

# Utilization Review Board Q2 (FY19)



PRESENTED BY

Kim Pohl 4/25/2019



Sandia National Laboratories is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.



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## Agenda:

- 9:00am: Welcome & Agenda Review
- 9:05am: Review of Updated URB Charter – Pohl/Holland
- 9:10am: Review of Risk Manager Role/Responsibilities -Pohl
- 9:20am: Pharmacy Review -UTI Rx Utilization - Field
- 9:40am: Health Action Plan Overview – Part 1 – Pohl
- 9:55am: Radiology Review—Chest X-Rays – Sauerman
- 10:05am: Quarterly Score Card Review- Pohl/Decoste
- 10:25am: Round Table & Meeting Wrap-up - All

# Review of Updated Utilization Review Board Charter

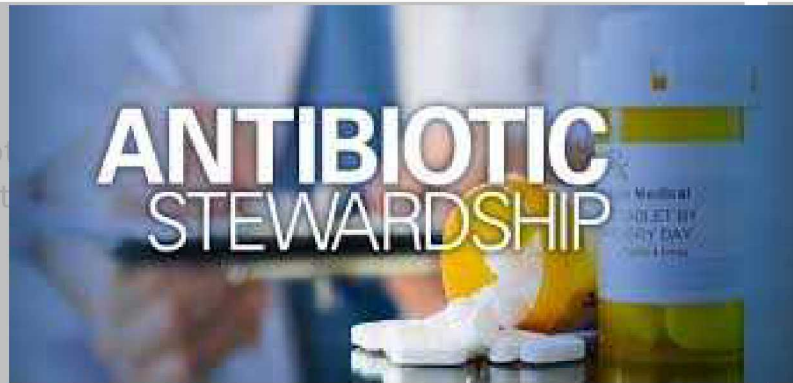
- New URB Charter included in packet for review.
- Updated to serve as an ongoing (not specific to each year) charter.
- Will be updated as changes apply -instead of annually.
- Reconfirmed board membership/contact information.
- Refined charter scope to detail coordination of care to PCPs, detail metrics the committee reviews.

# Risk Manager Role Overview

- Oversight of Risk Management functions across EHS
- Receives, reviews, investigates, reports on all:
  - incidents,
  - adverse events
  - near miss events
  - preventable harm events
  - any unexpected clinical outcomes with associated harm or potential liability
- Maintains database for all incidents
- Shares lessons learned from incident reporting
- Reviews feedback from customers to monitor potential areas of risk
- Liaison with Legal Department collaborating on all litigation matters involving EHS
- Tracks and supports process for dismissal of patients due to inappropriate conduct
- Creates and delivers staff training on Risk Management processes



*Exceptional service in the national interest*



# ANTIMICROBIAL STEWARDSHIP UTI FY19Q1 and Q2 Results

Shellie Field, PharmD, PhC, BCACP



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**UTI is a Heterogeneous term** that includes uncomplicated UTI (cystitis), pyelonephritis (UTI that extends to one or both kidneys) and complicated UTI

## **Complicated UTI:**

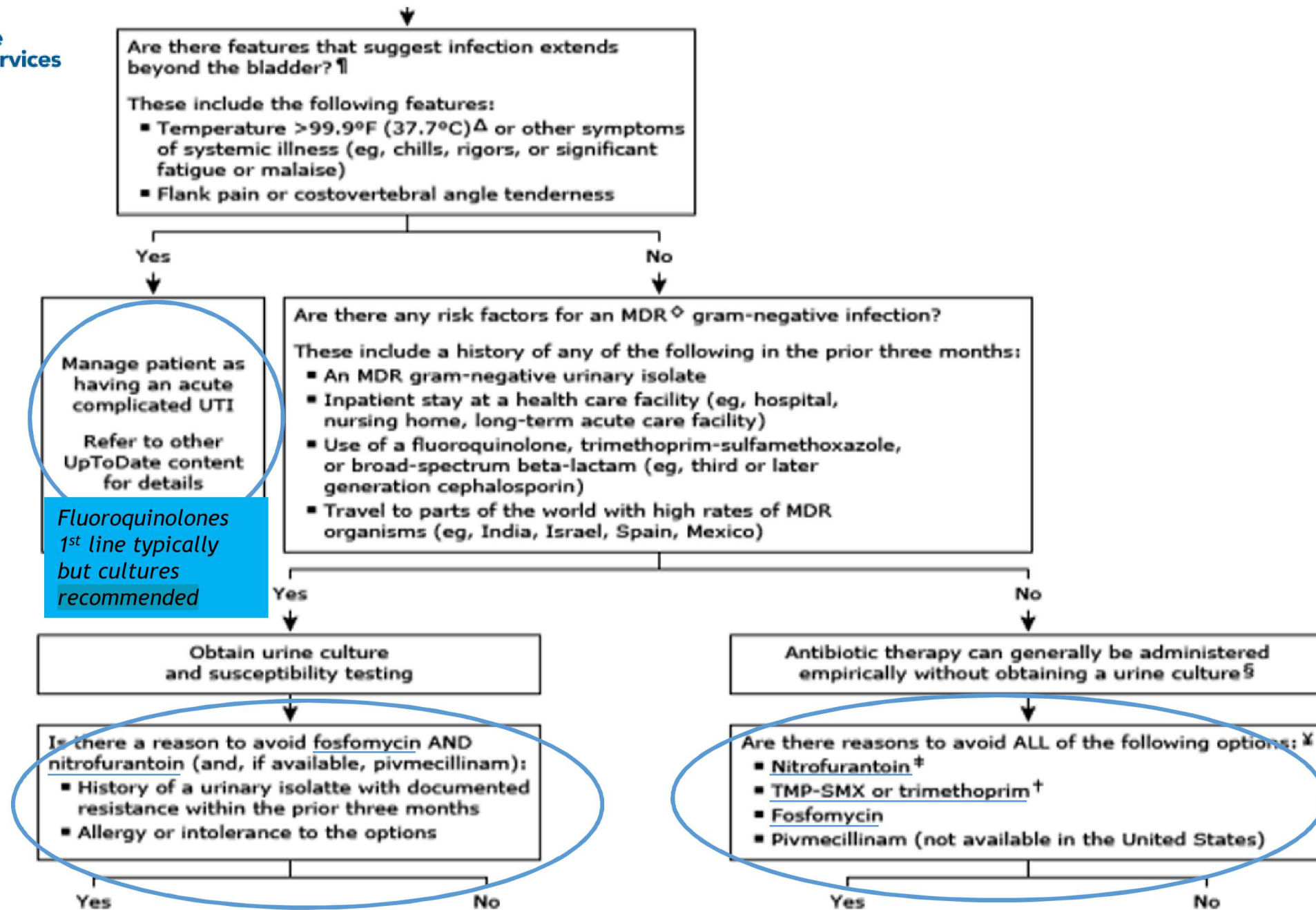
- There is a lot of debate in the literature of what constitutes a complicated UTI....
- Some say *all men, those with therapy failure, voiding dysfunction, comorbidities, post-menopause, urinary structural abnormalities, immunocompromised and uncontrolled diabetics* should all be considered complicated.
- Up to Date recommends only classifying those with systemic, invasive tissue infection or infection that extends beyond the lower urinary tract as complicated including men unless there is prostate involvement or they have neurogenic bladder

Because antibiotic spectrum of activity is based on tissue invasiveness/systemic infection rather than comorbidities, categorizing UTI and use of the treatment guidelines from *Up-to-Date* are the most appropriate and were employed for this study.

## CATEGORIZING UTI (EXTRACTED FROM UP TO DATE)

Acute simple cystitis <sup>☒</sup>	<ul style="list-style-type: none"><li>■ Acute UTI that is presumed to be confined to the bladder</li><li>■ There are no signs or symptoms that suggest an upper tract or systemic infection (refer to below)</li></ul>
Acute complicated UTI	<ul style="list-style-type: none"><li>■ Acute UTI accompanied by signs or symptoms that suggest extension of infection beyond the bladder:<ul style="list-style-type: none"><li>• Fever (&gt;99.9°F/37.7°C)<sup>†</sup></li><li>• Chills, rigors, significant fatigue or malaise beyond baseline, or other features of systemic illness</li><li>• Flank pain</li><li>• Costovertebral angle tenderness</li><li>• Pelvic or perineal pain in men</li></ul></li></ul>
Special populations with unique management considerations	<ul style="list-style-type: none"><li>■ Pregnant women</li><li>■ Renal transplant recipients</li></ul>







# Obtaining a Urine Culture

- Obtaining a urine culture is not recommended for acute simple cystitis.
- A urine culture is recommended for the following:
  - Complicated UTI (complicated as being defined by this study/Up to Date)
  - Immunocompromised
  - Uncontrolled diabetes
  - Urologic abnormalities
  - Risk factors for multi-drug resistant infection (MDR)

**Suspect multidrug-resistant gram-negative urinary tract infection in patients with a history of any of the following in the prior three months:**

- A multidrug-resistant gram-negative urinary isolate
- Inpatient stay at a health care facility (eg, hospital, nursing home, long-term acute care facility)
- Use of a fluoroquinolone, trimethoprim-sulfamethoxazole, or broad-spectrum beta-lactam (eg, third or later generation cephalosporin)\*
- Travel to parts of the world with high rates of multidrug-resistant organisms†

NOTE: The predictive value of these risk factors for multidrug-resistant gram-negative urinary tract infections has not been systematically evaluated. In particular, the time interval since these exposures is not well validated. The threshold for empirically covering a multidrug-resistant infection varies with the severity of infection, with a lower threshold warranted for more severe disease.

