

LabCorp Partnership in Value Based Care



Version 1, 1-2017

- Health Care Trends
- LabCorp and Value Based Care
- Improving Quality and Reducing Cost
- LabCorp *Insight Analytics* Report for LPCA

Healthcare Trends. Change is Upon Us



Government

- CMS driving innovation. Transition from FFS.
- Emphasis on quality and outcomes.
- MSSP plans

Private Payers

- Promoting value based agreements
- Commercial and Medicare Advantage space.
- Managed Medicaid
- Employers frustrated with FFS model.

Value Based Payments

- Pay for Performance
- More risk-sharing arrangements with providers.



Regulatory

- MACRA, MIPS and Advanced Payment Models drive Medicare physician fee schedules
- PAMA: significant lab fee schedule reductions began January, 2018 (up to 30% over 3 years)

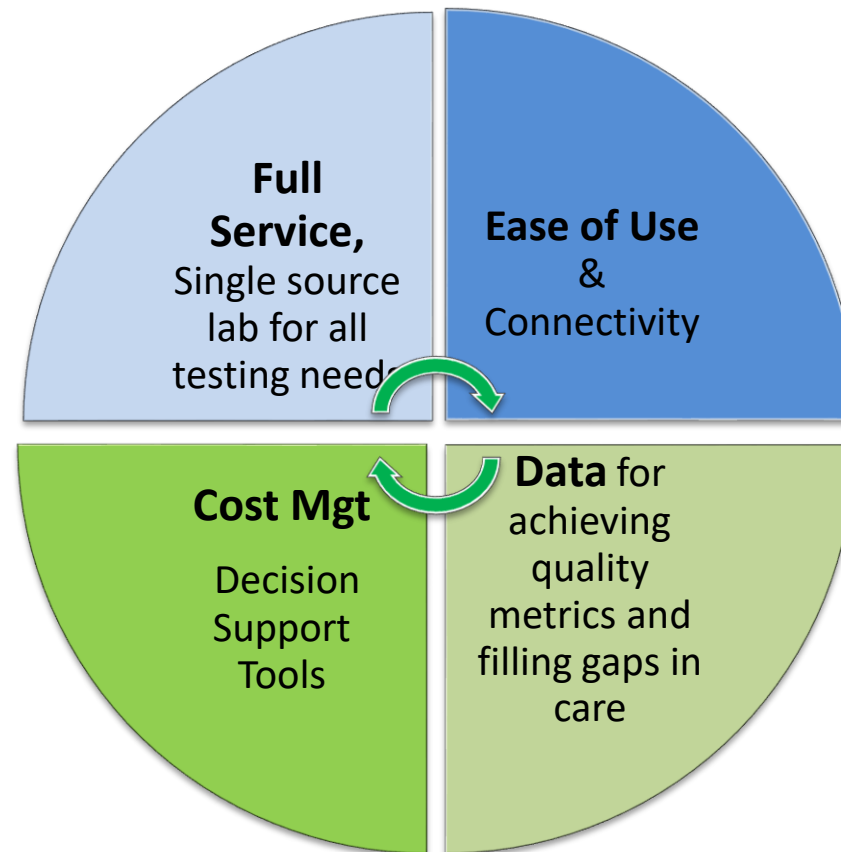
Market

- Margin compression at all levels: Hospitals, Physicians, Labs
- Consolidation of health systems, hospitals and independent labs continues.

Consumerism

- Demand for pricing transparency
- Proliferation of high-deductible plans
- Emerging technologies - consumers shop for healthcare access.

