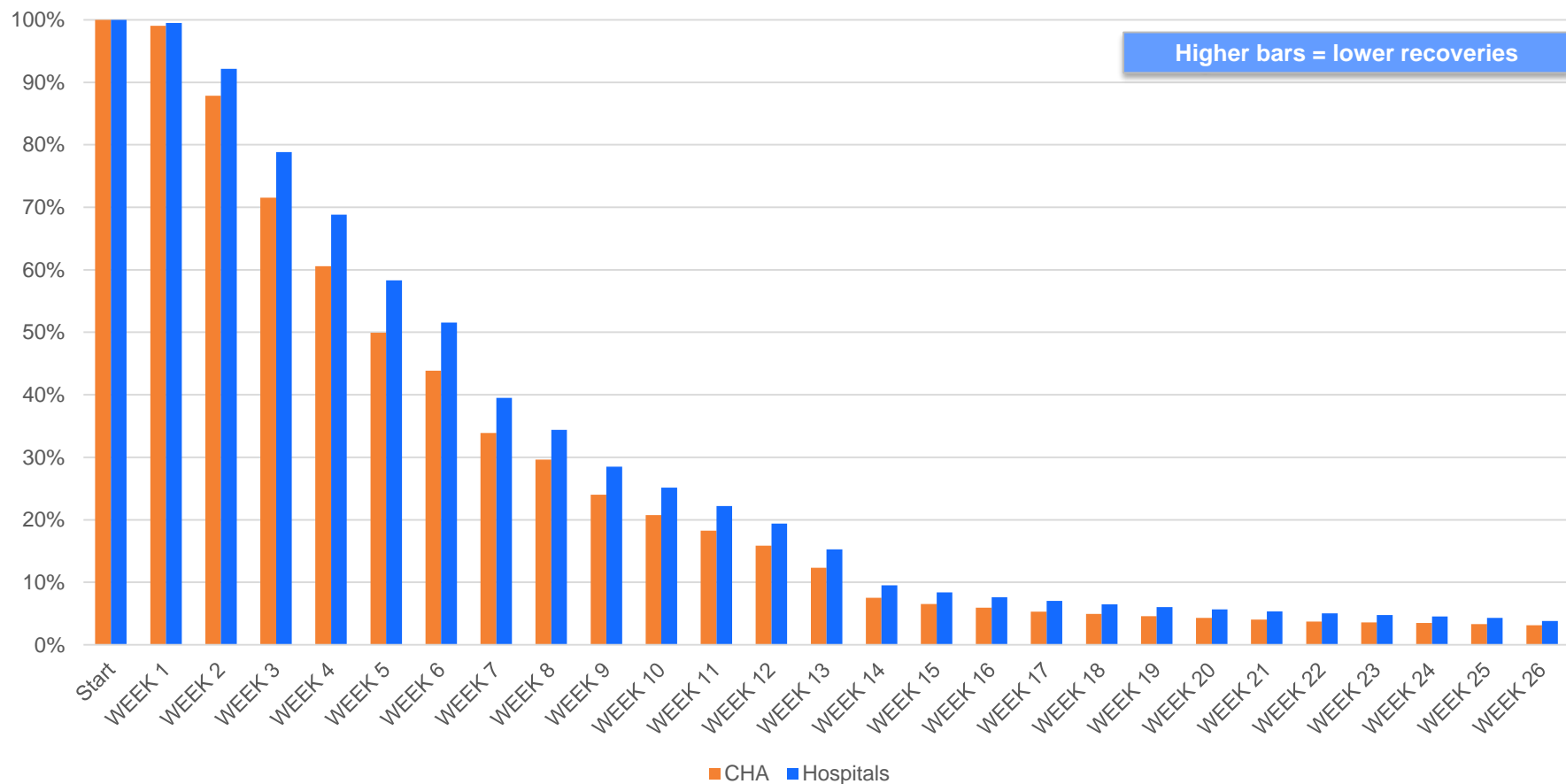
Usage by Length of Service (2017)

- Prior 3 years of data have shown similar, consistent trends
- Current average age is 39.9
- 77.5% of population is female