## **Provider education on:**

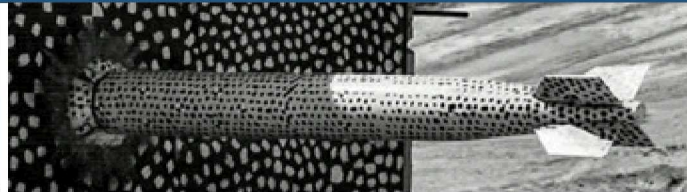
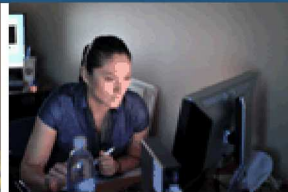
- When cultures recommended and not recommended
  - Risk of MDR gram-negative isolate, overnight hospital stay, international travel
  - Not needed with acute simple cystitis
- Macrobid is not for invasive disease
- Duration of antibiotics for female vs male with cystitis versus complicated
- Ceftriaxone IM x 1 no longer an acceptable option for complicated UTI or pyelonephritis – guidelines have changed (remove as acceptable indication from ceftriaxone PA)
- New study shows that delaying antibiotic treatment in the elderly increases risk of sepsis and death: Should not delay treatment in patients >65
- Antibiotic selection while awaiting cultures and antibiotic selection of complicated vs acute simple cystitis

# References

1. Up to Date. Last accessed 3/2019
2. Sanford Guide to Antimicrobial Therapy. Last accessed 3/2019
3. Hirsch, EB, Mahoney MV, Snyder, GM, Gupta, K. Definition of Complicated Urinary Tract Infection. CORRESPONDENCE. CID 2017;64 (15 February).529
4. Lee, HS, Le, J. Urinary Tract Infections. PSAP 2018 Book 1. Infectious Diseases
5. Jorgensen, S, Zurayk, M, Yeung S, et al. Emergency Department Urinary Antibigrams Differ by Specific Patient Group. J Clin Microbiol 55:2629 –2636. <https://doi.org/10.1128/JCM.00481-17>
6. Summary in the Pharmacy Times “Older Patients With UTIs Fare Better With Immediate Antibiotics” From the BMJ; Published March 13, 2019



# Health Action Plans- Part 1



*PRESENTED BY*

**Kim Pohl, Manager, EHS**



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## Step 1

Complete a pre-assessment questionnaire and attend your 60-minute initial sleep appointment to:

- Review your pre-assessment questionnaire
- Set individualized lifestyle intervention goals
- Schedule follow-up and post-assessment appointments

## Step 2

View or attend at least one sleep-related class, video, or event:

- Supercharge your Sleep ([video](#))
- Sleep Disorders ([video](#))
- Good Sleep: Want Some? ([video](#))

Each week you will receive an email containing tips and bonus activities designed to help you improve your sleep. Get the most out of your program by reviewing your tips and trying out the suggested activities.

## Step 3

After 90 days, complete a post-assessment questionnaire and attend your 60-minute exit sleep appointment to:

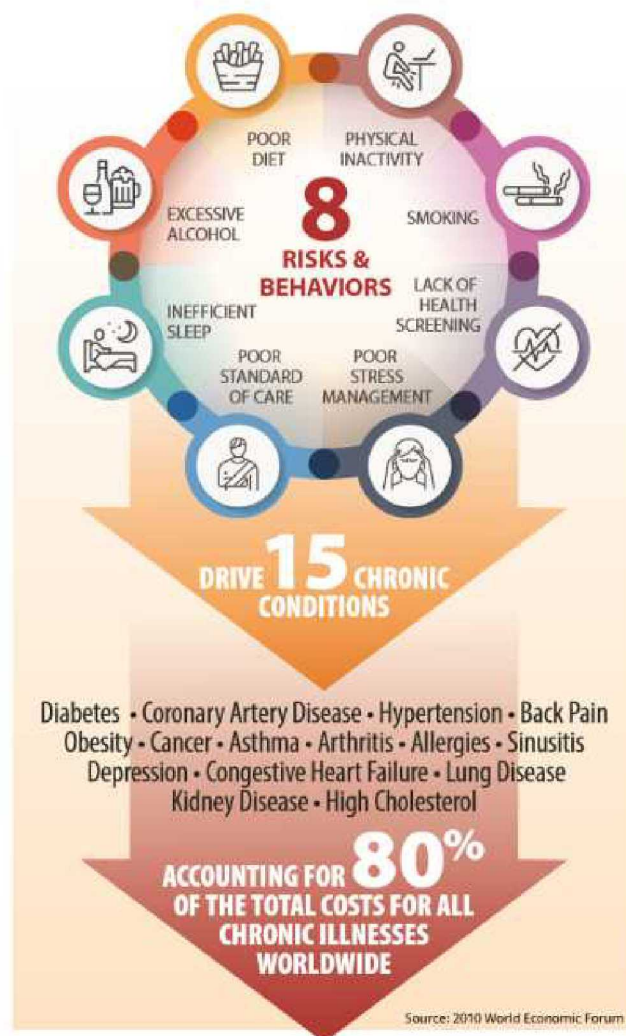
- Review your post-assessment questionnaire
- Discuss your progress toward reaching your goals and receive additional resources/referrals, if needed

Employee Health Services (EHS) believes that good health is essential to getting the most out of life, we offer a variety of worksite wellness programs that put employees in control of their health.

One of the Most successful worksite wellness programs in place is the Health Action Plan (HAP) initiative. This NOVA Award winning program targets key health risks identified through the 8-15-80 model by engaging employees to change their own healthcare story.

Using the Health Risk Assessment (HRA), EHS identifies the most prevalent of the health risk amongst our population and uses that data to provide a range of HAPs relative to the health changes our population needs.

## HR | Sandia Health Scorecard



### Healthcare Trends

In FY18, Sandia's health care spend of \$95.5M for active employees continues to grow at an annual rate of 4.5% which remains 2% lower than industry.

### Healthcare Costs:

Low \$1,500 | Moderate \$5,600 | High \$19,000

High risk is 12.7x higher in cost than low risk at Sandia



Relative Risk Score: **1.55**



Relative Risk Score: **1.51**

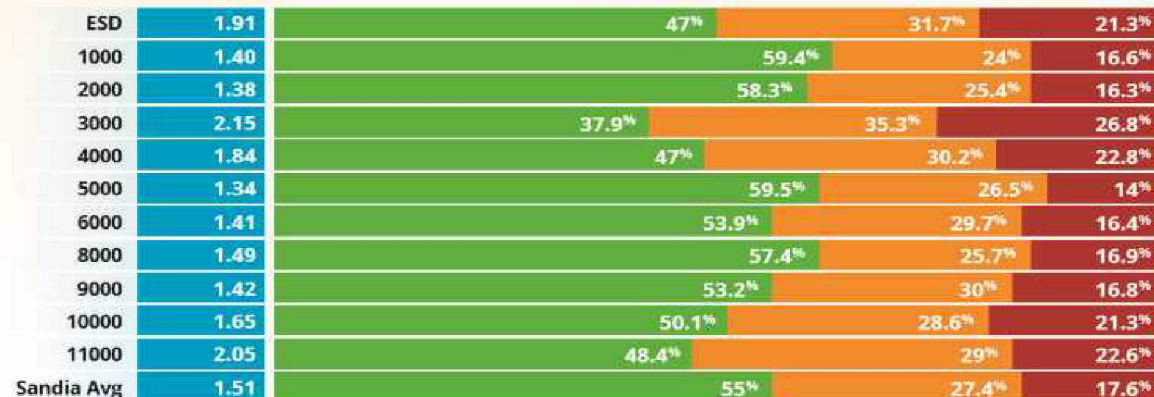
**COST SAVINGS: \$7.6 million**

At Sandia, having a healthier population, translated to 12.7x lower healthcare costs per low risk employee in comparison to high risk. Sandia's overall risk score of 1.507 compared to the Optum industry benchmark of 1.548 indicates that Sandia's population has an overall lower healthcare cost savings equivalent of \$7.6M dollars.

### OUR GOAL

Provide population health programs directed towards ensuring Sandia's health risk remains lower than national benchmarks. The Relative Risk Score evaluates medical and pharmacy claims of a population to assess health risk and costs. A lower risk score indicates a healthier workforce.

