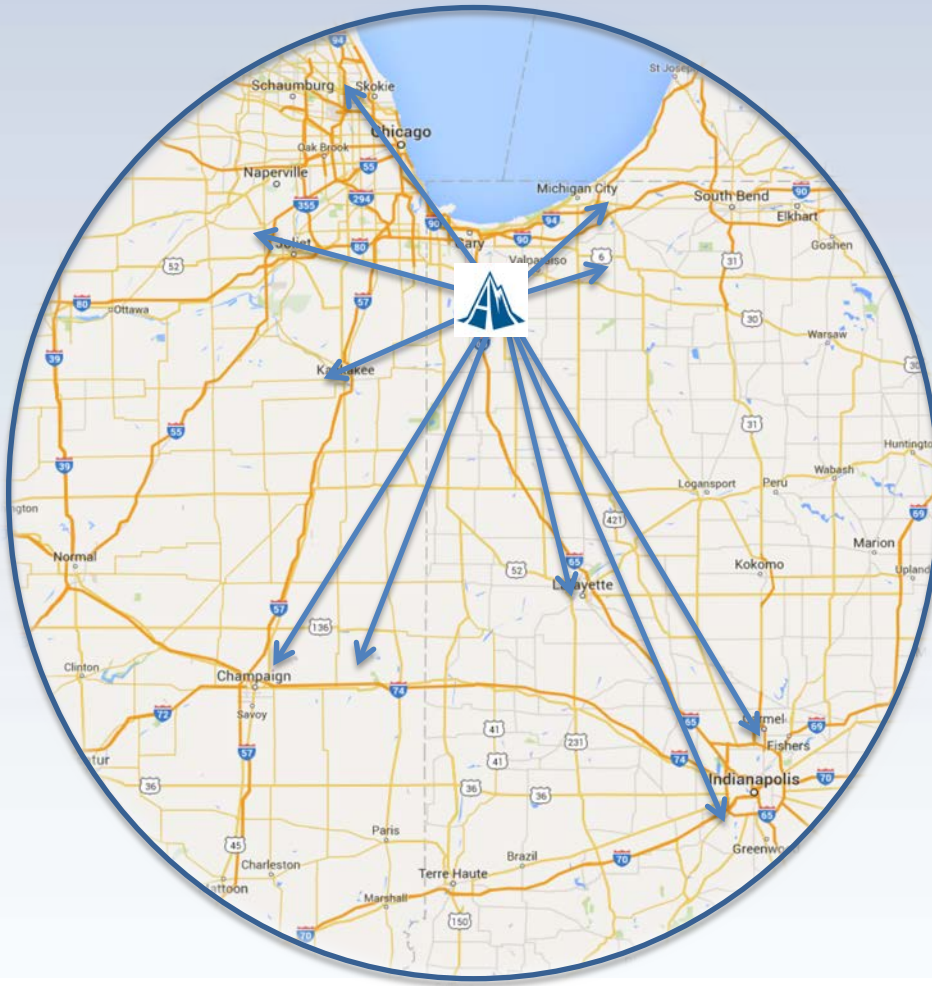**The PCL Alverno Difference – Quality Driven – Patient Focused**

Elevating the clinical laboratory and diagnostic capabilities of hospitals and healthcare providers.

Our Journey to Implement the Culture of Continuous Improvement in 26 Hospital Labs and the Alverno Central Lab

Donald Lair, MLS(ASCP), SSGB

Director of Quality Assurance Programs

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Where is PCL Alverno?

We service a 250 miles/400 km radius

Who We Are Today

- Alverno is a full service, community based medical laboratory, performing 14 million tests annually.
- 1,600 dedicated employees
- Joint venture of Franciscan Alliance and Presence Health. Alverno continues to provide stakeholder value with cost reduction and revenue growth.
- An extensive menu of tests are offered in both clinical and anatomic pathology at our regional reference laboratory in Hammond, IN.
- Elevating the clinical laboratory and diagnostic capabilities of hospitals and health care providers.