Data and Insight for Better Clinical Outcomes and Lower Cost of Care



- Largest single source test menu
5000+ diagnostic tests
- Expertise: routine highly
specialized testing
- Consistent test coding
- Integrated primary and
specialty labs across US



**Global Patient Look Up
--Share Results**

Eliminates duplicate test orders and related costs

LabCorp Link[®] Mobile:

Provider access to results and test information anywhere, anytime

AccuDraw:

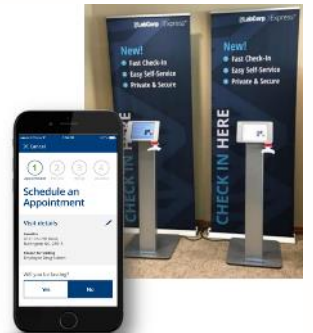
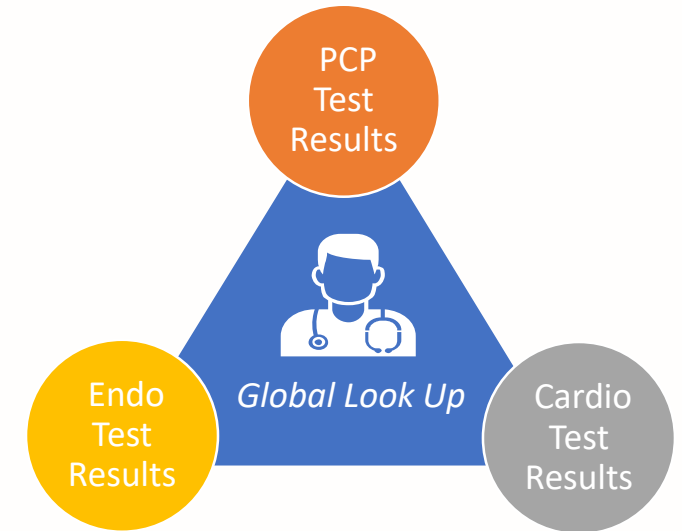
System combines visual cues with exact patient collection requirements, greatly reducing redraws and repeat visits

Patient Connectivity:

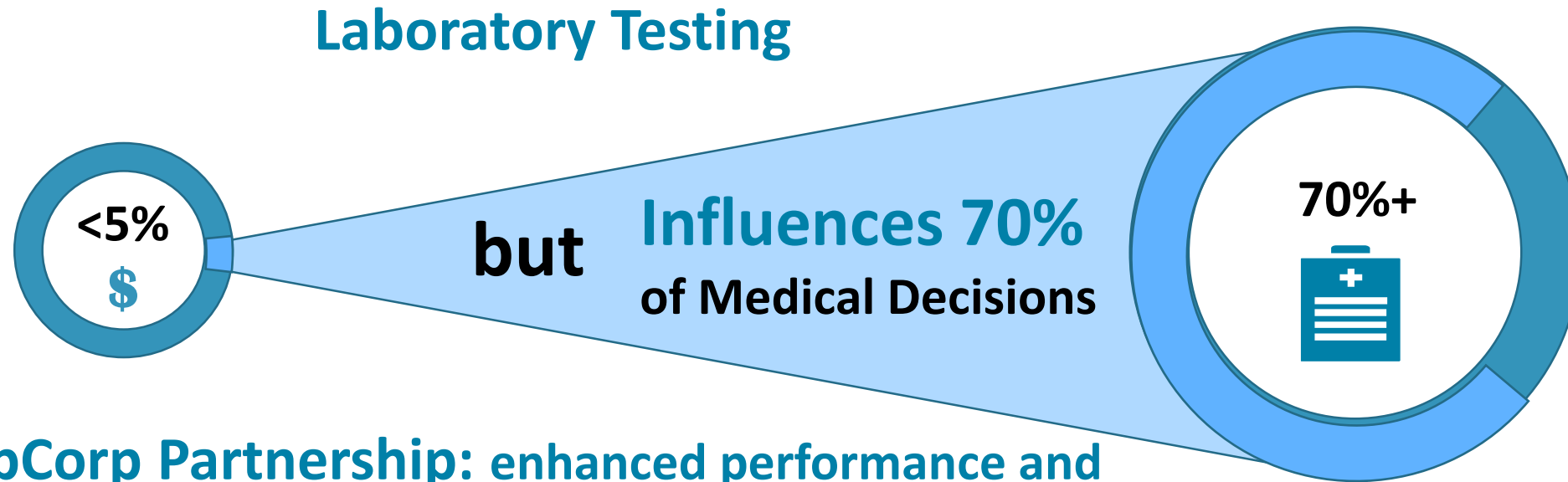
On-line appointment scheduling, automated check-in, and results portal

Expanded patient access:

LabCorp at Walgreens and home draws



Why partner with a lab?



