POC TESTING: COST V CONVENIENCE

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LEARNING OBJECTIVES

- Describe the one, clear clinical reason to perform lab tests at POCT
- Identify how lab testing impacts health screening, management of peri-acute conditions and chronic disease management
- Discuss more about the relationship between MACRA and in office lab testing
- Explain information on lab testing and morbidity/mortality for the 10 leading causes of death in the US
- Assess how utilization management influences test selection

DISCUSSION TOPICS

- Managing patient wellness and acute intervention visits
  - Clinical rationale for point of care testing
  - Vital signs and Lab tests: thoughts on their synergy
  - Patient centric rationale
- Leveraging the "obvious": 2-3% 0f the cost; 70% of the decisions
  - Is it really that simple?
  - Myth v reality: What does the data say?
- Can we truly reduce cost and improve patient outcomes with POC lab testing?
  - Cancer/FIT/FOBT
  - Diabetes/A1C
  - Influenza
- Utilization management: policing or coaching, or both
- Why test and why NOT test at the point of care?
  - Answering the fundamental question
  - Tests that make sense at the point of care; tests that need specific settings and expertise to make sense
  - What criteria must be satisfied for successful point of care testing implementation?
    - Readiness, willingness and ability to test are critical parameters
- Wrapping it all up: POC and YOUR budget

CLINICAL PERSPECTIVE ON POC TESTING

The primary reason to select POC testing:

To have tests available during the patient encounter that can be used to initiate or modify a patient treatment program

Speed diagnosis, OR assess progress after initiation of therapy

Provide a progress assessment to the patient

Confirm patient compliance with a treatment program

Diet, exercise, use of medication, lab tests, specialist treatment

Enable positive communication and solidify the relationship with the patient

Help the patient to understand and internalize THEIR responsibility for managing and maintaining their health

VITAL SIGNS…IMPORTANT BUT NOT ENOUGH

Vital signs are a critical element of every patient encounter

- Temperature, respiration, pulse rate, weight, heart and lung exam by stethoscope
  - Why these parameters?
  - Are you healthy or asymptomatic?
  - If you have symptoms, what do you have and can I "fix" it?

What is the credible role of lab testing in this setting?

Hypothesis: Vital signs in combination with specific lab tests are complementary at the point of care General Screening, Risk Based Screening, Treatment Plan Follow up, Acute Symptoms. Vitals and labs work together for the most common patient presentation scenarios:

Typical reasons a patient presents for care

- Well patient physical
- Medicare annual wellness visit
- Peri-acute conditions: presentation of symptoms
  - General malaise/physical discomfort/fever/infection
  - Respiratory symptoms
  - Shortness of breath/discomfort upon exertion
  - Unusual thirst, frequent urination, mental confusion
- Treatment Plan Follow up

PATIENT CONVENIENCE…

Hey, people, there's a patient in here…

One healthcare trip not two or more

Rather than one healthcare visit followed (or not) by a trip to the lab

Avoid putting the lab test request slip in the garbage can… maybe along with the FOBT test card

Understand where you are with your health and what you should do about it

Increase confidence in your clinical care giver team

ASK, learn and take charge of your health

How many needed tests DON'T get done due to inconvenience?
Check your LIS/EMR for "pending" test requests

SO, WHY TEST? MACRA AND MEDICARE

MACRA: Medicare Access and CHIP Reauthorization ACT: 2015 Federal law. Establishes physician practice metrics for quality, cost, improvement activities and promoting interoperability.

- ***Links quality of care and patient outcomes to reimbursement***
- ***Rewards patient care quality, not quantity***

WHAT ARE THE NEW MACRA PROGRAMS AND METRICS?

There are two pathways to implement MACRA for physician practices

Merit-based Incentive Payment System (MIPS)

- Quality
- Cost (begins in 2019)
- *Improvement activities*
- *Promoting Interoperability*

Advanced Alternative Payment Methods (APM)

How does lab testing fit into MACRA?

- Lab directly impacts 3 out of 4 MACRA metrics
  - Lab results factor into the 277 Quality metrics
    - Examples include liver panel testing for alcohol abuse metrics and statin use as well as pediatric ADHD medication management and anti-depressant medication
  - Lab results coupled with EHR/LIS impact Improvement Activities and Promoting Interoperability

MACRA: LOVE THE CARROT; BEWARE THE STICK!

Based on clinician scores on MACRA metrics, the clinician will either receive favorable reimbursement increases or unfavorable reimbursement decreases

Year	Reimbursement Modifier
2019	+/- 4%
2020	+/- 5%
2021	+/- 7%
2022	+/- 9%
2023 forward	+/- 9%

LAB COSTS AND MEDICAL DECISION MAKING

Leveraging the "obvious": 2-3% 0f the cost; 70% of medical decisions

Is it really that simple?

- While widely quoted, the 2-3% of cost, 70% of medical decisions is over-simplified
- The truth about cost: from the 2016 Office of the Inspector General Report

  Medicare payments for lab tests under the Clinical Laboratory Fee Schedule totaled $6.8 billion in 2016, accounting for about 2 percent of all Part B payments in 2016
- The truth about lab data and medical decisions:
  - In 2017, there were 1173 lab CPT codes in the Clinical Lab Fee Schedule
  - It's all about Pareto's rule: the top 25 lab tests account for over 60% of all spending on lab tests
  - Spending is concentrated on tests with high clinical value in screening and making immediate medical decisions, e.g. TSH, CMP, CBC, lipids, Vitamin D, A1C

Sources: Lewin Report 2009, COLA, AACC, OIG September, 2016 Report

DOES PATIENT SCREENING REDUCE MORBIDITY AND MORTALITY?