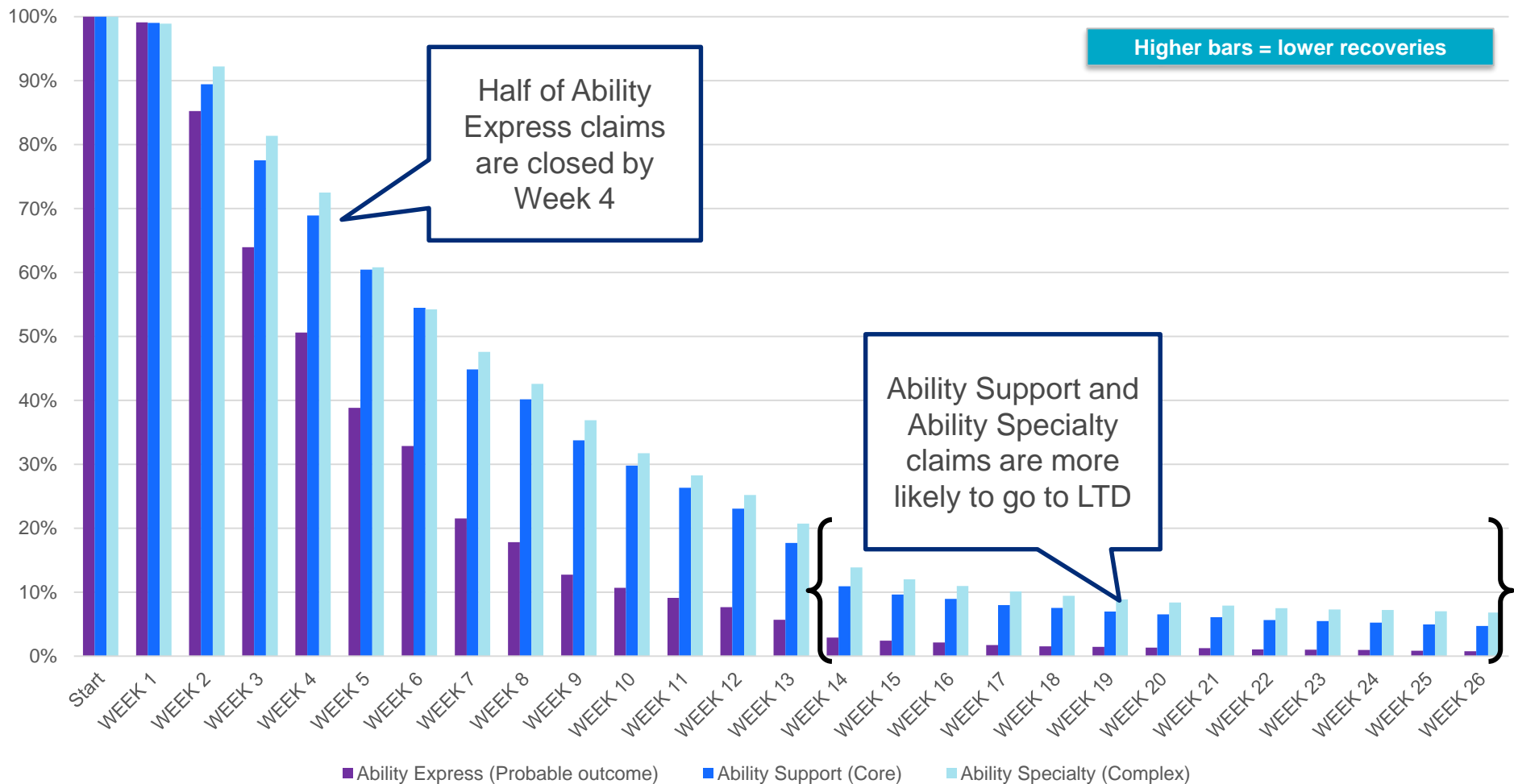
STD Claim Survival: CHA versus Hospital Block

CHA's results show higher recoveries across all durations.



Nonstatutory, excluding Maternity. Mix adjusted for 13 and 26 week Plans.

CHA STD Claim Survival by Claim Segmentation



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Appendix

Case Study

Department Analysis

- Environmental Services, Nursing-Periop & Surgical, Parc, and Food Services departments lead usage of FMLA (& short-term disability)

Department	Commentary
Environmental Svcs (Housekeeping)	<ul style="list-style-type: none"> Higher % of male employees and lower income levels, aging population 91% union/dual income workers, poor planners Much higher incidence of Employee Health FMLA claims Inability to flex time and to secure days off Repetitive physical work which causes fatigue Entitlement mentality “earn it and spend it”
Nursing - Periop & Surgical	<ul style="list-style-type: none"> Primarily female, slightly older and longer tenure, aging workforce, more medical conditions exist in this department 88% non-union
Parc	<ul style="list-style-type: none"> Primarily female, slightly older, all non-union Higher incidence of Employee Health FMLA claims Aging workforce, stressful position due to family facing scheduling
Food Services	<ul style="list-style-type: none"> Higher % of male employees, younger age and lower income levels 95% Union, Dual Income workers, poor planners Higher incidence of Employee Health FMLA claims Inability to flex time and to secure days off