LabCorp Partnership: enhanced performance and improved patient outcomes

- Accommodates 40% – 50% of quality reporting metrics
- Access to lab values inside and outside of network
- Supports appropriate risk stratification
- Target key disease cohorts

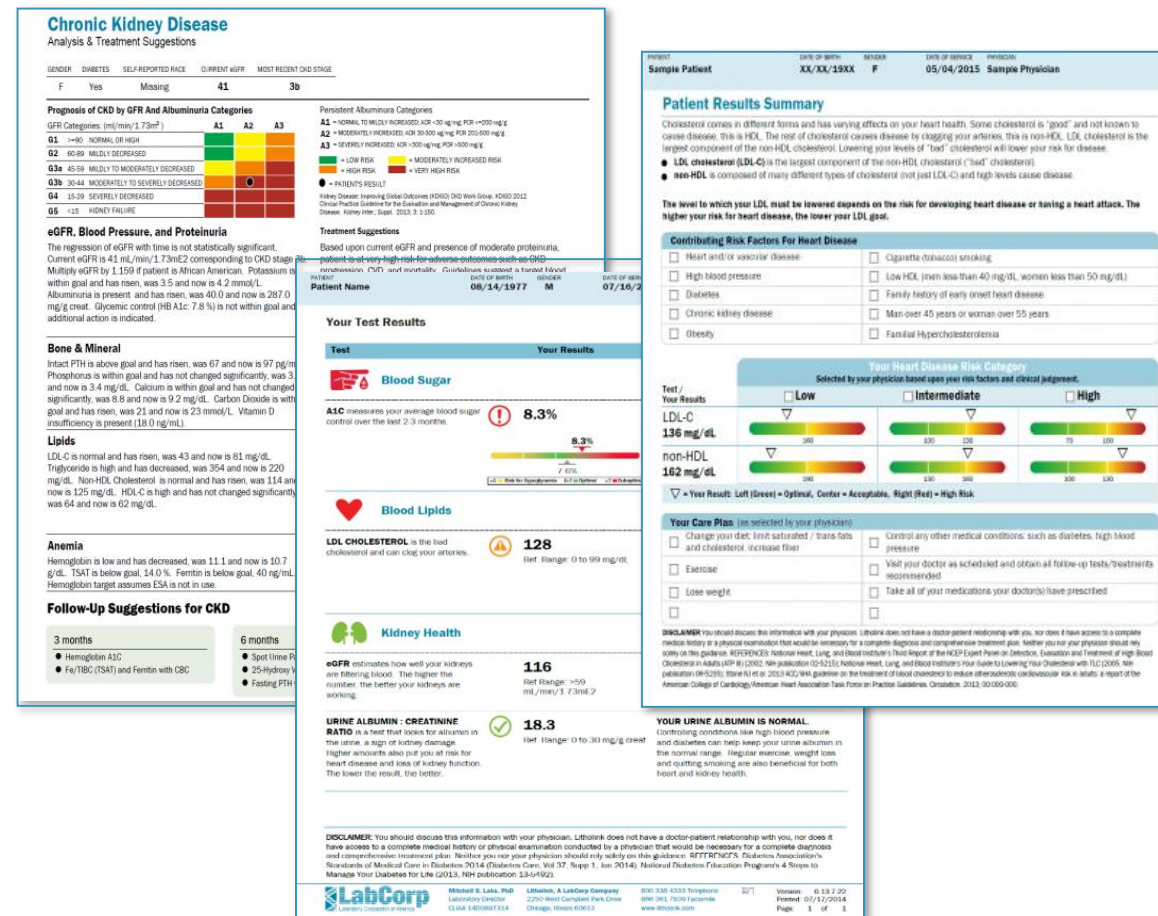
Data Use Agreement: Data Feed to Azara



- **Key Insights for Population Health Management**
 - Weekly or monthly data feeds directly into Azara
- **Supports attainment of Quality Metrics**
- **Identify gaps in care**
- **2 Year RetroSpective Results delivery:** Historical line of sight on patient outcomes
- **No additional charge**