The preponderance of the evidence worldwide confirms that it does

- MOST of the 10 leading causes of death in the US are declining
  - Screening and changes in health habits are largely responsible
- Diabetes testing and both colorectal and prostate testing have been researched extensively worldwide
  - Recommendations have been made to screen in at risk certain populations
    - Data shows the results
- Screening for infectious diseases, while somewhat controversial for some respiratory diseases, shows a reduction in morbidity and mortality
  - CDC recommends HIV, HPV and HCV screening

IS LAB TESTING MAKING A DIFFERENCE IN PATIENT OUTCOMES?

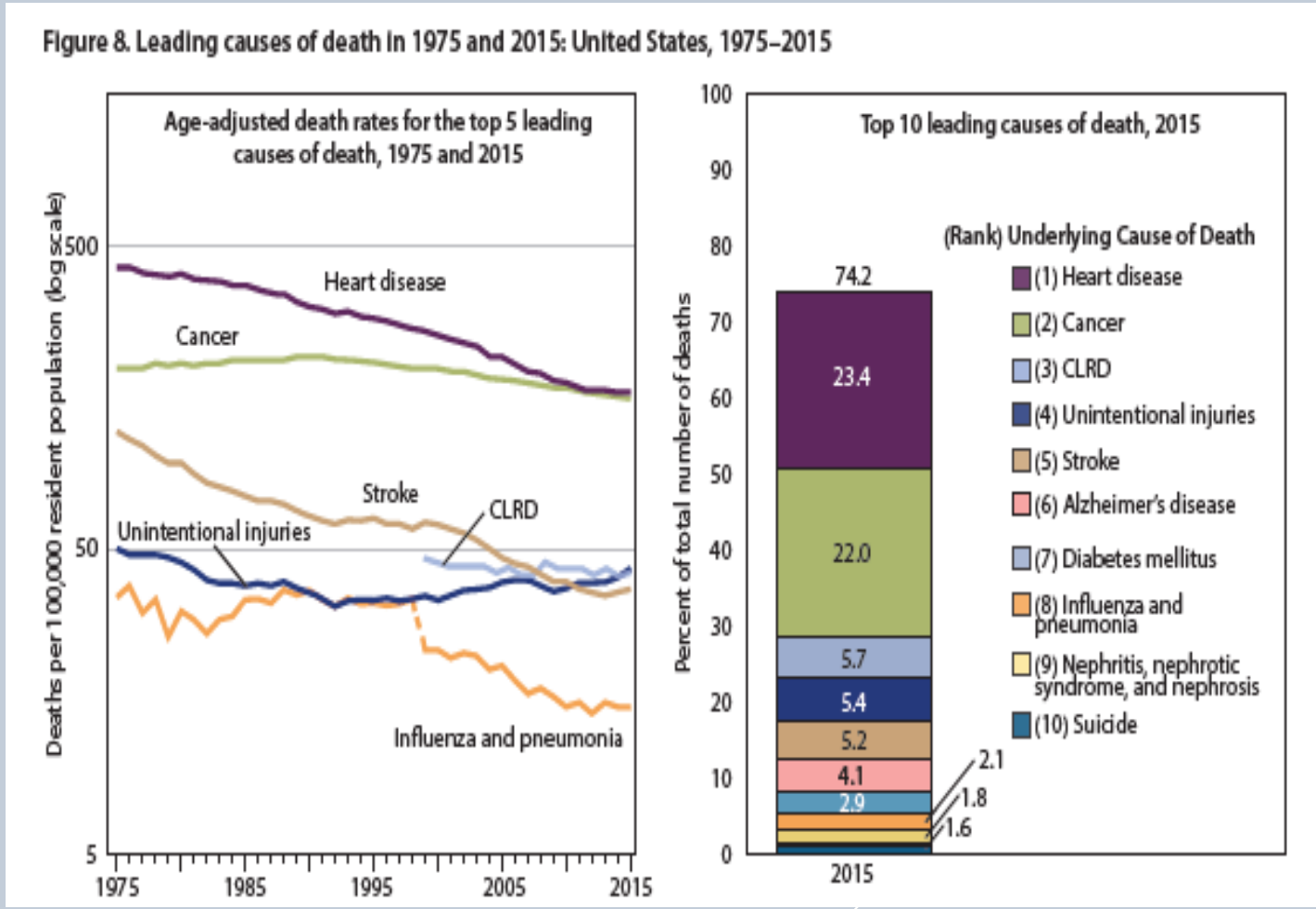
USPSTF

Figure. Benefits, Harms, and Burdens of Colorect

A Benefit: Life-years gained per 1000 individuals screened

Screening Method and Frequency	Model Estimates, Life-Years Gained per 1000 Screened		
	Middle	Low	High
Flexible sigmoidoscopy every 5 y	221	181	227
FIT-DNA every 3 y	226	215	250
FIT every year[a]	244	231	260
HSgFOBT every year	247	232	261
CT colonography every 5 y[b]	248	226	265
Flexible sigmoidoscopy every 10 y plus FIT every year[a]	256	246	270
FIT-DNA every year	261	246	271
Colonoscopy every 10 y[a]	270	248	275

CDC



NIH/NCBI

Diabetes mellitus is increasingly becoming an older person disease due to the increased survival and aging of the population. Previous studies which showed benefits of tight glycemic control and a linear relationship between HbA1c and mortality have largely included younger patients newly diagnosed with diabetes and with less comorbidities. Recent studies, which included older population with diabetes, have

Screening updates: CRC screening age at initiation lowered to 45 from 50
PSA screening recommendation re-instituted for men 55 to 69
Source: USPSTF

A1C AND POC: PRE-DIABETES SCREENING SUCCESS

POCT HbA1c Boosts Screening, Identification of Prediabetes, Diabetes

The Sample: May 2017

Date: MAY.1.2017 // **Source:** Clinical Laboratory News

Topics: Chronic Diseases, Delivery Methods, Lab Management, Testing Methods

Acomparison of point-of-care (POCT) HbA1c testing versus standard diabetes screening tests in family medicine clinic patients found that POCT HbA1c identified significantly more patients with previously undiagnosed hyperglycemia and prediabetes (Ann Fam Med 2017;15:162–4). The authors also determined that systematically screening patients via POCT HbA1c "greatly increases the chances for a screen to occur."

