QUALITY LAB MEDICINE: IT ALL STARTS WITH PEOPLE (A TALE IN TWO EXPERIENCES)

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TWO EXPERIENCES TODAY



IE UNIVERSITY OF ABAMA AT BIRMINGHAM Quality improvement through

<u>REVIEW PROCESS</u>



Laboratory Utilization Committee Prevent chaos in committees

Smooth, organized approvals & testing

INTERCONNECTING PEOPLE FOR LAB QI



INTERCONNECTING PEOPLE FOR LAB QI



SILOS OF QUALITY IMPROVEMENT





RESULT OF QI SILOS: CONFUSION!

What is the incidence of blood culture contamination @ UAB?

































SILO-LESS QI ANALYTICS





SILO-LESS QI ANALYTICS

Holistic quality assurance analytics

Ordering	Processing	Interpreting
Collecting	Reporting	Treating



BIG DATA QI ANALYTICS





BIG DATA QI ANALYTICS





BLOOD CULTURE CONTAMINATION: INTERACTIVE VISUALIZATIONS

Contaminations Rate by Collector and Bottle Weight



BLOOD CULTURE CONTAMINATION



BLOOD CULTURE CONTAMINATION



- <u>Personalized</u> feedback & resources
- Competitive engagement



Set C (overburdening):

- Targeted "nurse champion"
- Spend money/FTEs only at points of greatest impact

BLOOD CULTURE CONTAMINATION: BREAK ROOM COMPETITIVE CHART





BLOOD CULTURE CONTAMINATION: RESULTS



BLOOD CULTURE CONTAMINATION: RESULTS



BLOOD CULTURE CONTAMINATION: RESULTS



E THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

NEW PROJECTS



- Different labs!
 - Chemistry hematology reduction
 - Internal Medicine / Pharmacy vancomycin reduction
- Different applications!
 - Modification generates antibiograms for hospitals



INFECTALYTICS TEAM



AND NOW FOR SOMETHING COMPLETELY DIFFERENT...

I'M DROWNING IN SENDOUT REQUESTS!

- Increasing sendout complexity!
 - Molecular methodologies
 - Proprietary formulations
 - Highly specific target populations
 - Rapidly evolving marketplace
- Increasing cost!
 - Targeted testing -- even if not at precision medicine level
 - Targeted *clinician* populations siloed decision making
 - Third party billing easier on the budget, but obscures cost to health system

- Increasing demands!
 - Vendor marketing to clinician
 - Vendor marketing to *patient*
 - Staying "cutting edge"

Vs...

- Health system cost controls
- Insurance cost controls
- Government payer cost controls
- Increasing confusion!
 - What is "evidence based" here?
 - Are we helping patients?
 - How do I get / order / ship / interpret this test I want?

I'M DROWNING IN SENDOUT REQUESTS!

 "Utilization Committee" / "Test Menu Committee" / "Lab Quality Committee" used in many places to address challenges

Goals:

- Evidence-based approval of testing
- Evidence-based use of testing
- Guidelines for best practices in test ordering
- Evaluating alternate testing
- Avoiding unnecessary testing
- Most "bang for buck"
- LEAST important is cost control



CHALLENGES

- Variety of stakeholders
- Reasonable turn around time
- Responsive to clinicians
- Practicality logistics, finance, technical
- Wide variety of expertise required
- "Don't be the bad guy"



LAB UTILIZATION COMMITTEE DESIGN



ONE-STOP SHOPPING: NEW REQUESTS



ONE-STOP SHOPPING: NEW REQUESTS

LAB MEDICINE

Knowledge that will change your world

Submit completed request form along with any additional information to <u>labutilization@uabmc.edu</u> Phone Number: (205) 934-6440 Provider Request for New Diagnostic Testing (NOT for Research Lab Tests)

UAB Laboratory Utilization Committee

Provider / Requester Contact Information

Date	
Provider Name (Required)	
Provider Phone	
Provider Email	
Hospital Location	
Other Requesting Providers	
Test Information	

Test Description / Method	
Clinical Justification	
Vendor Name / Contact Information (email & phone)	
Vendor Website / Test Catalog Link	

Testing for Inpatients, Outpatients or Both?