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Who We Are and What We Do

- PCL Alverno is ISO 15189 Accredited (one of approximately twenty-five labs in the US)

- Employees: 1,600+

- 2015: 91st percentile in Employee Satisfaction

- Own 27 hospital laboratories: over 5,900 patient beds and 45,000 square feet central laboratory

- Own laboratories in two freestanding emergency departments

- Four independent laboratories to which we provide histology and other services

- High Level of system standardization

- 2,500 physician clients, staff in multiple physician offices
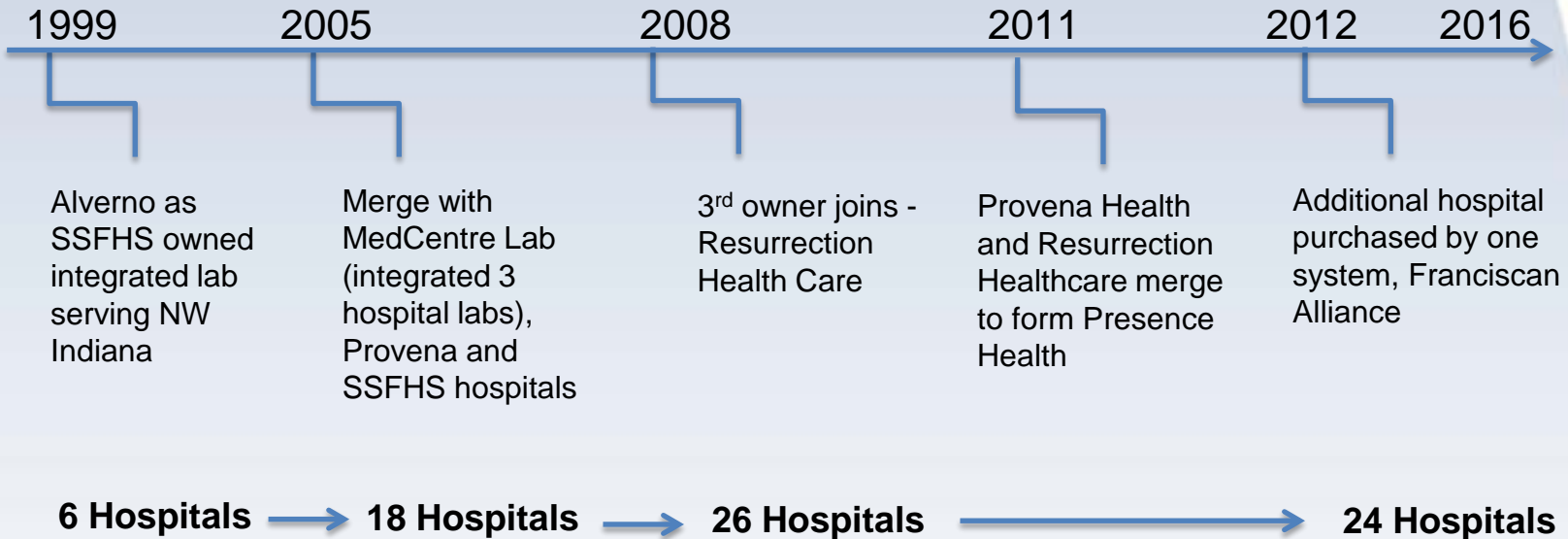
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Who We Are and What We Do

- We are in approximately 125 locations
  - 27 patient service centers across Illinois and Indiana
  - In-office phlebotomy services
- Courier Service – daily & multiple pickups
- Connectivity-Interfacing capabilities with multiple EMR products to provide ordering and result reporting
- Interfacing completed health plan participation
- Contracts with all major insurance carriers
- Dedicated Account Executive and Sales Team