The study compared POCT HbA1c and standard test results in demographically similar clinic patients who were at least 45 years old and not already diagnosed with diabetes who had not received HbA1c testing within the past year or taken steroids within the past 3 months. Overall, 324 were included in the standard practice arm of whom 73 (22%) received testing, nearly all undergoing fasting or random blood glucose tests. Another 164 patients underwent POCT HbA1c testing with 90% of those offered consenting to this type of testing.

POCT HbA1c in comparison to standard testing identified significantly more patients who unknowingly had diabetes or prediabetes, 10% and 53%, respectively, versus 8% and 33%. HbA1c cutoffs were ≤5.6% for euglycemia, >5.7–6.4% for prediabetes, and ≥6.5% for diabetes.

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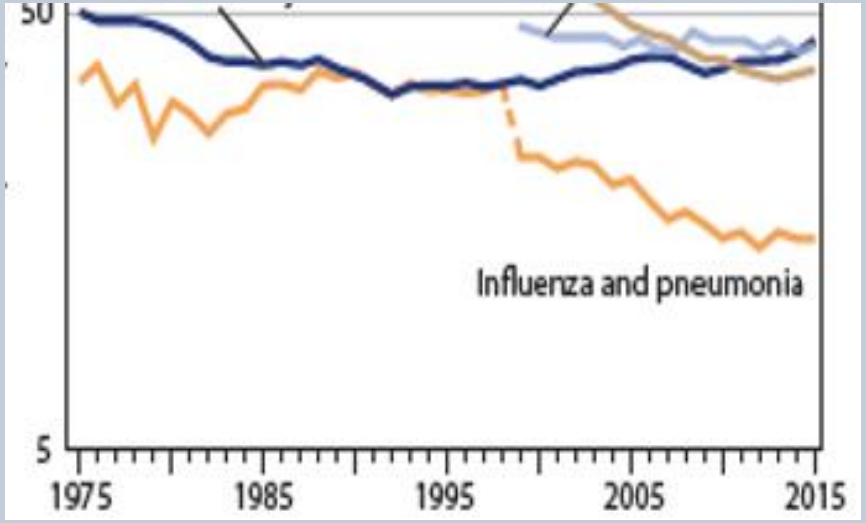
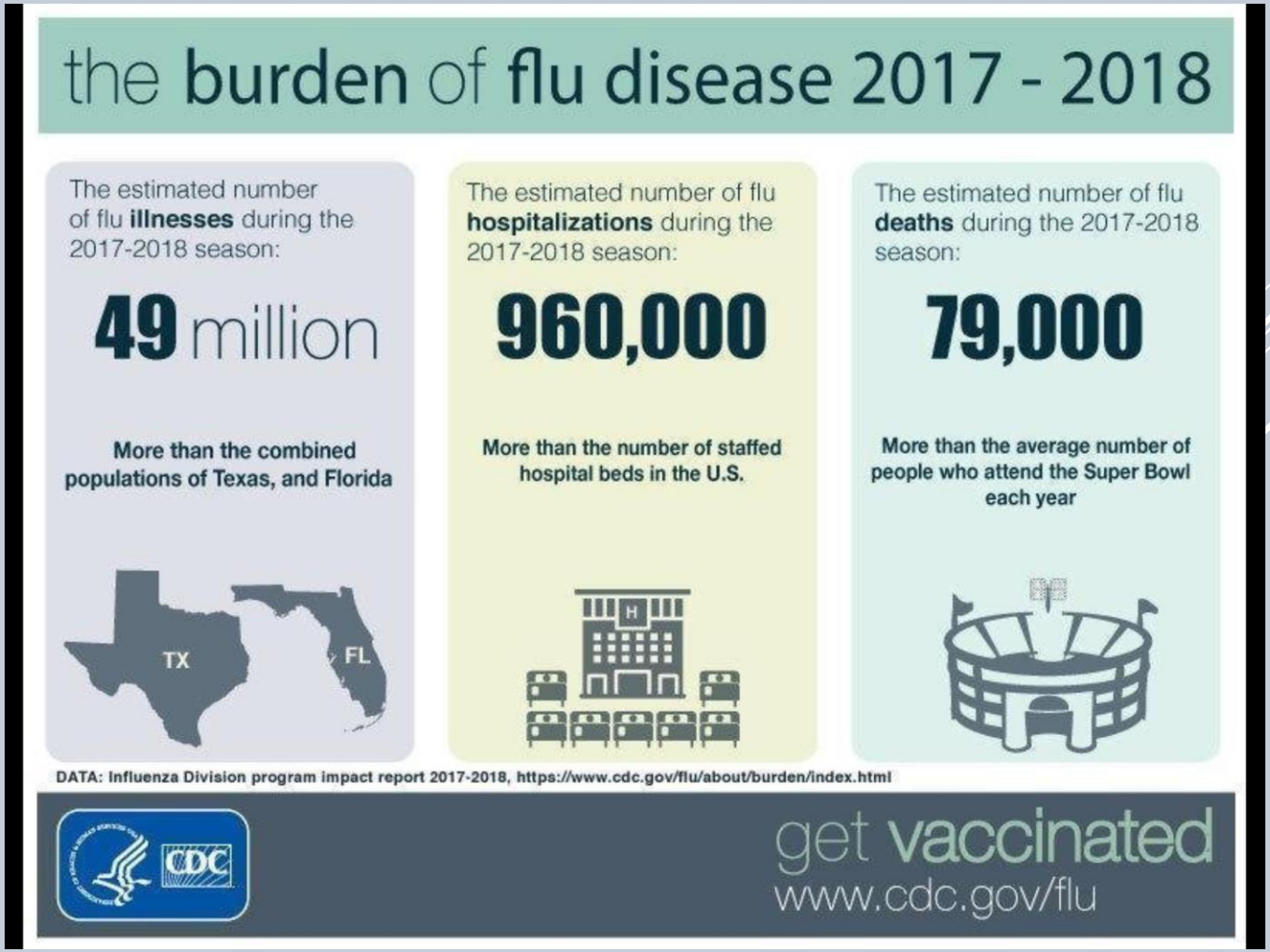
INFLUENZA: MAKING THE CASE FOR POC