Clinical Decision Support (CDS) programs target high cost disease states

- Initiated through laboratory order
- Guideline driven, patient specific test reports
- Identifies appropriate physician follow-up
- No additional charge



Chronic Kidney Disease (CKD)

Loss of kidney function, as measured by eGFR (estimated glomerular filtration rate)

- ✓ **Common:** 10 to 16% of population
- ✓ **Expensive:** \$20,964--\$76,968 for Commercial or Medicare patients
- ✓ **Easily detected** by lab - measured in stages of decline
 - > Stage 3a - eGFR 45 – 59 (loss of 1/2 of kidney function)
 - > **Stage 3b** - eGFR 30 – 44 (*advanced, may need referral*)
 - > Stage 4 - eGFR 15 – 29 (nephrology referral necessary)
 - > Stage 5 - below 15 (kidney failure)
- ✓ Complex, **many comorbidities:**
 - > 68% Hypertension
 - > 31% Diabetes
 - > 24% CVD
 - > 14% Congestive Heart Failure

Reports delivered to Physician



CKD:

- **Physician level reporting**
- **Delivered with lab results** when eGFR <60, indicating stage 3 or higher CKD
- **Patient-specific**
- Assessment and guidance in 4 key management areas:
 - eGFR, Blood Pressure, & Proteinuria
 - Bone & mineral metabolism
 - Lipids
 - Anemia
- Identifies appropriate follow-up

PATIENT CKDHL7, CASE2	DATE OF BIRTH 12/20/1953	GENDER F	CKD STAGE 3b	DATE OF SERVICE 04/28/2014	PHYSICIAN LabCorp Account #: 12005000
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Accessions: 11944599910

DISCLAIMER: These assessments and treatment suggestions are provided as a convenience in support of the physician-patient relationship and are not intended to replace the physician's clinical judgment. They are derived from the national guidelines in addition to other evidence and expert opinion. The clinician should consider this information within the context of clinical opinion and the individual patient.
SEE GUIDANCE FOR CHRONIC KIDNEY DISEASE PROGRAM: National Kidney Foundation Kidney Disease Outcomes Quality Initiative (KDOQI (TM)), with its limitations and disclaimers, are at www.kidney.org/professionals/KDOQI. Kidney Disease Improving Global Outcomes (KDIGO) clinical practice guidelines are at <http://kdigo.org/home/guidelines/>. The members of Litholink's national advisory panel are listed at www.litholink.com. This program is intended for patients who have been diagnosed with stages 3, 4, or pre-dialysis 5 CKD. It is not intended for children, pregnant patients, or transplant patients.

Note: Please refer to your LabCorp Report for all results as well as any test-specific and specimen-specific comments.

Chronic Kidney Disease

Analysis & Treatment Suggestions

GENDER	DIABETES	SELF-REPORTED RACE	CURRENT eGFR	MOST RECENT CKD STAGE
F	Yes	Missing	41	3b

Prognosis of CKD by GFR And Albuminuria Categories

GFR Categories: (mL/min/1.73m²)

G1	>90	NORMAL OR HIGH	A1	A2	A3
G2	60-89	MILDLY DECREASED			
G3a	45-59	MILDLY TO MODERATELY DECREASED			
G3b	30-44	MODERATELY TO SEVERELY DECREASED			
G4	15-29	SEVERELY DECREASED			
G5	<15	KIDNEY FAILURE			