Relative Risk Scores: Low Risk Moderate Risk High Risk





## HR | Sandia Health Scorecard



### Sandia Average



### FY19 Targets

**Overall Wellness Engagement %** ≥85

**Overall Prevention Points** >80

#### Prevention Score Key: Per Service

Class (video)/Health Fair or Event:	5 points
Corporate Gym or Fitness Class:	1 point
Health Action Plan Completion:	25 points
One-on-One Appointment:	10 points
Virgin Pulse Participation:	15 points

≥ 75	Doing Well
50 - 74	Caution
≤ 49	Take Action

Sandia's average Prevention Points are 78 (average wellness points earned per person) and Sandia's overall Wellness Engagement is 78. (78% of Sandia's employee workforce has engaged in Employee Health Services wellness programming. In FY18, ≥75 is "Doing Well")

### Sandia Top 3 Focus Areas for FY19

#### WEIGHT\* 62

\*69% of Sandia Population

Sitting	14%	34%	52%
Physical Activity	65%	26%	9%
Stress/Coping	74%	24%	2%
Weight (BMI)	38%	39%	24%
Nutrition	28%	68%	4%
Waist Circum.	70%	11%	19%
Sleep	71%	23%	5%

According to the 2017 Well Source report, 69% of Sandians are overweight and at increased risk for diabetes, cancer, and heart disease due to long bouts of sitting, excess weight, and poor nutrition. Excess weight can also influence depression, sleep, and stress intolerance. In 2017, over 1,000 Health Action Plans that addressed weight loss and improved diet quality were selected by Sandia employees. Healthier diets may prevent more than \$70 billion/year in medical costs, lost productivity, and premature deaths associated with these conditions.

#### NUTRITION\* 65

\*65% of Sandia Population

Beans/Legumes	42%	25%	33%
Fruits/Veg.	42%	51%	7%
Type of Fat	37%	59%	4%
Nuts/Seeds	23%	53%	24%
Salt	67%	26%	7%
Sugar/Sweets	75%	20%	5%
Saturated Fats	50%	31%	19%
Whole Grains	35%	60%	5%
Meats	28%	66%	4%

Poor nutrition impairs physical and cognitive function, weakens the immune system, and increases the risk of heart disease and stroke, hypertension, type 2 diabetes, osteoporosis, and certain types of cancer. A third of all premature deaths in the United States can be attributed to poor nutrition and sedentary lifestyles.

#### FITNESS\* 68

\*45% of Sandia Population

Sitting	14%	34%	52%
Waist Circum.	70%	11%	19%
Strength Exercise	49%	11%	40%
Resting Heart Rate	24%	8%	9%
Weight (BMI)	38%	38%	24%
Physical Activity	86%	9%	5%

In the U.S., annual healthcare costs total more than \$6,000 per inactive individual. A sedentary lifestyle has a direct negative impact on productivity, restricted activity, and absenteeism. Physical activity is beneficial for 23 health conditions and physical inactivity doubles the risk of developing heart disease, type 2 diabetes, obesity, and more. In 2017, Sandia employees completed over 2,200 Health Action Plans that focused on improving physical activity.

### Recommended Actions



HEALTH  
ACTION  
PLANS

**ENROLL NOW!**

[healthactionplans.sandia.gov](http://healthactionplans.sandia.gov)

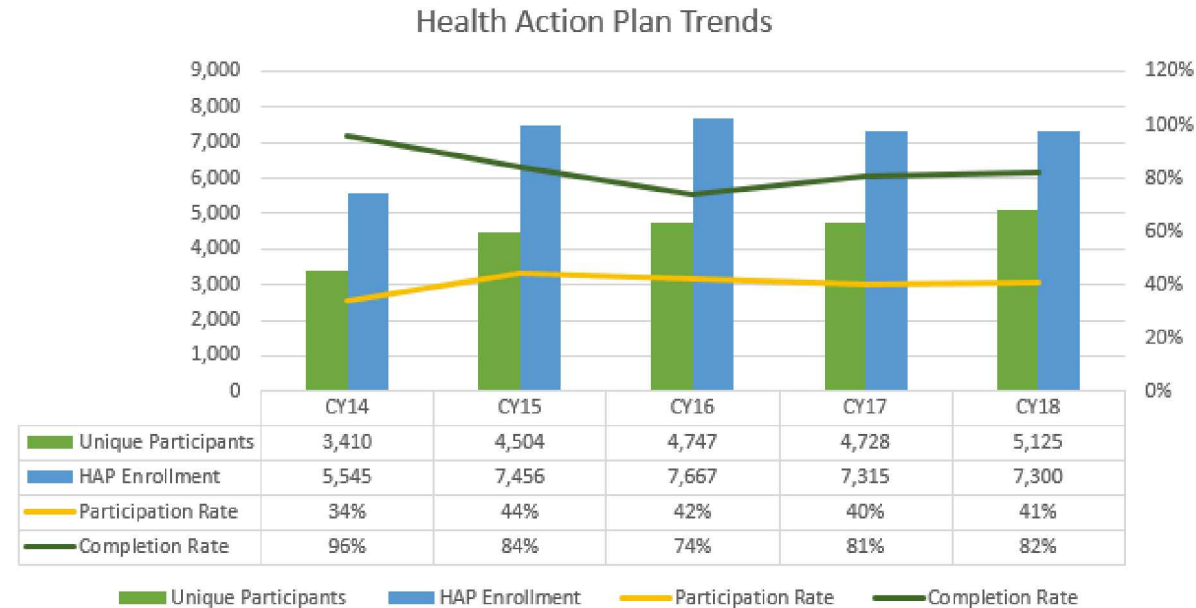
#### Health Action Plan

Join a Health Action Plan (HAP) as an individual or as a Division, and work with an onsite health professional to develop a personalized three-month plan for improving your health or addressing specific health risks.

#### Health Assessment - [snlhr.sandia.gov](http://snlhr.sandia.gov)

Get a preventive screening to find out the important numbers you'll need to complete your Health Assessment. Schedule a screening onsite through Employee Health Services by calling 505-844-4237 (NM) or 925-294-2700 (CA). Complete your Health Assessment on the Virgin Pulse website.

Health Action Plans ask the employee to TAKE ACTION, connecting employees with our onsite registered dietitians, fitness professionals, health coaches, physical therapists and physicians as appropriate. Currently our HAPs target inadequate sleep, energy, stress, weight management, physical inactivity, hypertension, dyslipidemia, managing and preventing diabetes, low back pain, allergies & asthma, digestive health, tobacco use, and living well or maintaining low risk for those individuals who do not have a chronic condition to manage.

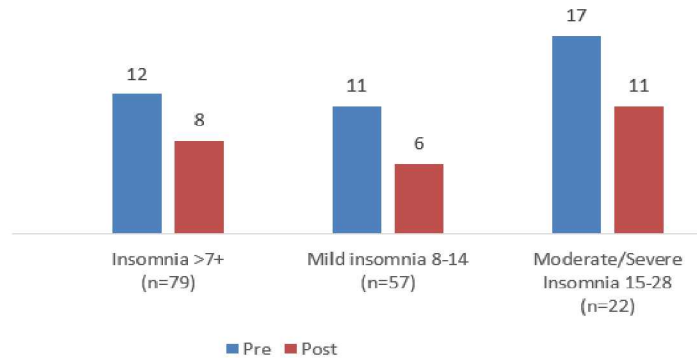




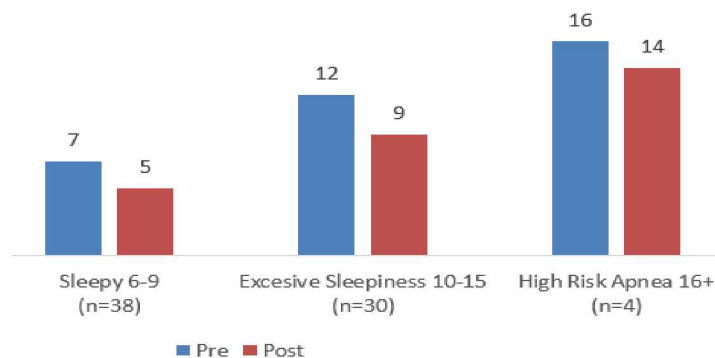
## Sleep

- 249 enrolled, pre and post data collected on 137 participants
- Insomnia Severity Index (ISI) - optimal score is below 7, all scores shifted towards normal
- Epworth "sleepiness" scale - optimal score is 5 or below, all scores shifted towards normal
- Score improvements directly affect productivity and safety

Change in Insomnia Severity Index scores  
Where <8 is normal

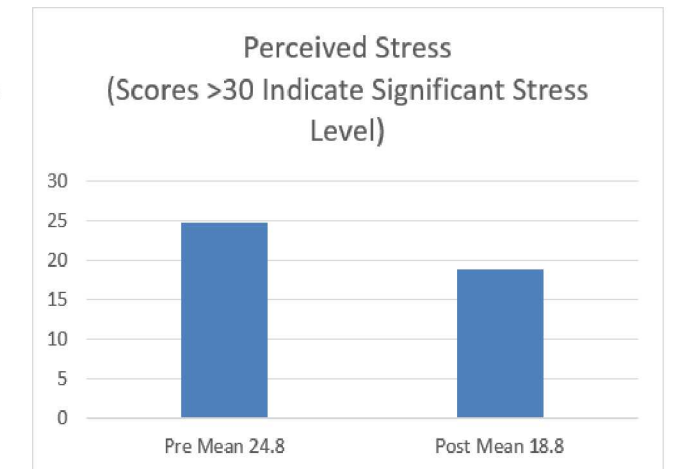
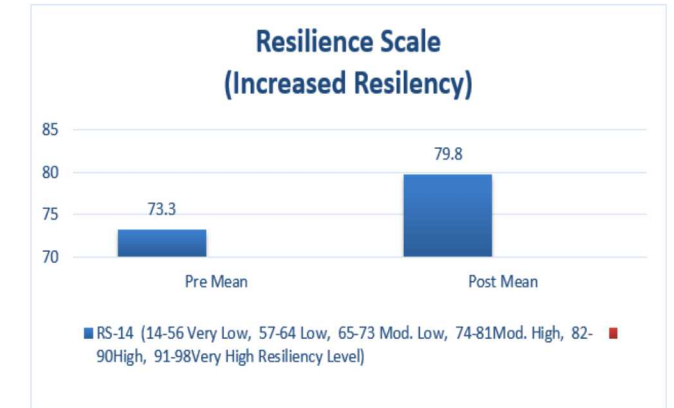