Influenza is a key seasonal cause of morbidity and mortality





KEY WAIVED MOLECULAR FLU TESTS

Complexity	Manufacturer	Product	Platform/ Instrument	Influenza Virus Types Detected	Influenza Virus Subtypes Detected	Other Respiratory Viruses Differentiated	Approved Specimens	Test Time
CLIA waived	Abbott	ID NOW™ Influenza A & B 2	ID NOW™ Platform	Influenza A and B	None	None	NPS, NS direct, or NPS and NS in VTM	<15 min
CLIA waived	BioFire, Inc. / BioMerieux	FilmArray® Respiratory Panel EZ	FilmArray 2.0 EZ	Influenza A and B	H1, H1pdm09, H3	Adenovirus, Coronavirus, Human Metapneumovirus, Human Rhinovirus/Enterovirus, Parainfluenza Virus, Respiratory Syncytial Virus	NPS in VTM	1-2 hr
CLIA waived	Cepheid	Xpert Xpress Flu	GeneXpert Xpress	Influenza A and B	None	None	NPS, NS in VTM	30-60 min
CLIA waived	Cepheid	Xpert Xpress Flu/RSV	GeneXpert Xpress	Influenza A and B	None	Respiratory Syncytial Virus	NPS, NS in VTM	30-60 min
CLIA waived	Mesa Biotech. Inc	Accula Flu A/Flu B	Accula Dock	Influenza A and B	None	None	NS direct	<30 min
CLIA waived	Roche Molecular Diagnostics	Cobas® Influenza A/B Assay	Cobas® Liat® Analyzer	Influenza A and B	None	None	NPS in VTM	<30 min
CLIA waived	Roche Molecular Diagnostics	Cobas ®Influenza A/B & RSV Assay	Cobas® Liat® Analyzer	Influenza A and B	None	Respiratory Syncytial Virus	NPS in VTM	<30 min
CLIA waived	Sekisui Diagnostics	Silaris Influenza A & B	Silaris Dock	Influenza A and B	None	None	NS direct	<30 min

A SAMPLE OF MODERATE COMPLEXITY FLU TESTS

Moderate	BioFire, Inc. BioMerieux	FilmArray Respiratory Panel	FilmArray® FilmArray® Torch	Influenza A and B	H1, H1pdm09, H3	Adenovirus, Coronavirus (HKU1, NL63, 229E, OC43), Human Metapneumovirus, Human Rhinovirus/Enterovirus, Parainfluenza Virus (1, 2, 3, 4) Respiratory Syncytial Virus	NPS in VTM	1-2 hr
Moderate	BioFire, Inc. BioMerieux	FilmArray Respiratory Panel 2	FilmArray 2.0® FilmArray® Torch	Influenza A and B	H1, H1pdm09, H3	Adenovirus, Coronavirus (HKU1, NL63, 229E, OC43), Human Metapneumovirus, Human Rhinovirus/Enterovirus, Parainfluenza Virus (1, 2, 3, 4) Respiratory Syncytial Virus	NPS in VTM	30-60 min
Moderate	BioFire, Inc. BioMerieux	FilmArray Respiratory Panel 2 plus	FilmArray®2.0 FilmArray® Torch	Influenza A and B	H1, H1pdm09, H3	Adenovirus, Coronavirus (HKU1, NL63, 229E, OC43), Human Metapneumovirus, Human Rhinovirus/Enterovirus, MERS-CoV, Parainfluenza Virus (1, 2, 3, 4) Respiratory Syncytial Virus	NPS in VTM	30-60 min
Moderate	Cepheid	Xpert Flu	GeneXpert	Influenza A and B	H1pdm09	None	NPS in VTM, NA, NW	1 hr
Moderate	Cepheid	Xpert Xpress Flu/RSV	GeneXpert	Influenza A and B	None	Respiratory Syncytial Virus	NPS, NW, NA in VTM	1 hr
Moderate	Cepheid	Xpert Xpress Flu	GeneXpert	Influenza A and B	None	None	NPS in VTM	30-60 min
Moderate	Cepheid	Xpert Xpress Flu/RSV	GeneXpert	Influenza A and B	None	Respiratory Syncytial Virus	NPS in VTM	30-60 min
Moderate	Focus Diagnostics (DiaSorin)	Simplexa™ Flu A/B & RSV Direct	Integrated Cycler	Influenza A and B	None	Respiratory Syncytial Virus	NPS in VTM	<2 hr
Moderate	Focus Diagnostics (DiaSorin)	Simplexa™ H1N1 2009	Integrated Cycler	Influenza A	None	Respiratory Syncytial Virus	NPS, NA, NPA	2-4 hr
Moderate	GenMark Diagnostics	ePlex Respiratory Pathogen Panel	ePlex	Influenza A and B	H1, H1pdm09, H3	Adenovirus, Coronavirus (229E, HKU1, NL63, OC43), Human Metapneumovirus, Human Rhinovirus/Enterovirus, Parainfluenza (1, 2, 3, 4), Respiratory Syncytial Virus (A, B)	NPS in VTM	2 hr
Moderate	Biocartis	Idylla™ Respiratory IFV-RSV Panel	Idylla	Influenza A and B	H1, H1pdm09, H3, H275Y mutation (H1N1pdm09)	Respiratory Syncytial Virus	NPS in VTM	30-60 min
Moderate	Luminex	Aries® Flu A/B & RSV	Aries	Influenza A and B	None	Respiratory Syncytial Virus	NPS in VTM	1-2 hr