Persistent Albuminuria Categories

A1 = NORMAL TO MILDLY INCREASED; ACR <30 µg/mg, PCR <=200 mg/g
A2 = MODERATELY INCREASED; ACR 30-300 µg/mg, PCR 201-600 mg/g
A3 = SEVERELY INCREASED; ACR >300 µg/mg, PCR >500 mg/g

LOW RISK **MODERATELY INCREASED RISK**
HIGH RISK **VERY HIGH RISK**

● = PATIENT'S RESULT

eGFR, Blood Pressure, and Proteinuria

The regression of eGFR with time is not statistically significant. Current eGFR is 41 mL/min/1.73m² corresponding to CKD stage 3b. Multiply eGFR by 1.159 if patient is African American. Potassium is within goal and has risen, was 3.5 and now is 4.2 mmol/L. Albuminuria is present and has risen, was 40.0 and now is 287.0 mg/g creat. Glycemic control (HbA1c: 7.8 %) is not within goal and additional action is indicated.

Bone & Mineral

Intact PTH is above goal and has risen, was 67 and now is 97 pg/mL. Phosphorus is within goal and has not changed significantly, was 3.4 and now is 3.4 mg/dL. Calcium is within goal and has not changed significantly, was 8.8 and now is 9.2 mg/dL. Carbon Dioxide is within goal and has risen, was 21 and now is 23 mmol/L. Vitamin D insufficiency is present (18.0 ng/mL).

Lipids

LDL-C is normal and has risen, was 43 and now is 81 mg/dL. Triglyceride is high and has decreased, was 354 and now is 220 mg/dL. Non-HDL Cholesterol is normal and has risen, was 114 and now is 125 mg/dL. HDL-C is high and has not changed significantly, was 64 and now is 62 mg/dL.

Anemia

Hemoglobin is low and has decreased, was 11.1 and now is 10.7 g/dL. TSAT is below goal, 14.0 %. Ferritin is below goal, 40 ng/mL. Hemoglobin target assumes ESA is not in use.

Treatment Suggestions

Based upon current eGFR and presence of moderate proteinuria, patient is at very high risk for adverse outcomes such as CKD progression, CVD, and mortality. Guidelines suggest a target blood pressure of 130/80 mmHg or less in patients with albuminuria or proteinuria to reduce cardiovascular risk and CKD progression. Proteinuria generally warrants use of ACEI or ARB to slow CKD progression. Weight loss and optimal glycemic control (in diabetes) are helpful in reducing proteinuria.

Treatment Suggestions

Begin vitamin D (ergocalciferol 50,000 IU/month orally for 6 months; alternatively, cholecalciferol 1000-2000 IU/d for 6 months). Restrict diet phosphate to 800 - 1000 mg/d. Monitor trend in PTH and consider further therapy if PTH is rising.

Treatment Suggestions

Therapeutic lifestyle changes are always valuable to maintain optimal blood lipid status (diet, exercise, weight management). If at least a 50% LDL reduction from baseline has not been achieved, begin or increase statin. Consider measurement of LDL particle number or Apo B to adjudicate need for further LDL lowering therapy. If statin cannot be tolerated or increased, alternatives include use of an intestinal agent (ezetimibe or bile acid sequestrant), niacin, and/or fish oil.

Treatment Suggestions

Iron deficiency is present, evaluate clinically. Begin oral or IV iron therapy, if not in use.

Follow-Up Suggestions for CKD

3 months <ul style="list-style-type: none">● Hemoglobin A1C● Fe/TIBC (TSAT) and Ferritin with CBC	6 months <ul style="list-style-type: none">● Spot Urine Panel (Albumin preferred)● 25-Hydroxy Vitamin D● Fasting PTH with Renal Panel	12 months <ul style="list-style-type: none">● Fasting Lipid Panel
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✓ Explains test results in patient friendly terms