Change in Epworth Scores  
Where <6 is normal



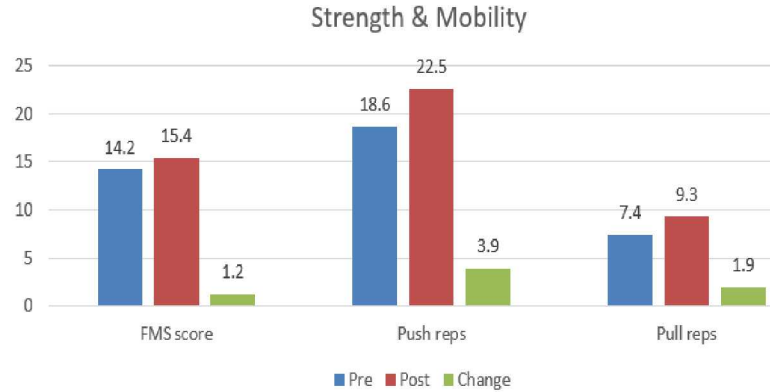
## Managing Change & Emotional Wellness

- 247 enrolled, pre and post data collected on 151 participants
- 83% reported Perceived Stress score improvements
- 75% reported Resiliency scale improvements
- Thriving: Score changes indicate improved coping skills and improved ability to deal with daily stressors, to use the new hot word



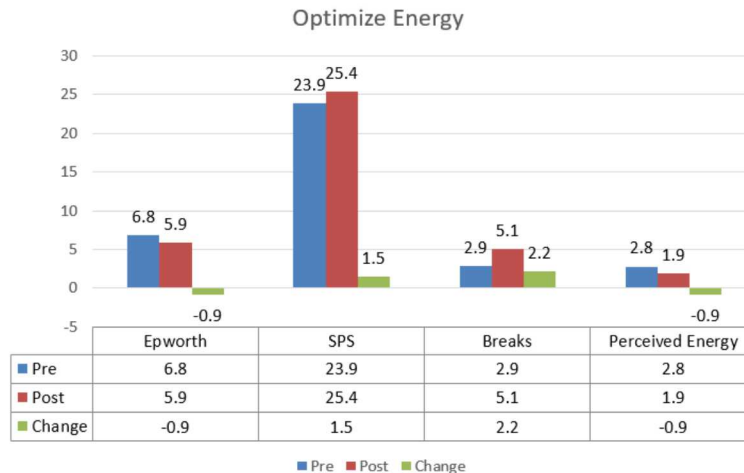
## Improve Strength & Mobility

- 97 enrolled, pre and post data collected on 76 participants
- Functional scores improved 8.5%, 17.5% improvement in those who started below average, 4 participants were moved out of “High risk”
- Both push & pull strength increased in participants



## Optimize Energy

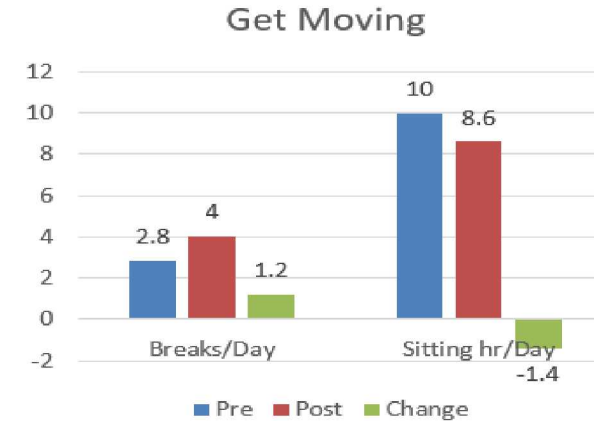
- 379 enrolled, pre and post data collected on 235 participants
- 1.2 more breaks/day
- 1.4 less hours spent sitting/day
- 51 more minutes of exercise/week
- 850 more steps/day



# Results

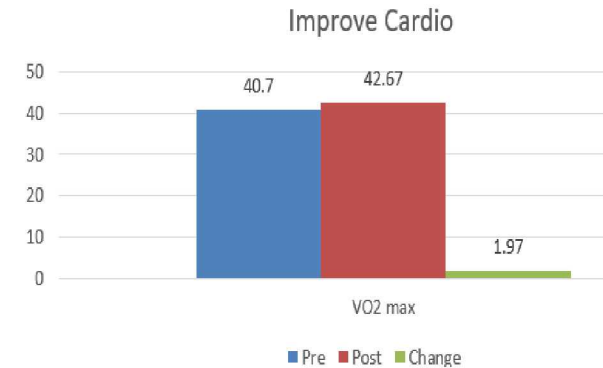
## Get Moving & Sit Less

- 379 enrolled, pre and post data collected on 235 participants
- 1.2 more breaks/day
- 1.4 less hours spent sitting/day
- 51 more minutes of exercise/week
- 850 more steps/day



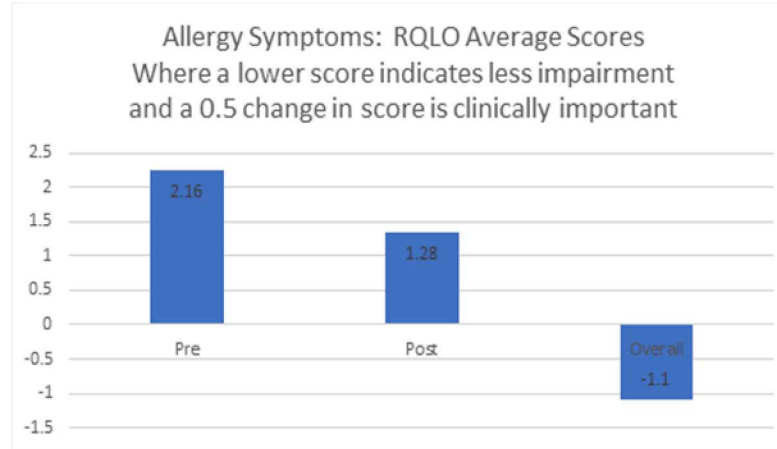
## Improve Cardio

- 164 enrolled, pre and post data collected on 130 participants
- Vo2 increased 4.84%
  - Pre Average Vo2 40.7
  - Post Average Vo2 42.67
- Multiple test types utilized to fit all needs



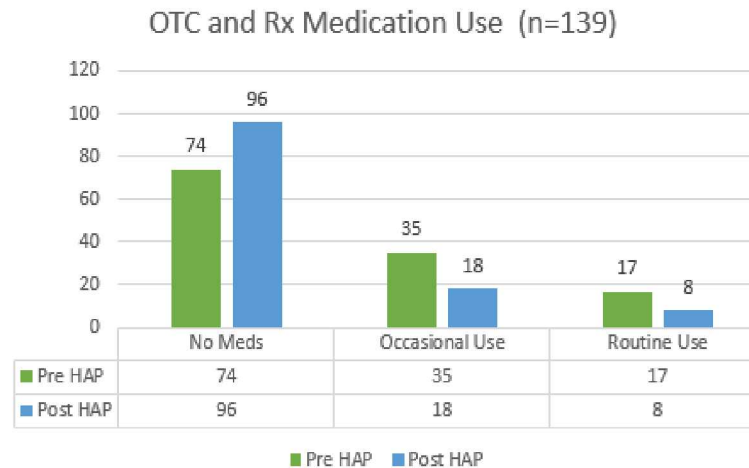
## Managing Allergies & Asthma

- 123 enrolled, pre and post data collected on 92 participants
- Rhinoconjunctivitis Quality of Life tool (RQLO) shows 89 participants had improved symptoms post HAP (mean score lower)



## Healthy Gut

- 205 enrolled, pre and post data collected on 126 participants
- 29% of participants able to discontinue digestive meds post HAP
- 9% reported less use of OTC digestive meds post HAP
- 24% of routine med users were moved into occasional use



## 1 on 1 Weight Loss

- 403 enrolled, 322 final measurements captured
- 234 participants lost or maintained their weight (73%)
  - 212 lost weight (66%)
  - 22 maintained (7%)
  - 88 gained weight (27%)
- 965.2 total lbs. lost
  - Average lbs. lost = 5.8
  - Average weight of participants decreased by 3 lbs.