IF FLU TESTING WORKS, WHAT HAPPENED HERE??

National and Regional Summary of Select Surveillance Components

HHS Surveillance Regions*	Data for current week			Data cumulative since October 1, 2017 (week 40)						
	Out-patient ILI†	Number of jurisdictions reporting regional or widespread activity§	% respiratory specimens positive for flu in clinical laboratories‡	A (H1N1) pdm09	A (H3)	A (Subtyping not Performed)	B Victoria lineage	B Yamagata lineage	B lineage not performed	Pediatric Deaths
				Influenza test results from public health laboratories only						
Nation	Elevated	46 of 54	15.0%	4,415	28,950	413	722	6,562	2,748	128
Region 1	Elevated	5 of 6	25.5%	249	1,723	4	43	428	38	4
Region 2	Elevated	3 of 4	22.0%	263	1,628	10	15	254	279	8
Region 3	Elevated	4 of 6	18.8%	858	3,153	10	159	867	93	12
Region 4	Elevated	8 of 8	14.0%	779	2,705	96	32	562	531	33
Region 5	Elevated	6 of 6	24.2%	692	6,349	83	48	1,149	169	24
Region 6	Elevated	4 of 5	16.3%	345	1,285	8	2	355	373	22
Region 7	Elevated	4 of 4	20.2%	76	1,134	12	3	434	34	2
Region 8	Elevated	6 of 6	15.6%	253	2,524	17	96	714	61	2
Region 9	Elevated	3 of 5	13.4%	583	7,068	166	313	1,344	769	17
Region 10	Elevated	3 of 4	17.6%	317	1,381	7	11	455	401	4

What else is out there?

- Rhinovirus
- Coronavirus
- Adenovirus
- Parainfluenza viruses
- RSV Viruses

Oh, Yeah,
It doesn't hurt to have a good swab

Upper respiratory conditions have multiple etiologic organisms; where do we stop?

POC TESTING AND UTILIZATION MANAGEMENT

The good news is, with national efforts like the Choosing Wisely campaign now underway, UM has left the confines of the clinical laboratory. While the duties of clinical laboratory professionals have never truly ended at the walls of the laboratory, the truth of this is now more apparent than ever. Addressing UM concerns is simply a matter of:

- reviewing your test menus for obsolete tests;
- creating reflexive test algorithms to ensure appropriate pre-test probabilities;
- crafting targeted pop-up messages;
- starting a laboratory test formulary committee;
- developing and delivering provider report cards; and
- pairing all of this with appropriate education.

Quoted from Geoffrey Baird, Bench Matters, December 2015

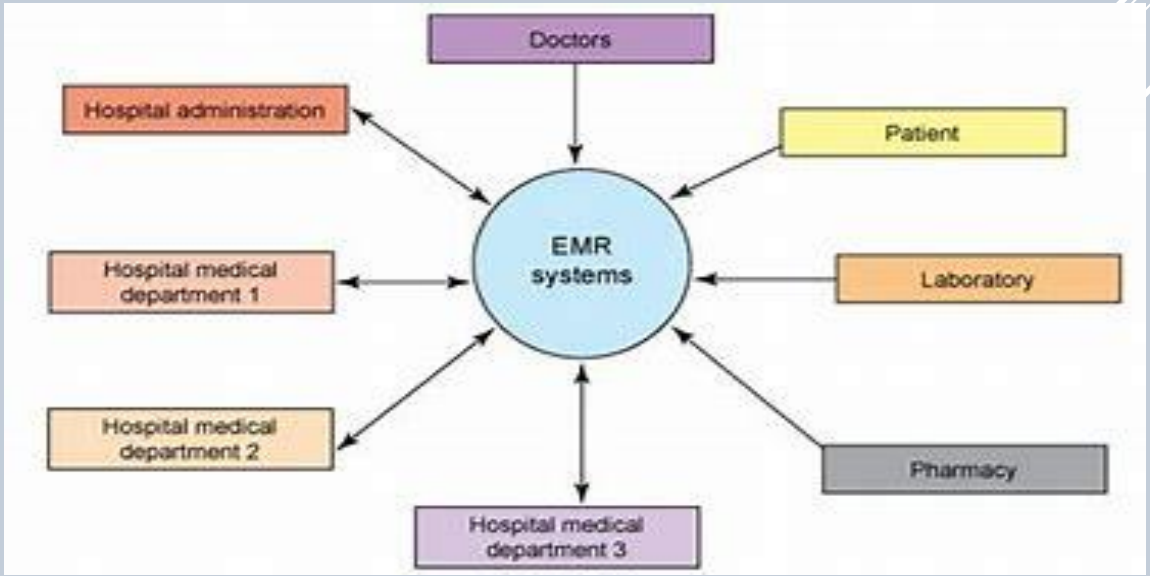
PUTTING "UTILITY" IN UTILIZATION MANAGEMENT