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Development of Alverno

1999	2005	2008	2011	2012	2016

Alverno as SSFHS owned integrated lab serving NW Indiana

Merge with MedCentre Lab (integrated 3 hospital labs), Provena and SSFHS hospitals

3rd owner joins - Resurrection Health Care

Provena Health and Resurrection Healthcare merge to form Presence Health

Additional hospital purchased by one system, Franciscan Alliance

6 Hospitals → **18 Hospitals** → **26 Hospitals** → **24 Hospitals**

Manage various components of five non-system hospitals

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Acute Care Service "Model"

Testing needed to meet STAT or urgent needs is performed in the hospital laboratory	Testing performed at the central laboratory
• 60% of testing done at the hospital lab • Range of integration for current hospital depends on the complexity of the hospital services, up to 40%	• All non-STAT microbiology tests • All non-STAT outreach testing • Anatomic pathology slide processing • Moderate complexity testing such as hepatitis, HIV, etc.

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Alverno's DBS Journey

- Beginning 2015 in partnership with Beckman we have offered 10 Problem Solving Process (PSP) classes, initially trained 120 leaders

- In 2016, system goal requires full adoption of Alverno Business Systems (ABS)

- Very small quality team of four individuals for the entire system – aka "smoke jumpers"

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What is Alverno Business systems?

(ABS) is our process to drive continual improvement at all levels within our organization to become a Center of Excellence in lab services.

➢ Phlebotomy

➢ Lab Assistants

➢ Technical Staff

➢ Leadership

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KPIs: Every Hospital

CATEGORY	PERFORMANCE/PROCESS IMPROVEMENT METRICS (PIM)	OWNER	TARGET	JOP	In Use	PLAN VS ACTUAL	JAN	FEB	MAR	APR	MAY
PEOPLE											
1	Employee OSHA reportable injuries		6.2 OSHA Benchmark			Plan	<=6.2	<=6.2	<=6.2	<=6.2	<=6.2
					Y	Actual	0	0	0	0	0
2	Employee opinion survey results ; Action Plan Status Updated		Monthly Action Planning for 100% Site Workgroups			Plan	100%	100%	100%	100%	100%
					Y	Actual	100	100	100	100	100
QUALITY											
3	Proficiency testing failures: any analyte failure, document event and action plan of correction		100% follow up on all failures			Plan	100%	100%	100%	100%	100%
					Y	Actual	100	100	100	100	100
4	Percent of all facets of audits, internal and external, compliance - annual audit/RCA/Canary/Mock etc. outcomes follow up completed on time		100% Compliance			Plan	100%	100%	100%	100%	100%
					Y	Actual	100	100	100	100	100
5	PRBC utilization per CMI APD		Results to Hospital Leadership			Plan	<=17	<=17	<=17	<=17	<=17
					Y	Actual	20.86	16.54	11.83	15.36	11.75
6	Blood Culture Contamination Rate ≤ 3%		≤3%			Plan	<3%	<3%	<3%	<3%	<3%
					Y	Actual	3	1.5	2.4	2.6	3
7	Gram Stain Smear Correlation - blood cultures only	Core	System Result - 95%			Plan	95%	95%	95%	95%	95%
					Y	Actual	100	98.9	100		
8	Pre-Analytical Errors (includes ER, nursing units, lab) 5% reduction from 2015		-5% of 1st Qtr Average			Plan	1st quarter average for baseline			127.30	127.30
					Y	Actual	142	128	132	159	156
9	Histology slide floater rate (1.5-8.8%)	Core	≤1.5%			Plan	<1.5%	<1.5%	<1.5%	<1.5%	<1.5%
					N	Actual					
SERVICE											
10	AM draw production time met 95% of the local target time - hospital sites.		**95% by 6 am**			Plan	95%	95%	95%	95%	95%
					Y	Actual	70	69	76	88	92
11	AM run completion production time met 95% of the local target time - hospital sites.		**95% by 8 am**			Plan	95%	95%	95%	95%	95%
					Y	Actual	81	78	97	95	97
12	ED STAT Creatinine (BMP) receipt to verify 92% within 35 minutes - hospital sites		92% within 35 minutes			Plan	92%	92%	92%	92%	92%
					Y	Actual	83	77	82.7	84.2	85.9
13	ED STAT Troponin receipt to verify 92% within 40 minutes - hospital sites		92% within 40 minutes			Plan	92%	92%	92%	92%	92%
					Y	Actual	81	76	79.9	76.6	82.7
14	Creatinine, ER TAT, order to receipt in 20 minutes*		60% within 20 minutes			Plan	60%	60%	60%	60%	60%
					N	Actual					
15	Patient Satisfaction - inpatient		**71%**			Plan	71%	71%	71%	71%	71%
					Y	Actual	52.4	43.4	55.3	34.1	48.5
16	Patient Satisfaction - outpatient		**71%**			Plan	71%	71%	71%	71%	71%
					Y	Actual	56	56	50	56.3	64.7
FINANCIAL											
17	Productivity technical - direct labor hours costs (paid hours) per billable tests performed on site.		2016 Budget			Plan	0.11	0.10	0.12	0.11	0.11
					Y	Actual	0.11	0.11	0.13	0.13	0.12
18	Productivity Phlebotomy - direct labor hours costs (paid hours) per billable test.		2016 Budget			Plan	0.05	0.05	0.05	0.05	0.05
					Y	Actual	0.06	0.06	0.07	0.07	0.07
19	Reference lab utilization expense		2016 Budget			Plan	$ 67,909	$ 67,909	$ 67,909	$ 67,909	$ 67,909
					Y	Actual	$ 47,182	$ 47,731	$ 59,655	$ 60,946	$ 30,280
20	Overtime Trending ≤ 2.0%		2016 Budget			Plan	<2.0%	<2.0%	<2.0%	<2.0%	<2.0%
					Y	Actual	2	3	3	2	3
21	Cost per RVU compared to Budget		2016 Budget			Plan	1.09	1.04	1.13	1.13	1.08
					Y	Actual	1.13	1.12	1.15	1.17	1.06