Case Study

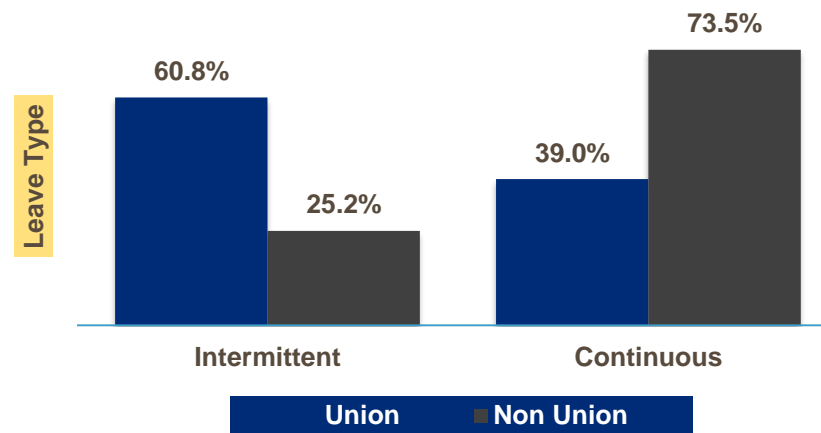
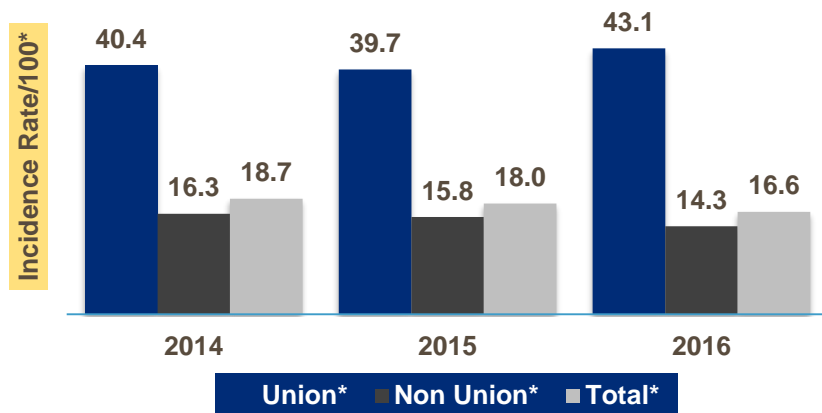
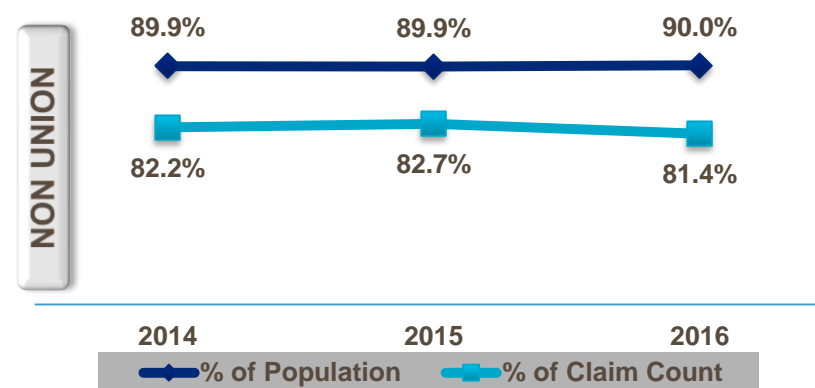
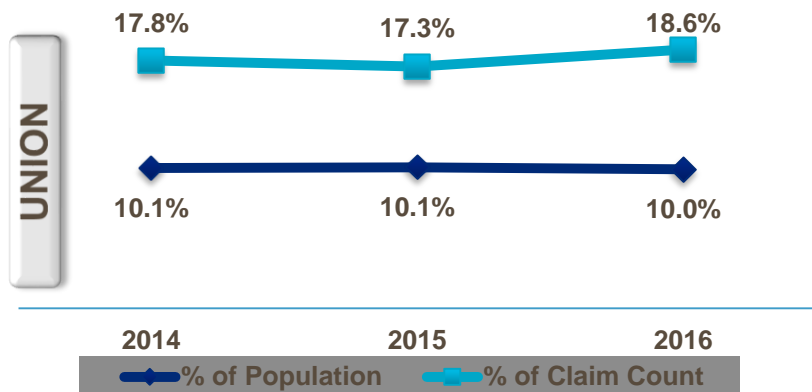
Department Analysis – STD & FMLA