Key challenges to remember with decentralized POC

- Reference ranges should be looked at because it could be different from main lab reference ranges.
- Storage requirements for the test, look into conductivity and databases, Policies and procedures
- If the doctor's office is part of a system there should be standardization across the system
- Check to make sure that the tests are truly waived test and not moderate
- According to the guidelines is the medical director on the CLIA license appropriate?
- If the tests are moderately complex make sure that everyone involved in the testing from the medical director to the people training to the testers have the appropriate education.

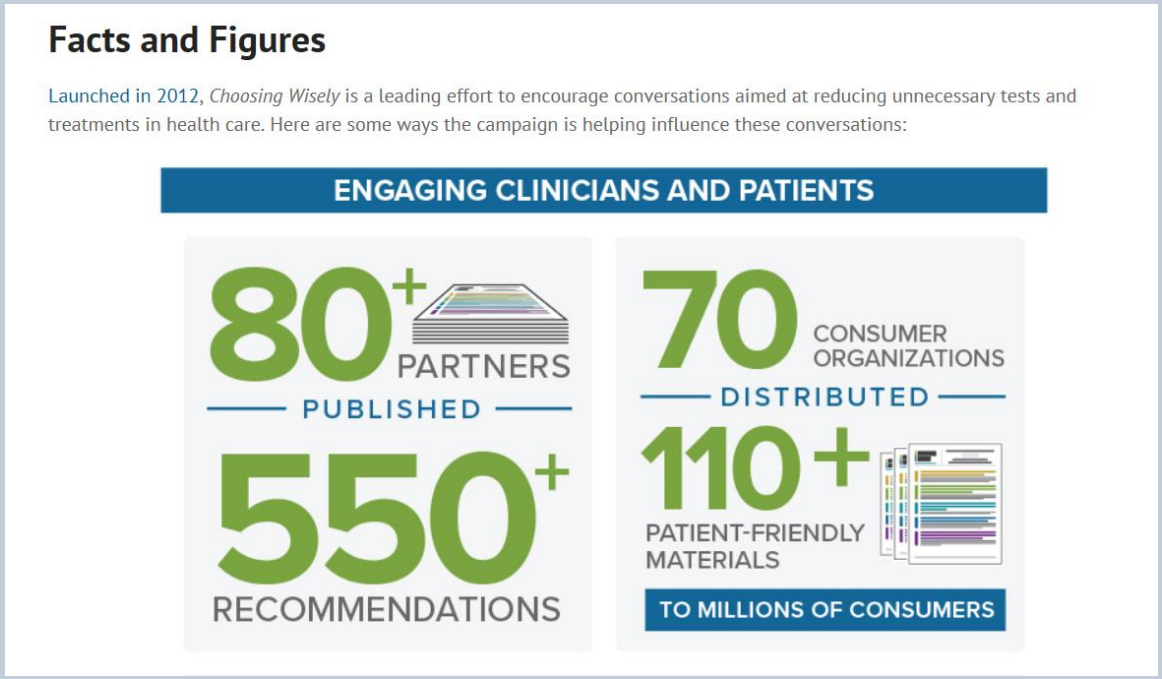
EMR: TRUTH OR DARE…

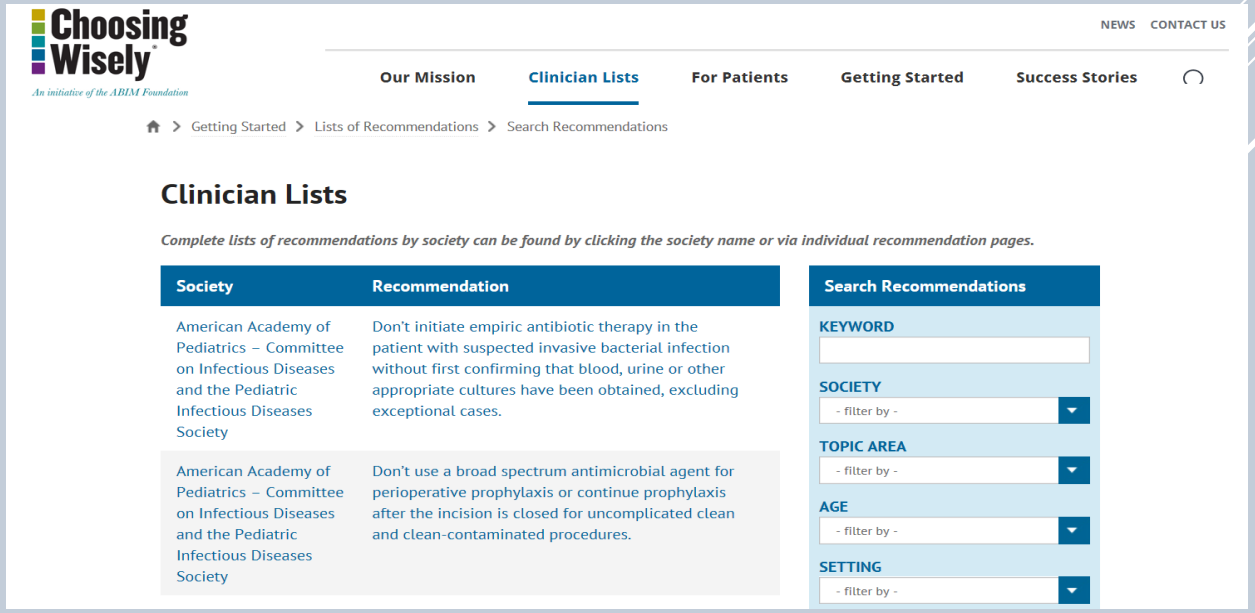
Performance Category	2019	2020	2021
Quality	60%	50%	30%
Cost	0%	10%	30%
Improvement Activities	**25%**	**25%**	**25%**
Promoting Interoperability	**15%**	**15%**	**15%**