✓ Reinforces patient compliance

✓ Provides diet and lifestyle suggestions


Your Test Results

 WITHIN GOAL
  BORDERLINE
  OUT OF GOAL

Test	Your Results	Suggestions
 Blood Lipids		
LDL CHOLESTEROL is the bad cholesterol and can clog your arteries.	 86 Ref. Range: 0 to 99 mg/dL	YOUR LDL CHOLESTEROL IS NORMAL. To keep it normal, remember to take any medications prescribed by your doctor. Your doctor may recommend even lower cholesterol levels to reduce your risk of heart disease. Weight loss, exercise (at least 30 minutes 5 times a week), a diet low in trans and saturated fats, and quitting smoking can keep cholesterol low.
 Kidney Health		
eGFR estimates how well your kidneys are filtering blood. The higher the number, the better your kidneys are working.	19 Ref Range: >59 mL/min/1.73mE2	YOUR RESULT COULD MEAN YOU HAVE STAGE 4 CHRONIC KIDNEY DISEASE (CKD). There are 5 stages of CKD. See below for more information.
URINE PROTEIN : CREATININE RATIO is a test that looks for protein in the urine, a sign of kidney damage. Higher amounts also put you at risk for heart disease and loss of kidney function. The lower the result, the better.	 724 Ref. Range: 0 to 200 mg/g creat	YOUR URINE PROTEIN IS VERY HIGH. Controlling conditions like high blood pressure and diabetes can help to lower your urine albumin. Your doctor may change or increase your medicines to help treat these conditions. Remember to take all medicines prescribed by your doctor. Regular exercise, weight loss and quitting smoking can also help to improve urine protein.
POTASSIUM helps keep your heart and muscles working properly. High or low levels can be dangerous.	 4.9 Ref. Range: 3.5 to 5.2 mmol/L	YOUR POTASSIUM IS NORMAL. To keep it in the normal range, make sure you avoid foods high in potassium. For more information, visit www.kidney.org/atoz/content/potassium.cfm .
PHOSPHORUS works with calcium to build strong, healthy bones and keep the rest of the body healthy. Too much phosphorus can damage the heart and blood vessels.	 3.5 Ref. Range: 2.5 to 4.5 mg/dL	YOUR PHOSPHORUS IS NORMAL. To keep it in the normal range, continue to avoid foods high in phosphorus. For more information, visit www.kidney.org/atoz/content/phosphorus.cfm . Also remember to take your medicines as prescribed by your doctor.
HEMOGLOBIN is a test to look for anemia, or low blood count. Low hemoglobin levels may cause you to feel tired or have low energy.	 9.9 Target Range: 13 to 17 g/dL	YOUR HEMOGLOBIN IS LOW. Low hemoglobin has many causes, and your doctor may order other blood tests to determine the cause. Your doctor may prescribe iron or other treatments if your hemoglobin gets too low. Take all medications as prescribed by your doctor.

YOUR eGFR IS 19, YOU ARE IN STAGE 4 CKD. THINGS YOU SHOULD KNOW:

- CKD means your kidneys have been damaged by diabetes, high blood pressure, or many other diseases. CKD can lead to heart disease.
- Your doctor will test you for problems such as high blood pressure, high cholesterol, anemia, and bone disease.
- Symptoms can include leg swelling, feeling tired, breathing problems, poor appetite, and itching; or you may have no symptoms.
- Your doctor may refer you to a nephrologist (kidney specialist) to help manage your CKD.
- Avoid taking NSAIDs (e.g. ibuprofen, Advil®, Motrin®, Aleve®) as these may worsen your kidney function.
- Your eGFR result may be slightly higher if you are African American.
- To learn more, visit the National Kidney Foundation's website: www.kidney.org/kidneydisease.



Summary

ACO_CVD and DM Outliers_Q3 2014.

Description of Data File

Includes an analysis of outlier physicians and patients with respect to diabetes and lipid testing. Patient and physician identifiers as well as payor information are included when available.