LÆ	MED	ICINE

Knowledge that will change your world

yes, explain)

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Vendor Website / Test Catalog Link	
Is this test required for a treatment or	⊖ Yes ⊖ No
therapy being introduced to UAB? (if	

LAB UTILIZATION: RESEARCHING TESTS

 Same workflow can be used to permit <u>outside review</u> and <u>market research</u>



- Permits blinded consideration of testing alternatives
- Akin to, but more streamlined than, procurement processes

LAB UTILIZATION: REVIEWING TESTS



- Three-faculty peer review committee
- Other faculty can be recruited ad hoc as needed to provide expertise
- Relevant technical staff may also be included to advise on:
 - ability to pre-process
 - equipment and reagent requirements.

LAB UTILIZATION: REVIEWING TESTS



- Parallel reviews conducted by:
 - Business Affairs cost/benefit analysis; reimbursement; labor and supply costs
 - Sendouts Office collection means; authorizations and orders; logistics and packaging; report processing
- Having these staff offices in loop *before* approval...

...eases implementation *after* approval

LAB UTILIZATION: LIASION METHOD



- One member of peer review committee designated *liaison*
- Liaison and provider work <u>together</u> to produce case for test utilization
- Collaborative, not adversarial
- Identifies many pitfalls before final decision

PUTTING IT ALL TOGETHER



- Full committee meets
 ~ once per month
 as needed
- Liasion + provider present case
- Each review team presents analysis
- Organized inputs allow rich + efficient discussion
- Team for implementation integrated with committee:

no delays or confusion!

RESULTS

- Since implementation, November 2018:
- 16 requests received
 - Includes 8 backlogged requests
- 8 requests inactivated
 - 5 by provider request
 - 3 found inappropriate
- 3 requests implemented
- 2 requests approved, in process
- 4 requests in review pipeline

	UAB MEDICINE LABORATORY UTILIZATION COMMITTEE						
	CATALOG OF TEST REQUESTS RECEIVED						
MASTER CASE DEFINITION						MASTER	
Case ID#	Date rec'd	Name of test	Vendor	Sendout	Requesting physician(s)	Primary use case	Currently
18-01	10/1/18	AlloSure®	CareDx	Yes		Prognosis: Kidney transplant	To review
18-02	10/1/18	Percepta®	Veracyte	Yes	MBA	Diagnosis: Lungcancer	Active
18-08 18-09	10/1/18 10/1/18	Veristrat® Genestrat™	Biodesix Biodesix	Yes Yes	ira-	Prognosis: Lung cancer Treatment strategy: Lung	Inactive Inactive
18-10	10/1/18	Guardant 360®	Guardant Health	Yes	MD	Treatment strategy: Lung cancer	Active
18-03	10/1/18	Envisia®	Veracyte	Yes	1D	Diagnosis: Pulmonary fibrosis	Complete
18-04	10/1/18	Avise®CTD	Exagen	Yes	, MD	Diagnosis: Lupus	Active
18-05	10/1/18	Karius®	Karius	Yes	MD	Diagnosis: Occult infection	Inactive
18-06	10/1/18	AFP-L3	Fujifilm Wako	Yes		Diagnosis: Hepatocellular	Inactive
18-07	10/1/18	DCP	Fujifilm Wako	Yes		Diagnosis: Hepatocellular	Inactive
18-11	11/27/18	Clonoseq™	Adaptive Biotech	Yes		Prognosis: Lymphoblastic	Complete
18-12	12/18/18	Free phenytoin	Beckman-Coulter	No		Treatment strategy: Status epilepticus	Inactive
19-01	3/15/19	Elecsys®Beta- Amyloid Elecsys®	Roche	No		Diagnosis: Alzheimer's	Inactive
19-02	3/15/19	Phospho-Tau	Roche	No		Diagnosis: Alzheimer's	Inactive
19-03	5/6/19	DCISionRT	PreludeDX	Yes		Diagnosis, treatment: DCIS	Active
19-04	5/8/19	CDS1	Мауо	Yes	MD	Diagnosis: Neuromyelitis optio	Preliminary



Process is important

Data gathering is important

But *collaboration* and *communication...*

are indispensable



QUESTIONS?