TEST SELECTION: MULTIPLE VIEWS AND CHOICES

PEER SUPPORT: CHOOSING WISELY PROGRAM





http://www.choosingwisely.org/

WELLNESS MANAGEMENT: THE BROADEST VIEW OF POC TESTING

Situation	Diseases screened for	Some test examples	Waived
General screening	Heart disease, diabetes, general health, anemia	CBC, CMP, BMP, Glucose, urinalysis	Yes
Risk based screening	HIV, HCV, colorectal cancer, lead poisoning, stroke	HIV, HCV, CBC, FOB/FIT, lead, PT/INR, myoglobin, d-dimer, lipids, HPV	Most
Follow up	Diabetes, lipids/cardiac, clotting/stroke, kidney, UTI	PT/INR, lipids, A1C, urinalysis, ALT/AST	Yes; All
Acute onset of symptoms	respiratory, GI pain, anemia/bleeding, UTI, disorientation, dehydration	Flu, strep, RSV, CBC, urinalysis, gastric blood, amylase, glucose	Yes, All

CHRONIC DISEASE AND POC TESTING…

Disease	Screening test available?	Is screening waived?	Monitoring Test available?	Is monitoring waived?
Heart Disease	Yes	Yes; e.g. BNP	Yes	Yes; e.g. BNP
Cancer	Yes; FOBT/FIT/PSA	Yes; iFOBT in particular	Yes	No
Chronic lower respiratory disease	Yes; electrolytes, blood gas	Some electrolytes	Yes	Some electrolytes
Cerebrovascular (stroke)	Yes	Some; d-dimer, PT/INR	Yes	Some; d-dimer, PT/INR
Unintentional Injuries	N/A			
Alzheimer's Disease	N/A	Rule out tests exist		
Diabetes mellitus	Yes	Yes; glucose	Yes; A1C	Yes
Pneumonia and influenza	Yes	Rapid pneumonia and flu tests	N/A	N/A
Kidney disease	Yes	Yes; creatinine, BUN	Yes; creatinine, BUN	Yes
Intentional self-harm	N/A	N/A	N/A	N/A

Chronic diseases in the 10 leading causes of death daily comprise most non acute patient encounters

RECOMMENDED CORE POC TESTS

What's the test?	Why?	CLIA Category	Thoughts/comments
Hemoglobin	Quick check for anemia	Waived	Fast, easy, accurate
hCG	Pregnancy can strike at any time	Waived	Important for nutritional needs, pre-natal care and before imaging studies
Urinalysis	Fast, easy, non invasive health screen	Waived	Should be part of every annual physical
Glucose	Diabetes, especially type 2, is on the rise worldwide	Waived	Treatment can't begin without a good diagnosis; use an accurate quantitative test
CBC	Infection, anemia, general health	Waived/Moderate	Next to glucose, UA and hCG, the best tool in the general use lab tool belt
CMP	General metabolic assessment	Waived/Moderate	Tells the story of overall patient status in health AND disease
BMP	Limited general health assessment	Waived/Moderate	Less data; typically no liver function tests
Lipid profile	Lipid disorders lead to serious complications and are often related to diabetes	Waived/Moderate	Use of statins has made lipid tests fundamental in adult medicine
A1C	Knowing average glucose level over time	Waived/Moderate	Are Ward and June sticking to their diet? How well controlled is their diabetes?
Flu	Know what you are treating	Waived/Moderate	Only about 30% of all flu tests are positive; ever wonder what the other causes are?
Strep	Prevent very dangerous complications	Waived/Moderate	Before antibiotics, strep was a serious cause of illness and death
RSV?	Some practices love it; others want it done in a more sophisticated lab	Waived/Moderate	This test has arguments for and against in house testing; new, molecular tests make it a better in office test choice than ever
FIT/FOBT	Colorectal cancer is highly curable if detected early	Waived	Colonoscopy has left these tests "behind" to a large extent; they are still important

SECONDARY TESTS BASED ON PATIENT POPULATION

What's the test	Practice type/patient type	CLIA category	Thoughts/comments
Lead	Pediatric	Waived	Can prevent serious neurological damage via early detection
TSH	GP/IM/OBG	Waived/Moderate	Useful at annual physical
Free T4	GP/IM/OBG	Moderate	Reflex with abnormal TSH
PSA	GP/IM/URO	Moderate	New, multiple assay tests including PSA are better than ever
PT/INR	GP/IM/Cardio	Waived/Moderate	Important follow up for clotting disorders
BNP	GP/IM/Cardio	Waived/Moderate	Detect/follow up on heart failure
B12/Folate	GP/IM/OBG	Moderate	Differential diagnosis of anemia
Vitamin D	GP/IM/OBG/Etc	Moderate	Depending on who you believe, either everyone or no one has a Vitamin D deficiency

WHEN THE RIGHT TREATMENT SETTING AND EXPERTISE IS CRITICAL

Test name	Why Screen?	Why Not?
Troponin I	Speed AMI Dx	Treatment options?
Electrolytes	Metabolic imbalance/cardiac issues	Treatment options?
Blood gases	Metabolic imbalance	Invasive; skill/practice required
Toxicology	Patient counseling	Equipment and staff requirements
RSV	Knowing ASAP is important	Technology limitations*

***new molecular tests dramatically improve NVP in particular**

LESS ADVISABLE SCREENING SCENARIOS

A list of 37 clinical diagnostic scenarios produced by the American College of Physicians and published in Annals of Internal Medicine includes many uses of lab tests that, according to ACP's physician workgroup, do not reflect high-value, cost-conscious care.