# X-Ray Utilization FY18



PRESENTED BY

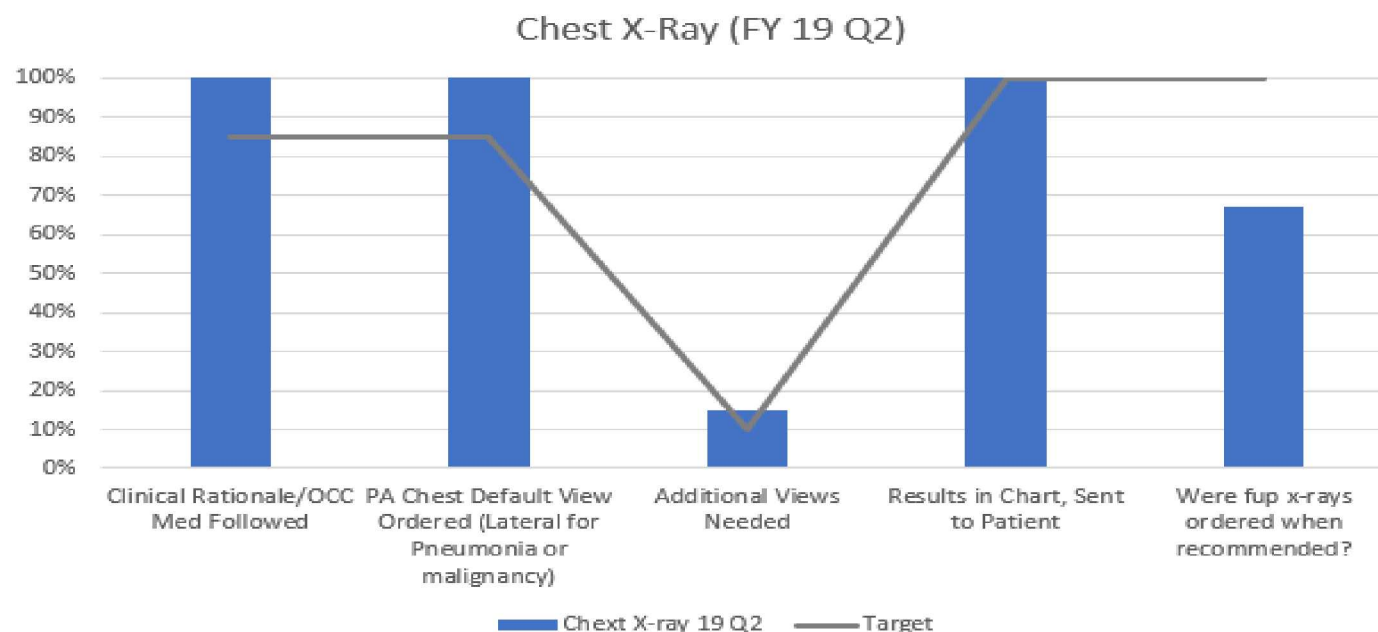
Rick Sauerman, MD, MPH Site Occupational Medical Director



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1. Were the X-rays ordered consistent with clinical rationale/Occ Med rationale?
  2. Was PA of the chest the default view? Lateral when looking for pneumonia or malignancy?
  3. After the initial X-Ray was ordered by the EHS provider, were additional views recommended by the Radiologist?
  4. Was communication of the X-Ray result to the patient documented in the medical record?
  5. Were follow-up x-rays done when non-negative studies called for follow-up x-ray examination?
- Note: In one case, patient refused follow-up testing



Benchmarked  
Communication  
Goal:

NCQA Patient  
Centered  
Connected Care  
Standard of 85%

- Audits were reviewed with providers, identified OFI's
  - Get from Dr. S?????????
  - Reviewed charts audited and peer comments with providers
- Goals:
  - Improve consistency in ordering X-Rays by doing so only if (UpToDate????) guidelines or History and Exam suggest rational for X-Ray. Goal for AAAHC is above 85% (current 100%)
  - Document the communication of X-Ray results to patient in the medical record. Goal from NCQA is above 85% (current 100%)
- X-Ray audits will continue quarterly through FY19

# Quarterly Score Card: Q1 FY19



PRESENTED BY

Renee Holland, Director, EHS



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# NM EHS Monthly Metrics Dashboard FY19 March 2019



Sandia National Laboratories



Employee Health Services

60,708  
Transactions  
31,472 1:1s YTD



10,949 Unique  
Participants  
YTD



82% Employee  
population  
served YTD  
9,702 out of 11,853



1.5m Wait Time  
27m with  
Provider



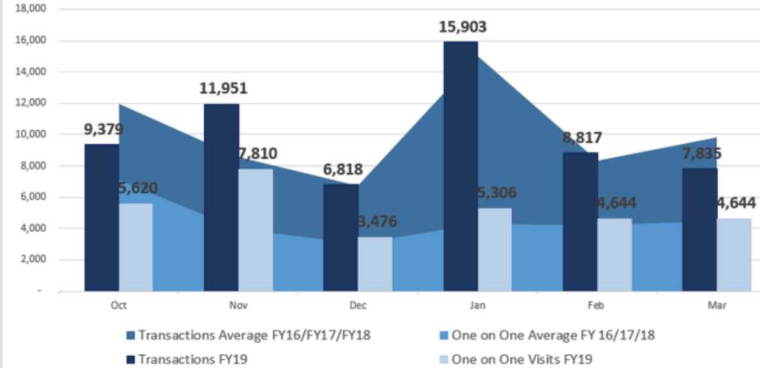
89% PCP  
Documented  
63% Assigned  
4% Pending



\$1.69 ROI  
\*ROI FY19: Avg. Wage  
increased from \$83.52 to  
\$87.59/hr  
\*FY18 ROI: \$1.48



NM Transactions and 1:1 Visits Monthly



YTD Transactions

FY18: 63,570

FY17: 63,679

YTD 1:1s

FY18: 29,886

FY17: 26,133

MAR Uniques

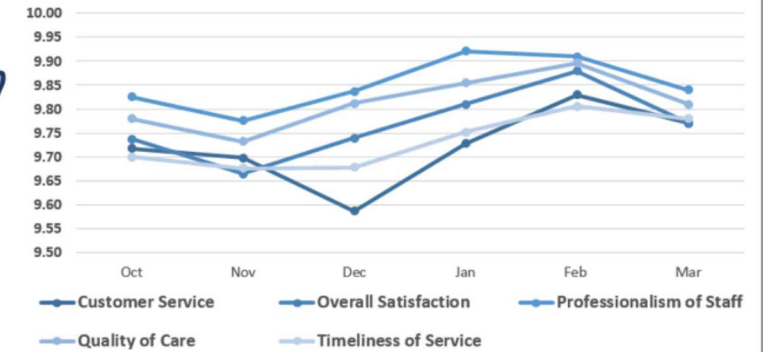
FY19: 3,346

FY18: 3,533

FY17: 3,980

NM CSAT Score

9.77  
Overall



Average Patients Seen per Day

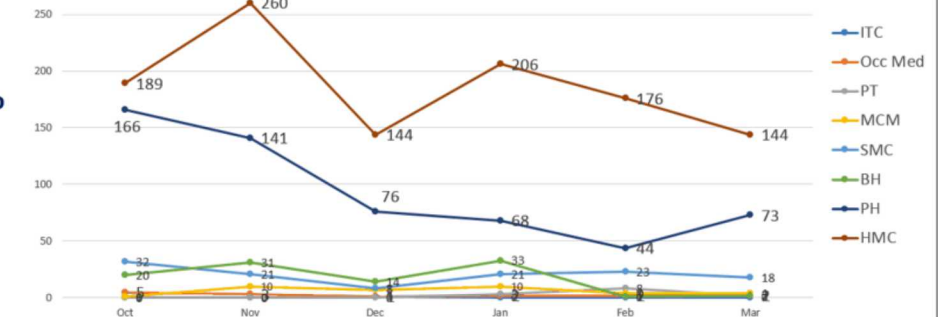


258  
Patients  
per Day  
YTD

Onsite Referrals

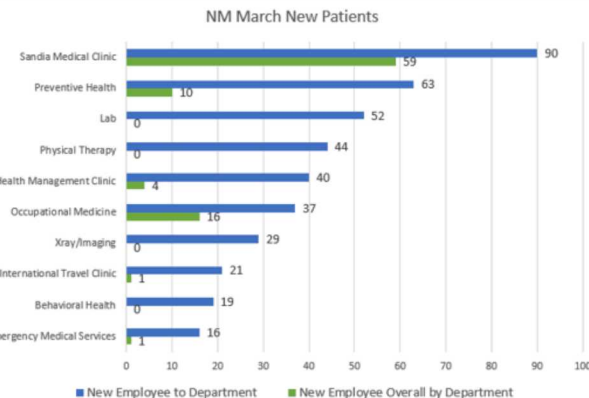
2,032  
Onsite Referrals to  
1,961  
Patients YTD

NM Onsite Referrals From



New  
Patients

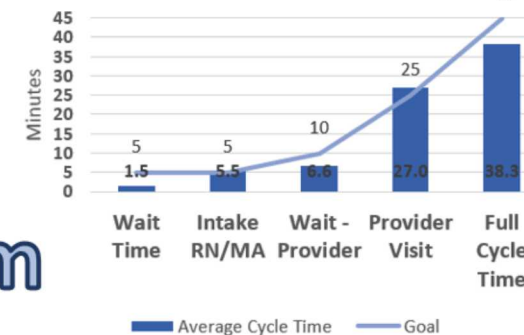
\*Patients are  
considered NEW  
if they have not  
had an  
appointment in  
ANY Department  
in the past 36  
months.