* Accurate data cannot be collected at this time- ED work process at some sites is to collect and send specimen prior to test orders.

KPIs: The Central Laboratory

CATEGORY	PERFORMANCE/PROCESS IMPROVEMENT METRICS (PIM)	OWNER	TARGET	JOP	In Use	PLAN VS ACTUAL	JAN	FEB	MAR	APR
PEOPLE										
1	Employee OSHA reportable injuries		6.2 OSHA Benchmark			Plan	<6.2	<6.2	<6.2	<6.2
					Y	Actual	1.0	0.4	0.8	0.2
2	Employee opinion survey results ; Action Plan Status Updated		Monthly Action Planning for 100% Site Workgroups			Plan	100%	100%	100%	100%
					Y	Actual	100.0	100.0	100.0	100.0
QUALITY										
3	Proficiency testing failures: any analyte failure, document event and action plan of correction		100% follow up on all failures		Y	Plan	100%	100%	100%	100%
						Actual	100.0	100.0	100.0	100.0
4	Percent of all facets of audits, internal and external, compliance - annual audit/RCA/Canary/Mock etc. outcomes follow up completed on time		100% Compliance		Y	Plan	100%	100%	100%	100%
						Actual	100.0	100.0	100.0	100.0
5	Error Correction Rate		<=0.05%		Y	Plan	<=.05%	<=.05%	<=.05%	<=.05%
						Actual	0.067	0.025	0.037	0.035
6	Blood Culture Contamination Rate ≤ 3%		≤3%		Y	Plan	<3%	<3%	<3%	<3%
						Actual	0.0	2.1	0.8	
7	Gram Stain Smear Correlation - blood cultures only		System Result - 95%		Y	Plan	95%	95%	95%	95%
						Actual	99.9	99.9	99.7	
9	Histology slide floater rate (1.5-8.8%)		≤1.5%		Y	Plan	≤1.5%	≤1.5%	≤1.5%	≤1.5%
						Actual	0.011	0.013	0.007	0.010
SERVICE										
10	Production Schedule acceptable %		**95%**		Y	Plan	95%	95%	95%	95%
						Actual	96.2	96.4	95.6	98.5
FINANCIAL										
17	Productivity technical - direct labor hours costs (paid hours) per billable tests performed on site.		% of Sites Meeting Goal		Y	Plan	60%	60%	60%	60%
						Actual	40.0	60.0	60.0	60.0
18	Productivity Phlebotomy - direct labor hours costs (paid hours) per billable test.		% of Sites Meeting Goal		N	Plan	60%	60%	60%	60%
						Actual				
19	Reference lab utilization expense		% of Sites Meeting Goal		Y	Plan	60%	60%	60%	60%
						Actual	100.0	40.0	80.0	60.0
20	Overtime Trending ≤ 2.0%		% of Sites Meeting Goal		Y	Plan	60%	60%	60%	60%
						Actual	60.0	40.0	40.0	40.0
21	Cost per RVU compared to Budget		% of Sites Meeting Goal		Y	Plan	60%	60%	60%	60%
						Actual	40.0	40.0	20.0	20.0