Department	STD Incidence			STD Duration (weeks)			FMLA Incidence			FMLA Average Lost Work Days			FMLA % Intermittent		
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
RESEARCH	4.6	5.1	3.7	6.9	7.3	6.7	6.9	8.0	5.5	27.6	28.4	27.6	9.3%	4.1%	9.0%
CARE NETWORK	11.1	10.0	8.4	7.2	8.6	7.2	18.5	17.1	12.4	23.7	25.0	23.7	17.8%	24.7%	25.2%
Department of Pediatrics	8.6	7.4	9.5	6.9	7.4	6.9	13.1	13.0	15.2	23.4	24.4	23.4	26.5%	23.0%	31.7%
ENVIRONMENTAL SVCS	13.5	13.2	10.0	7.6	9.7	8.4	42.5	39.9	43.4	19.0	26.7	19.0	57.8%	53.8%	63.9%
NURSING - MEDICAL & REHAB	13.9	16.4	10.8	7.6	7.2	6.4	27.4	29.9	23.6	18.9	22.6	18.9	31.9%	29.4%	45.8%
NURSING - PERIOP & SURGICAL SV	17.1	11.7	12.3	7.6	7.7	8.4	32.6	21.0	28.8	21.5	21.3	21.5	48.0%	39.3%	45.6%
NURSING - NEONATAL NURSING	10.4	13.7	14.0	8.1	7.3	7.5	20.8	27.3	25.2	21.4	23.2	21.4	27.2%	23.7%	33.3%
INFORMATION SERVICES	6.1	5.3	5.3	7.6	6.4	5.2	10.3	7.0	5.5	20.3	28.5	20.3	15.4%	17.1%	10.7%
NURSING - CRITICAL CARE	16.0	10.8	10.1	6.5	7.6	6.0	24.8	19.6	21.7	19.5	21.4	19.5	28.9%	26.6%	33.7%
PARC	9.8	9.9	8.7	7.9	7.5	5.9	22.7	22.9	23.1	16.7	21.6	16.7	53.4%	47.3%	60.4%
NURSING - CARDIAC CENTER	16.3	10.8	11.6	7.5	7.1	6.8	29.7	23.2	21.6	23.5	19.6	23.5	20.0%	27.4%	21.3%
LABS	11.1	11.7	7.8	8.4	9.1	5.1	16.4	17.8	13.7	14.1	26.8	14.1	32.7%	43.6%	68.2%
MEDICAL AFFAIRS	5.2	3.4	3.7	6.4	4.4	6.7	4.3	1.9	4.1	25.6	30.9	25.6	10.0%	0.0%	14.3%
REHAB	9.4	9.7	7.3	6.5	6.9	8.1	16.7	20.3	13.0	28.2	26.5	28.2	13.9%	6.4%	3.1%
NURSING - RESPIRATORY & DIAG	12.6	10.7	11.9	7.7	7.5	8.5	18.8	17.5	20.7	24.7	25.0	24.7	15.6%	15.9%	36.5%
NURSING - EMERGENCY	10.3	12.2	14.3	6.6	6.8	6.3	21.1	24.1	20.9	21.9	23.0	21.9	33.3%	17.3%	22.0%
NURSING - ONCOLOGY NURSING	14.4	13.4	9.5	7.4	6.5	5.7	24.0	20.8	18.9	20.7	22.3	20.7	28.6%	26.8%	36.4%
SCC AND CLINICS	12.1	8.3	11.7	7.6	6.1	6.3	23.0	17.8	16.4	23.1	24.2	23.1	31.9%	28.2%	29.7%
FOOD SERVICES	10.9	12.1	7.9	8.4	7.7	8.2	31.7	37.2	34.5	15.1	22.7	15.1	42.5%	54.2%	52.5%
PHARMACY	5.7	8.2	6.7	6.9	7.2	7.9	16.5	16.2	16.1	23.2	23.8	23.2	42.9%	32.3%	38.7%
RADIOLOGY	16.3	11.0	9.3	8.5	8.6	8.3	25.7	25.5	21.0	16.1	27.7	16.1	28.2%	33.3%	58.8%
SECURITY/PARKING/TRANSPORT	11.9	8.7	11.8	7.6	6.7	8.2	21.2	16.7	22.1	22.4	26.8	22.4	40.0%	47.6%	33.3%
Anesthesiology and Critical Care Medicine	12.6	8.1	9.0	9.0	6.4	5.8	15.5	15.7	14.0	25.0	22.9	25.0	11.8%	14.3%	25.0%
NURSING - IMAGING	12.5	17.2	12.1	6.5	6.9	8.3	28.3	29.6	28.7	21.3	20.3	21.3	40.0%	25.0%	35.5%
FACILITIES	11.8	7.6	8.1	5.6	9.9	7.8	14.3	11.4	8.9	38.1	30.6	38.1	11.8%	46.7%	8.3%
BEHAVIORAL HEALTH	7.3	13.0	6.8	11.6	7.8	9.1	8.7	22.9	9.5	13.0	26.8	13.0	0.0%	20.0%	50.0%
Total Population	10.6	9.7	8.8	7.4	7.6	7.0	18.7	18.0	16.6	24.2	24.0	21.7	30.3%	28.5%	36.4%

- Analysis based on the 26 departments with over 100 active/eligible lives today. They represent approximately 86% of the total population.
- Red indicates high usage, green indicates low.

Case Study

FMLA – Usage by Union Status





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