Examples of lab tests include:

- Measuring brain natriuretic peptide in the initial evaluation of patients with typical findings of heart failure.
- Annual lipid screening for patients not receiving lipid-lowering drug or diet therapy in the absence of reasons for changing lipid profiles.
- In asymptomatic women with previously treated breast cancer, performing follow-up complete blood counts, blood chemistry studies, tumor marker studies, chest radiography, or imaging studies other than appropriate breast imaging.
- Screening low-risk individuals for hepatitis B virus infection.
- Screening for cervical cancer in low-risk women age 65 years or older and in women who have had a total hysterectomy (uterus and cervix) for benign disease.
- Screening for colorectal cancer in adults older than 75 years or in adults with a life expectancy of less than 10 years.
- Screening for prostate cancer in men older than 75 years or with a life expectancy of less than 10 years.
- Using CA-125 antigen levels to screen women for ovarian cancer in the absence of increased risk.
- Ordering routine preoperative laboratory tests, including complete blood count, liver chemistry tests, and metabolic profiles, in otherwise healthy patients undergoing elective surgery.
- Performing preoperative coagulation studies in patients without risk factors or predisposing conditions for bleeding and with a negative history of abnormal bleeding.
- Performing serologic testing for suspected early Lyme disease.
- Performing serologic testing for Lyme disease in patients with chronic nonspecific symptoms and no clinical evidence of disseminated Lyme disease.
- Performing imaging studies, rather than a high-sensitivity D-dimer measurement, as the initial diagnostic test in patients with low pretest probability of venous thromboembolism.
- Measuring D-dimer rather than performing appropriate diagnostic imaging (extremity ultrasonography, CT angiography, or ventilation–perfusion scintigraphy), in patients with intermediate or high probability of venous thromboembolism.
- Performing an antinuclear antibody test in patients with nonspecific symptoms, such as fatigue and myalgia, or in patients with fibromyalgia.

Source: Ann Intern Med 2012;156:147-149.

WHAT DOES IT TAKE TO ASSURE EFFECTIVE TESTING

- **Readiness**
- **Willingness**
- **Ability**

Test selection is critical, but commitment and planning assure proper testing results

READY TO TEST

- **Ready** to perform which tests?
- **Focus on tests that can be performed and discussed during the patient visit (15 minutes or less)**
  - **This would include lipids, urinalysis, rapid pregnancy, respiratory and some cardiac markers as well as hemoglobin A1c**
- **Facility Ready**
  - **Space, water, power**
  - **Patient privacy**
  - **Medical records/EMR**
- **Staff Ready**
  - **Roles and responsibility established**
  - **Training plan in place and effective**
  - **Motivation/interest/understanding importance to the patient and practice**
- **Patients Ready**
  - **Informed and understand the rationale**
- **Insurance Ready**
  - **Understand which carriers permit testing**
- **License Ready**
  - **CMS 116 completed and CLIA number established and up to date?**

WILLING TO TEST

- **Willingness involves both confidence in the testing mission and commitment to implement the lab tests and overcome obstacles along the way**

- Clinicians and staff need to be committed to the decision to test at POC
- Needs to portray confidence to the patients of the practice
  - Most practices find patients prefer this level of service during the visit

Needs to be prepared for "speedbumps": product back orders, training plan modifications, facility modifications and the like

  - They are all part of establishing a new level of service and will become routine over time
- Willingness will help assure that the tests performed are continually challenged and how efficiently it manages this element of the practice.

Staff reluctance and training issues are key reasons for issues

ABLE TO TEST

- **Ability: tests every element of "readiness" and is the final assurance that the laboratory will run smoothly and provide the service level the practice and patients expect**
- Licensing, test selection and personnel considerations are paramount and need thorough understanding and evaluation
  - Coordination with POCC and central lab are critical
- On going training for all practice staff involved in lab testing is both required and important
  - Continuing education is an essential element of an efficient, modern lab
- Have a back up staff plan in place BEFORE initialization of testing
  - Assure at least two personnel are ready, willing and able to perform tests to avoid service interruptions
- Be prepared for patient questions about why the practice performs some tests and not others

IMPLEMENTATION ESSENTIALS…

Successful POC implementation includes

- Coordination with POCC and central lab
- Staff meeting to introduce the solution
- Staff training
- Patient brochures and information
- Announcement to the patients

POC IMPACT ON BUDGETS AND COST OF CARE

- **Can POC testing be justified on the basis of saving money on the lab budget?**
  - **Hypothesis: reductions in morbidity and mortality are SYSTEM WIDE health care cost impacts**
  - **There is SOME empirical data that patient cost and convenience can be captured by MACRA patient satisfaction metrics**
  - **Longitudinal patient morbidity and mortality data are the only true measure of the economic benefits of POC testing**
    - **Geisinger, Vanderbilt, MANY others are collecting data**
- **Over time the overall health system can/will experience reductions in patient costs due to preventing avoidable acute interventions, reducing morbidity and forestalled mortality (you don't win that one)**

THOUGHTS, QUESTIONS, COMMENTS…