* Accurate data cannot be collected at this time- ED work process at some sites is to collect and send specimen prior to test orders.

SITE COMMON PIMS		Owner	Target	JOP		Plan vs. Actual	Jan	Feb	Mar	Apr
PEOPLE										
PIM S. Terese	Rounding, Managing Up, Thank You Notes Participation	Site Director	90% or greater of system		Y	Plan	90%	90%	90%	90%
						Actual	80.0	70.0	78.0	95.6
PIM S. Terese	Coaching Low Performers (documented by site leaders)	Site Director	95% or greater of system		Y	Plan	95%	95%	95%	95%
						Actual	100.0	100.0	100.0	100.0
PIM S. Terese	Completion of Staff Ready Roll Out	Site Director	Complete Project Roll Out		Y	Plan	0%	10%	20%	30%
						Actual	60.0	64.0	70.0	72.0
2016 Quality Plan	Employee Education and training ≥ 4.0 CEUs	Site Director	100% of staff by end of 2016		Y	Plan			25%	
						Actual			25.0	
QUALITY										
PIM S. Terese	Completion of ABS Implementation - System	Site Director	System wide use of ABS		Y	Plan	10%	20%	30%	40%
						Actual	100.0	100.0	86.0	100.0

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Leadership Principles

Focus

Urgency

Accountability

Transparency

Continuous Learning

Ownership to the lowest level

What is Daily Management?

TEAM-BASED, VISUAL process held with REGULAR CADENCE to ensure process discipline and drive IMPROVEMENTS around most CRITICAL METRICS.

When off track, the TEAM applies PROBLEM SOLVING and takes action with URGENCY.

DM is not REPORTING news, It's MAKING it

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Why is Daily Management Critical ?

- Provides focus & alignment
- Can quickly see what's not working
- Customer-focused, and team-based
- Pushes decision making & transparency to point-of-impact
- Ensures Alverno's foundation stays strong