Wait  
Time

1.5m

NM Average Cycle Time



YTD Costs:

Cost per participant:

\$369.66

Cost per employee:

\$341.47

\*FY18 CPP: \$675.96

CPE: \$687.74

# CA EHS Monthly Metrics Dashboard FY19 March 2019



Sandia National Laboratories



12,432  
Transactions  
3,633 1:1s YTD



1,363 Unique  
Participants  
YTD



84% Employee  
population  
served YTD  
1,168 out of 1,392



4.2m Wait Time  
22.5m Provider  
Time



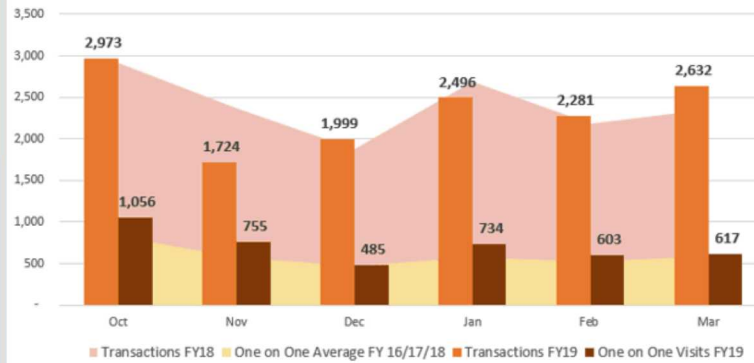
86% PCP  
Documented  
66% Assigned  
6% Pending



\$1.34 ROI  
\*ROI FY19: Avg. Wage  
increased from \$102.02 to  
\$107.00/hr  
\*FY18 ROI: \$1.33



CA Transactions and 1:1 Visits Monthly



## YTD Transactions

FY18: 14,396

FY17: 5,565

## YTD 1:1s

FY18: 3,899

FY17: 3,546

## MAR Uniques

FY19: 576

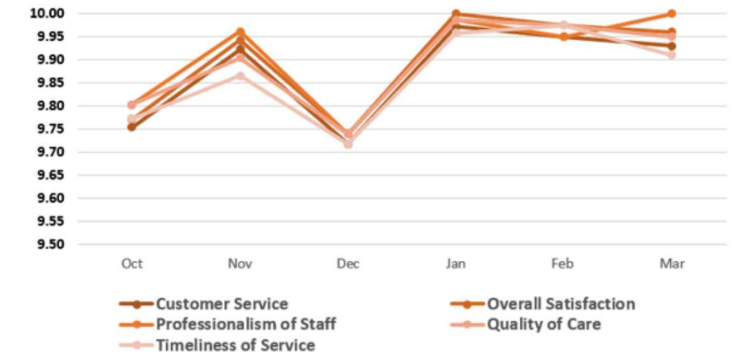
FY18: 536

FY17: 440

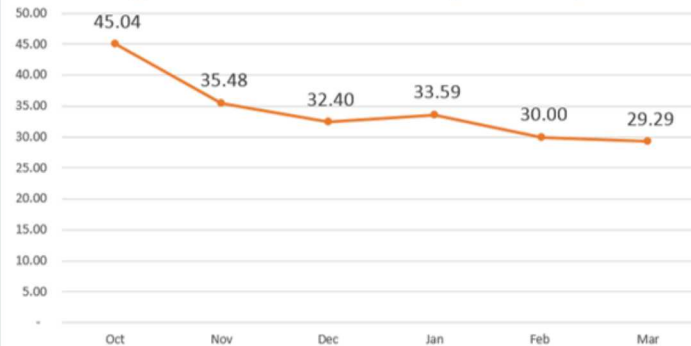
CA CSAT Score

9.96

Overall



## Average Patients Seen per Day

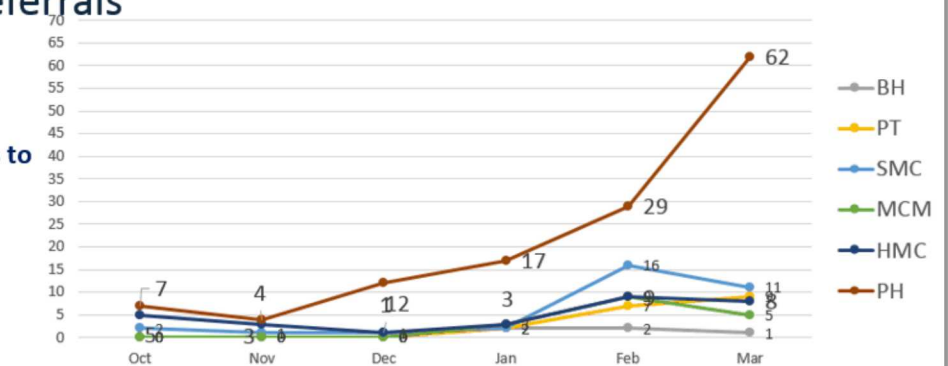


35  
Patients  
per Day  
YTD

## Onsite Referrals

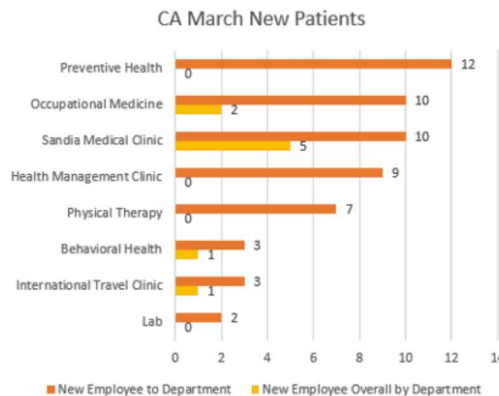
262  
Onsite Referrals to  
243  
Patients YTD

CA Onsite Referrals From



## New Patients

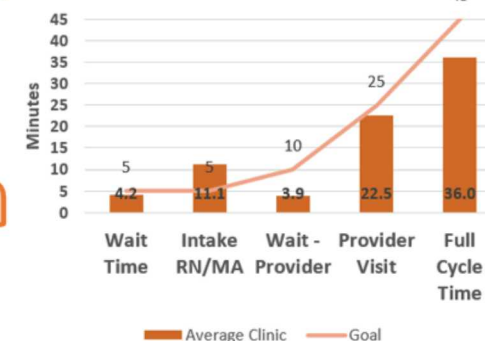
\*Patients are considered NEW if they have not had an appointment in ANY Department in the past 36 months.



## Wait Time

4.2m

CA Average Cycle Time



## YTD Costs:

Cost per participant:

\$726.79

Cost per employee:

\$711.65

\*FY18 CPP: \$1,135.87

CPE: \$1,218.34



# Sandia Medical Clinic (SMC) Monthly Metrics Dashboard

## March 2019

1,582 Transactions  
1,050 Unique Pts



CSAT: 9.38



Cycle Time

2.5m Arrived to Room  
5.9m Waiting on Provider  
30m Total Time Spent



New Patients = 90



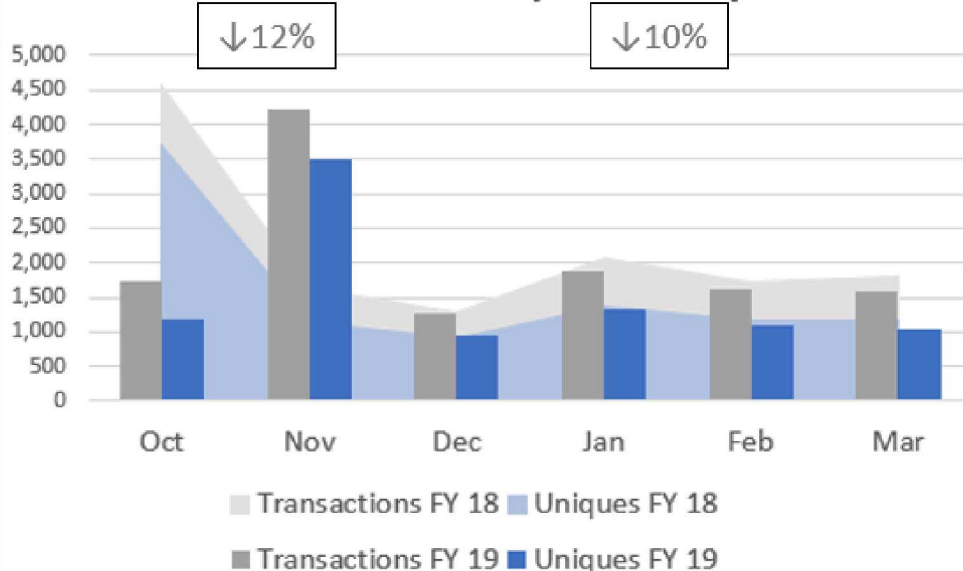
Fill Rate: 81%



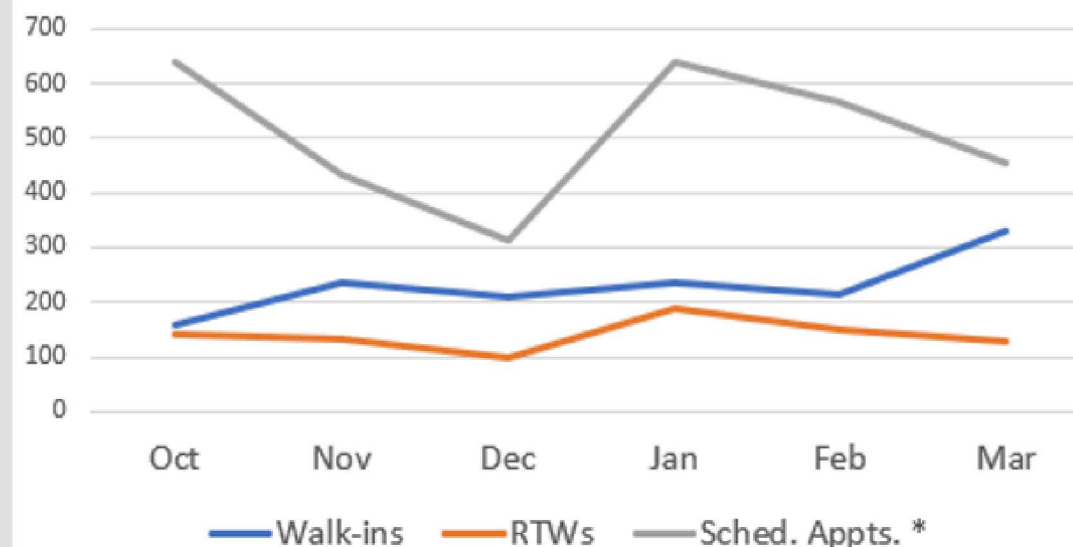
ROI: \$2.98



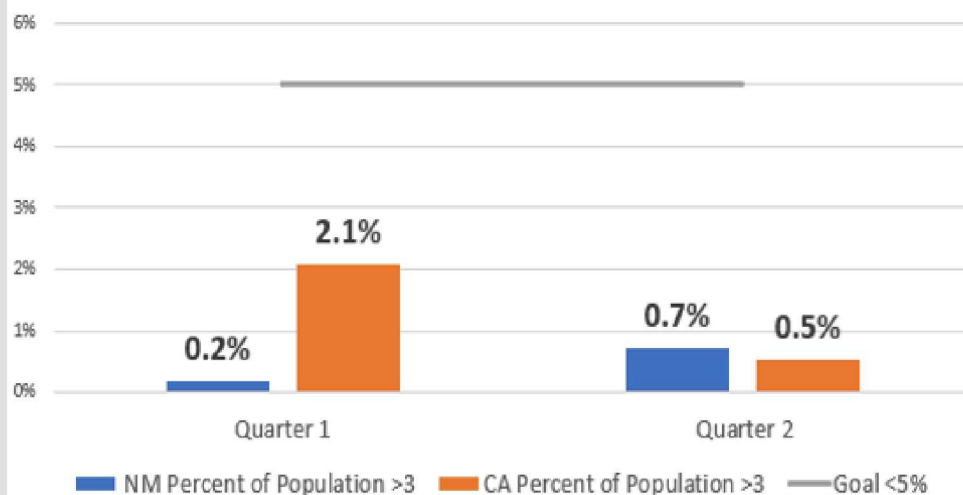
### Transactions & Unique Participants



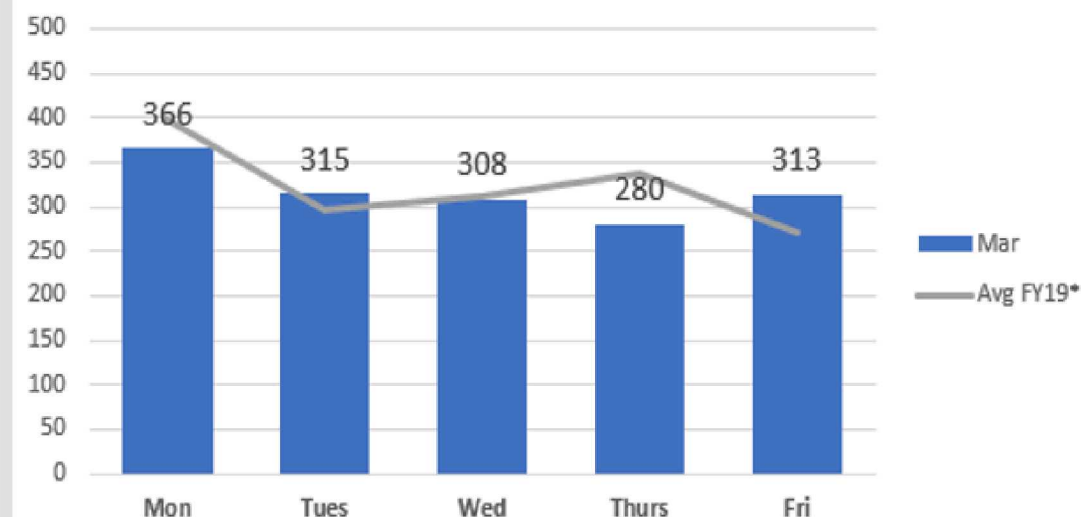
### Appts/Walk-Ins/RTWs



### Sandia Medical Clinic Acute Visits ≥3 per Diagnosis





### SMC Activity by Day of Week

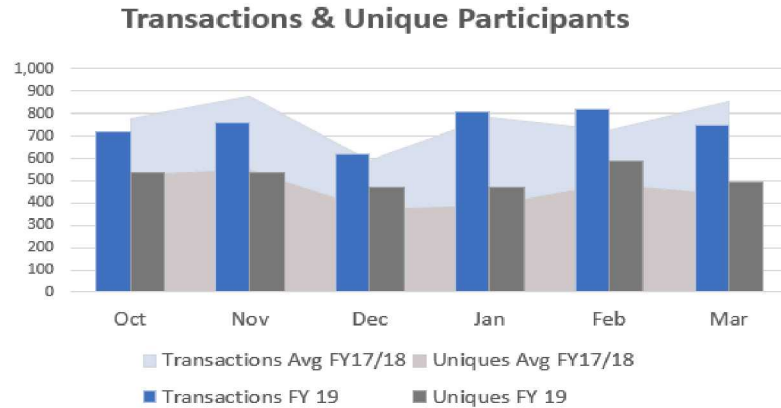




# HMC Monthly Metrics Dashboard March FY 2019

Transactions 

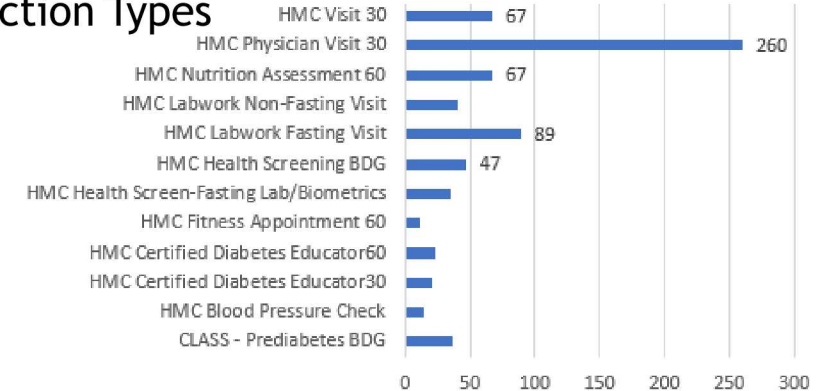
Unique Participants 



## Transactions

March  
 Transactions  
 2019: 748  
 2018: 927  
 2017: 787  
 Uniques  
 2019: 495  
 2018: 452  
 2017: 420