Data Sheet

Description

Includes list of diabetic patients with:

- A1c result >7% on most recent testing
- LDL-C result ≥ 100 mg/dl
- No A1c testing in the last 12 months
- No albuminuria test in the last 12 months

Use the dropdown menu under 'Diabetic patient outliers' to select the outlier group of interest.

Includes list of chronic kidney disease patients with likely other patients with likely kidney disease.

With:

- LDL-C result ≥ 100 mg/dl
- No LDL-C result in the last 12 months

Use dropdown menu under 'High risk patient outliers' to select the outlier group of interest.

List of patients with most recent LDL-C result ≥ 190 mg/dl, suggestive of possible familial hypercholesterolemia. These patients warrant treatment with high intensity statin therapy if tolerated.

Patients with LDL-C ≥ 190

List of physicians and the percentage of their diabetic patients with an A1c >7% on most recent testing.


% Diabetic A1c >7 by MD

List of physicians and the percentage of their diabetic patients with an LDL-C ≥ 100 mg/dl on most recent testing.

% Diabetic LDL-C ≥ 100 by MD

List of physicians and the percentage of their CVD patients with an LDL-C ≥ 100 mg/dl on most recent testing.

% High risk LDL-C ≥ 100 by MD

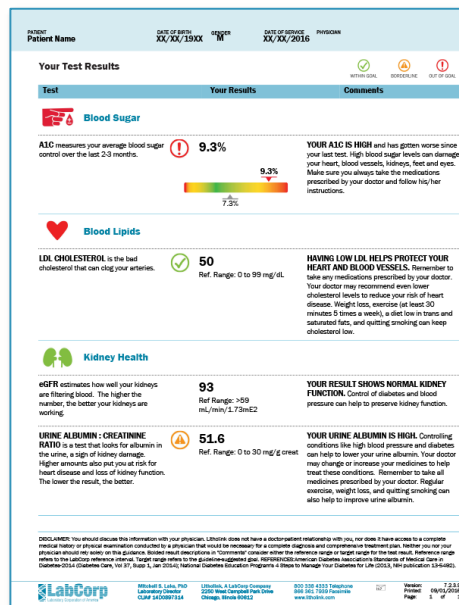
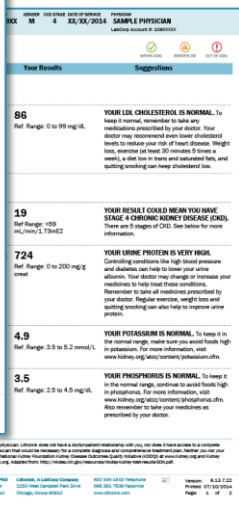
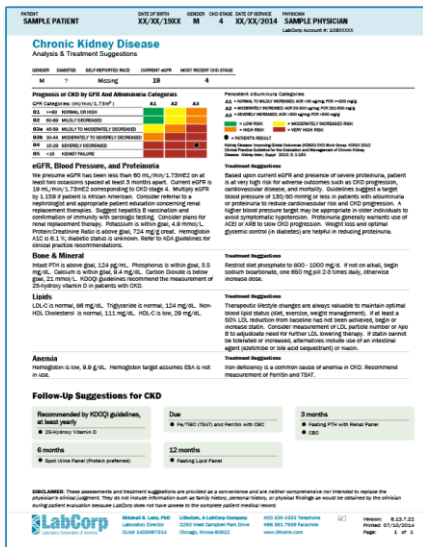


% Diabetic A1c >7 by MD

ordering_acct_nur	npi_num	PHYSICIAN_L_NAME	PHYSICIAN_F_NAME	diabetic_patient_count	outlier_patient_count	outlier_percent
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	16	2	13
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	2	1	50
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	23	6	26
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	43	8	19
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	21		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	2	2	100
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	330	51	15
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	33	41	21
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1	4	31
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1	1	100
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	95	29	31
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	329	115	35
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	4	2	50
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	179	63	35
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1	1	100
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	5		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	2		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1	1	100
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	214	52	24
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	42	4	10
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	2		
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	1	1	100
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	12	4	33
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	53	31	58
1234567890	9876543210	DOCLASTNAME	DOCFIRSTNAME	307	68	22