Drives continuous improvement

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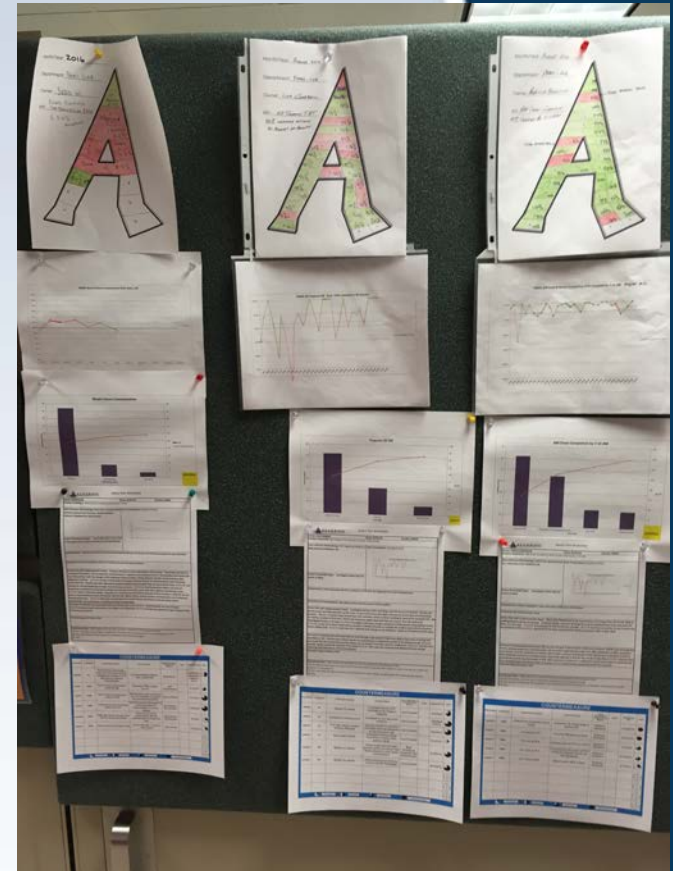
Examples of KPI material: Key Performance Indicators
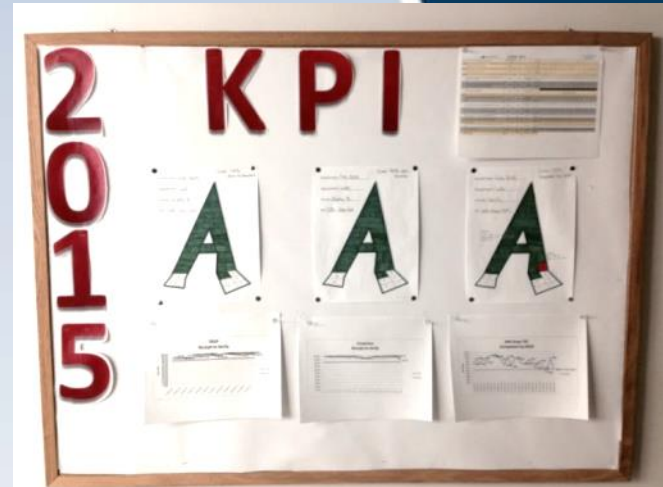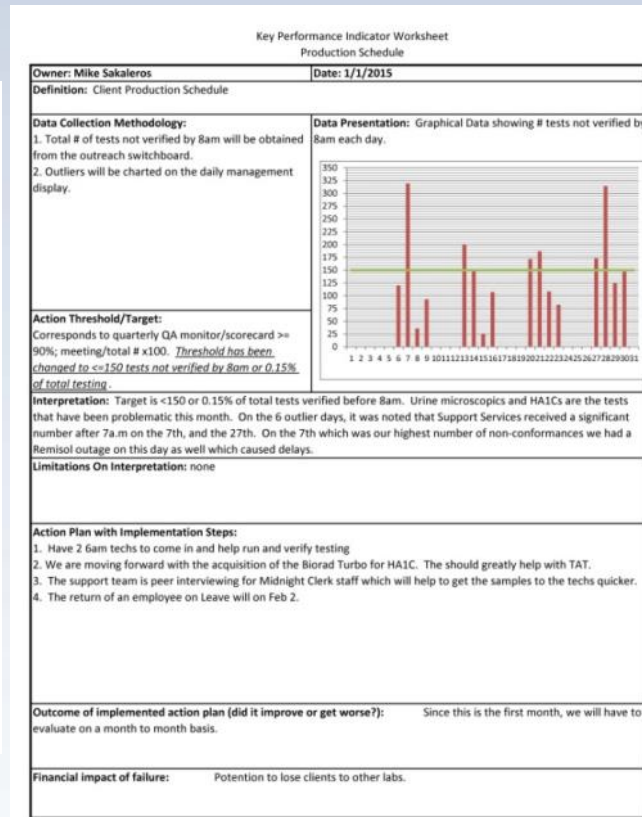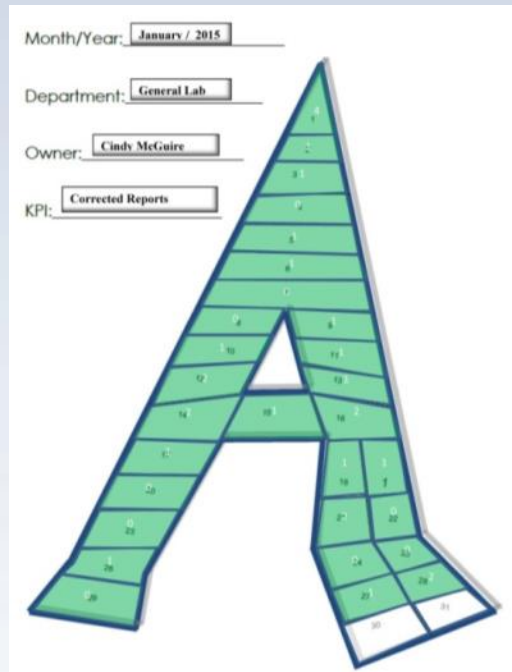
Leaders Understanding of Daily Management