## Transaction Types

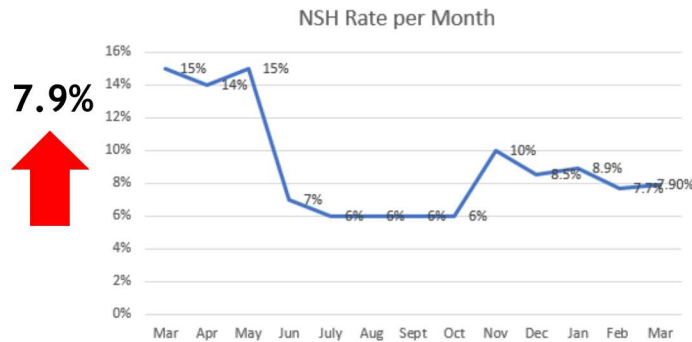


CSAT 9.81 

Staff Wait Time:  
2 min 

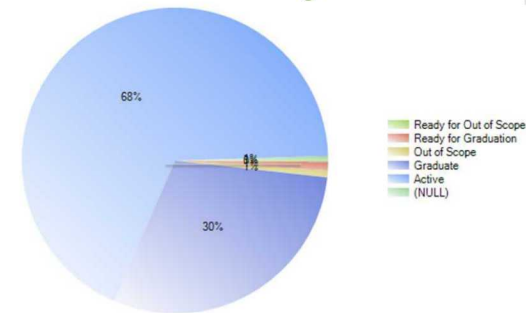
Dr. Wait Time:  
7 min

## NSH Rate

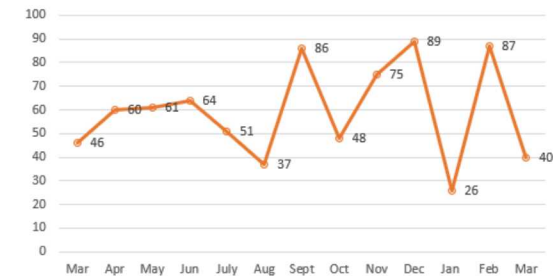


## Ready for Graduation

Baseline 21%  
 Dec 11%  
 Mar 1%  
 Graduated  
 Baseline 14%  
 Feb 28%  
 Mar 30%




## New Pts Seen: 40

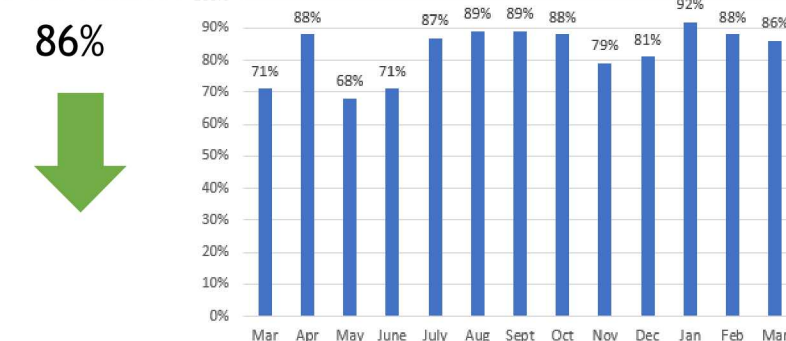


## New HMC Enrollments: 30

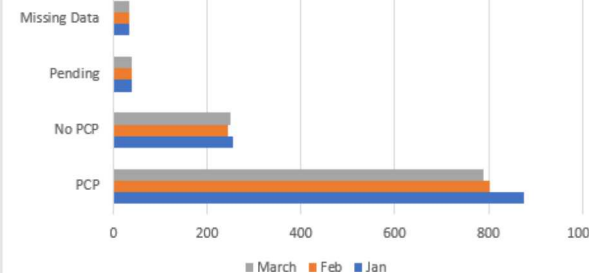
Onsite Referrals Made: 19% (N=144) 

\$ ROI 1.45 

## Fill Rates

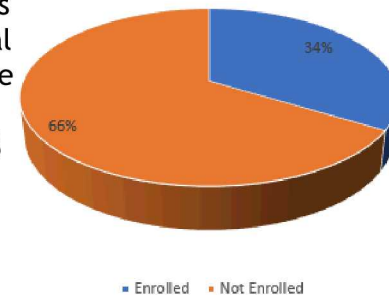


## PCP Documented: 71%



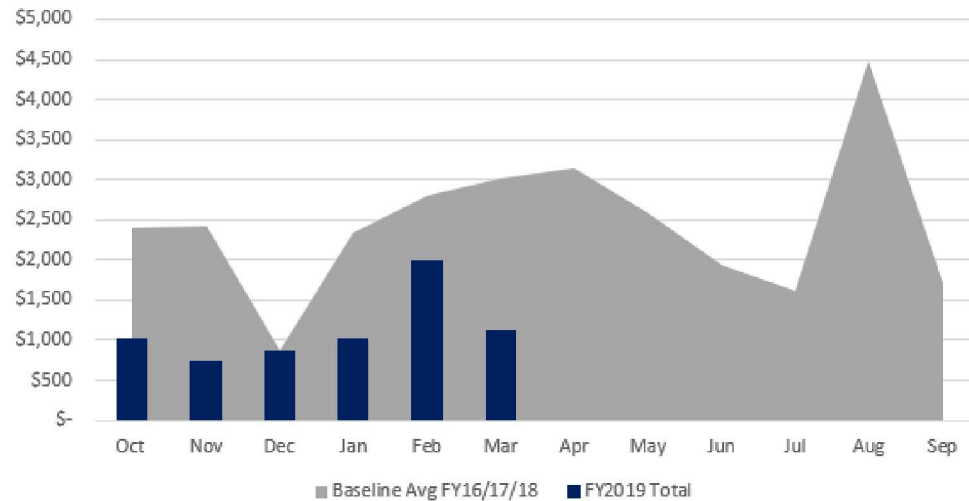
## HAP Enrollment: 34%

31 new HAPs in Mar. Total of 886 active with 299 in HAP. Up 4% from Feb.



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NM (Dispense/Administer) Pharmacy Costs Review



FY19 Quarter 2

NM Pharmacy costs have reduced 54%, cost savings YTD \$7094

CA Pharmacy costs have reduced 45%, cost savings YTD \$822

Target: Reduce 25%

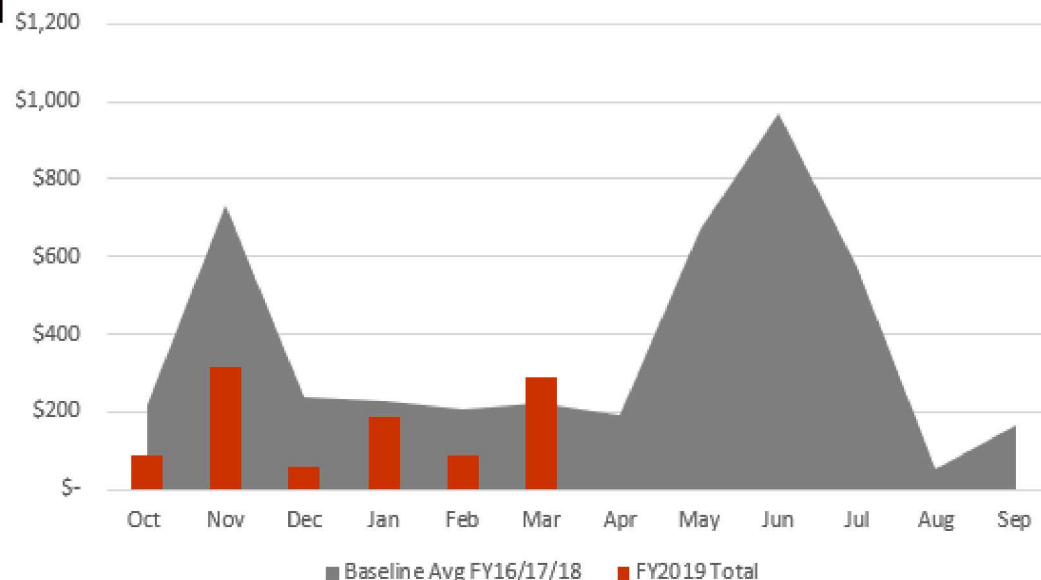
Total Cost Savings YTD Q2: **\$7,916**

Formulary Summary:

- Non-acute medications dispensed onsite transitioned to offsite
- Antibiotic Formulary Review

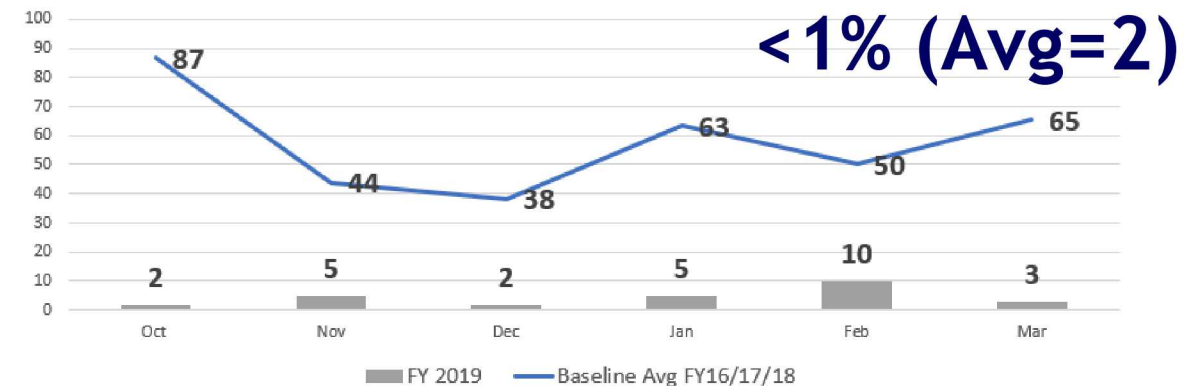
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CA (Dispense/Administer) Pharmacy Costs Review



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Number of Prescriptions >6 Month Duration - Authorized per Month



Scope of Service: Any prescription fill that is within the EHS scope of service, will not exceed 6 months and bridging of any medication till external care is connected will not exceed 90 days.

- Round Table Wrap-Up
- Questions