Patient population trends/averages for key lab tests
Identifies patients out of compliance or overdue for testing
Provides physician practice patterns and outliers

Actionable Data for Every Stakeholder



% Diabetic A1c-9 by MD				
PHYSICIAN_LAST	PHYSICIAN_FIRST	diabetic_pt_count	outlier_pt_count	outlier_percent
DOCLASTNAME	DOCFIRSTNAME	5275	1419	27%
DOCLASTNAME	DOCFIRSTNAME	1	0	0
DOCLASTNAME	DOCFIRSTNAME	1	0	0
DOCLASTNAME	DOCFIRSTNAME	16	2	13
DOCLASTNAME	DOCFIRSTNAME	2	1	50
DOCLASTNAME	DOCFIRSTNAME	23	6	26
DOCLASTNAME	DOCFIRSTNAME	43	8	19
DOCLASTNAME	DOCFIRSTNAME	1	0	0
DOCLASTNAME	DOCFIRSTNAME	21	0	0
DOCLASTNAME	DOCFIRSTNAME	2	2	100
DOCLASTNAME	DOCFIRSTNAME	330	51	15
DOCLASTNAME	DOCFIRSTNAME	193	41	21
DOCLASTNAME	DOCFIRSTNAME	1	0	0
DOCLASTNAME	DOCFIRSTNAME	13	4	31
DOCLASTNAME	DOCFIRSTNAME	1	1	100
DOCLASTNAME	DOCFIRSTNAME	95	29	31
DOCLASTNAME	DOCFIRSTNAME	1	0	0
DOCLASTNAME	DOCFIRSTNAME	329	115	35
DOCLASTNAME	DOCFIRSTNAME	4	2	50
DOCLASTNAME	DOCFIRSTNAME	179	63	35
DOCLASTNAME	DOCFIRSTNAME	1	1	100
DOCLASTNAME	DOCFIRSTNAME	5	0	0
DOCLASTNAME	DOCFIRSTNAME	2	0	0
DOCLASTNAME	DOCFIRSTNAME	1	0	0
DOCLASTNAME	DOCFIRSTNAME	1	1	100
DOCLASTNAME	DOCFIRSTNAME	1	0	0
DOCLASTNAME	DOCFIRSTNAME	214	52	24
DOCLASTNAME	DOCFIRSTNAME	1	0	0
DOCLASTNAME	DOCFIRSTNAME	42	4	10
DOCLASTNAME	DOCFIRSTNAME	2	0	0
DOCLASTNAME	DOCFIRSTNAME	1	1	100
DOCLASTNAME	DOCFIRSTNAME	12	4	33
DOCLASTNAME	DOCFIRSTNAME	53	31	58

Providers

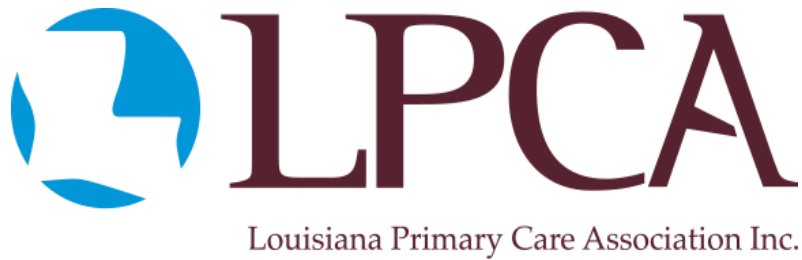
- Delivered with lab results
- Patient-specific recommendations based on current guidelines / standards of care
- Identifies untreated problems

Patients

- Educate patients about what their lab results mean
- Empower patients to participate in their own care
- Condition-specific care plans

Care Management Team

- Real-time targeting of high risk patients
- Highlight outliers and likely gaps in care
- Metrics on provider performance



LabCorp Partnership in Value Based Care