➤ Used to drive improvement

➤ Team Based

➤ Huddles are held at a regular time interval or cadence

➤ Focus on the critical few

➤ Use visuals to help associates understanding of metric data

DM Leadership Checklist

- ❑ Build a winning Team environment
- ❑ Make it safe to expose problems and engage Associates
- ❑ Leaders are present and actively involved
- ❑ Drive a sense of urgency
- ❑ Create a learning environment, look for coaching through teaching/feedback moments
- ❑ Drive accountability
- ❑ Ask questions, check for understanding
- ❑ Know when to have discussions off-line
- ❑ Delegate ownership of metrics wisely
- ❑ Team takes ownership by documenting follow-up actions
- ❑ Customer-focused metrics linked to KPIs

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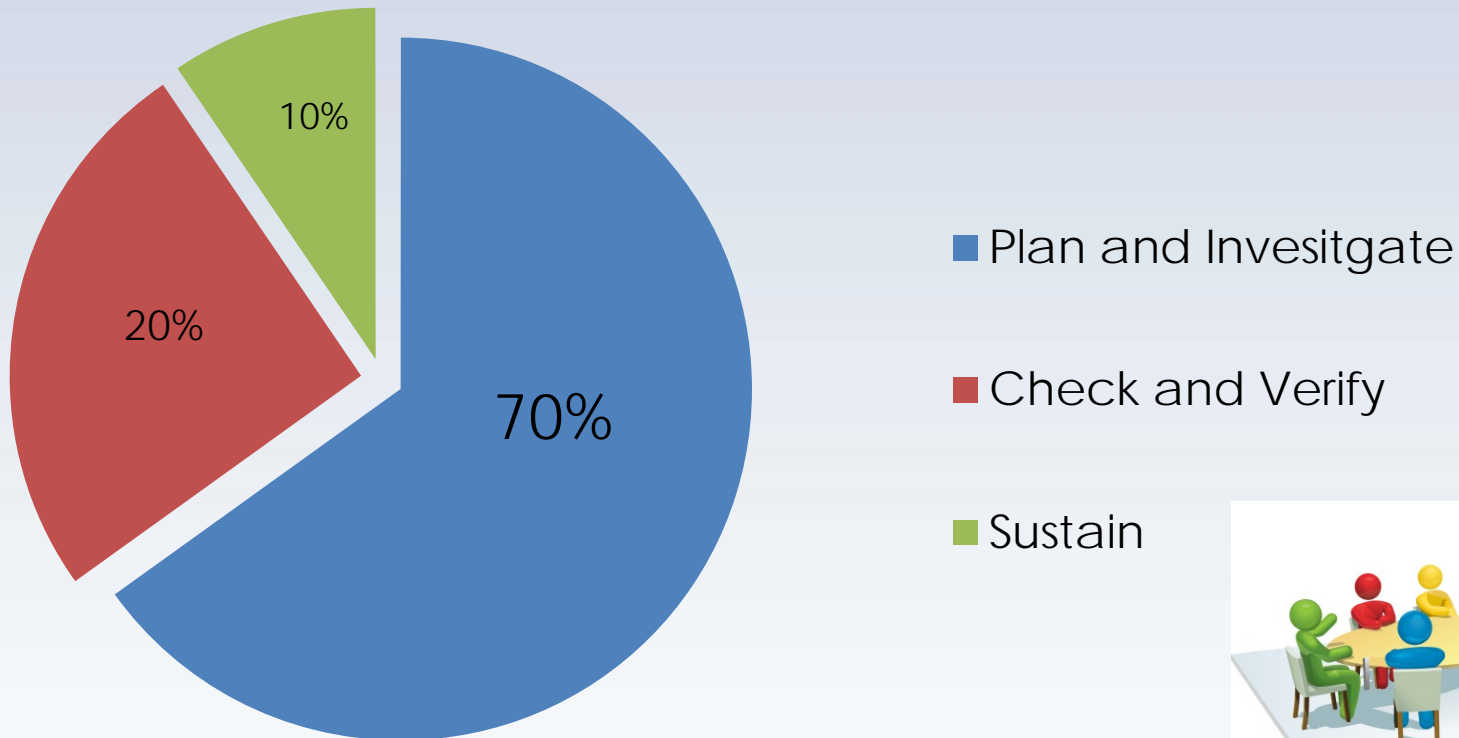# Problem Solving!

PDCA
Summit Expedition

Plan/Prepare

Do

Check/Assess

Adjust

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Time Spent on Problem Solving Elements

Percent of Time

- Plan and Invesitgate
- Check and Verify
- Sustain

70% / 20% / 10%

PDCA

- 2-Day course working on a real problem in the site lab

- Leaders come with A3 started

- Learn various LEAN tools to help identify potiential root causes

Eliminate Waste in Processes

- Overproduction
- Inventory
- Waiting
- Motion
- Movement of materials
- Correction of Defects
- Extra Processing

Effective PS Culture!

- Shares ideas openly
- Evidence and facts based
- The issues or challenges are…
- Encourages the participation of all members on the team!

Leaders GEMBA

- Started training in 2016
- 2-Day course
- Regional Directors, Directors, Managers ~ 50 trained thus far
- More than just rounding with associates
- Observe process
- Engage staff at the frontline

Leadership at GEMBA

- Walk the processes with purpose, NOT as a tourist

- Develop process improvement activities around the Value Stream

- Identify "choke points" in the process and direct focus on gaps

Celebrate Success

- Promote the presentation of success stories at our leadership meetings
- Quality meetings
- Huddles
- Individual and team recognition
- Remember to recognize the associates that prevent issues…

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What we could have done better?

- Train Director level leadership in the new process first!
- Systematic roll-out (Media Labs, DM Power point Presentations)
- Standardization of DM expectations
- Increased communication from Leaders to frontline staff

What we implemented well!

- Having Quality Coordinators designated to each hospital site

- Visual Management provided immediate improvement

- Sensei mentoring

- Changed the way we view a problem

What Matters – Chemistry, Hematology, Microbiology, Histology, Molecular, Cytology, Flow Cytometry, Mass Spectrometry, Digital Imaging and much more

QUESTIONS?