

# Case Study LabPiQture™

How to use LabPiQture to uncover or disprove chronic kidney disease.



## Case Study



#### **Problem**

About 37 million people in the United States are currently affected by chronic kidney disease (CKD), and the prevalence of ensuing kidney failure is rising. How do insurers quickly and confidently determine if their applicant has kidney disease?



#### **Solution**

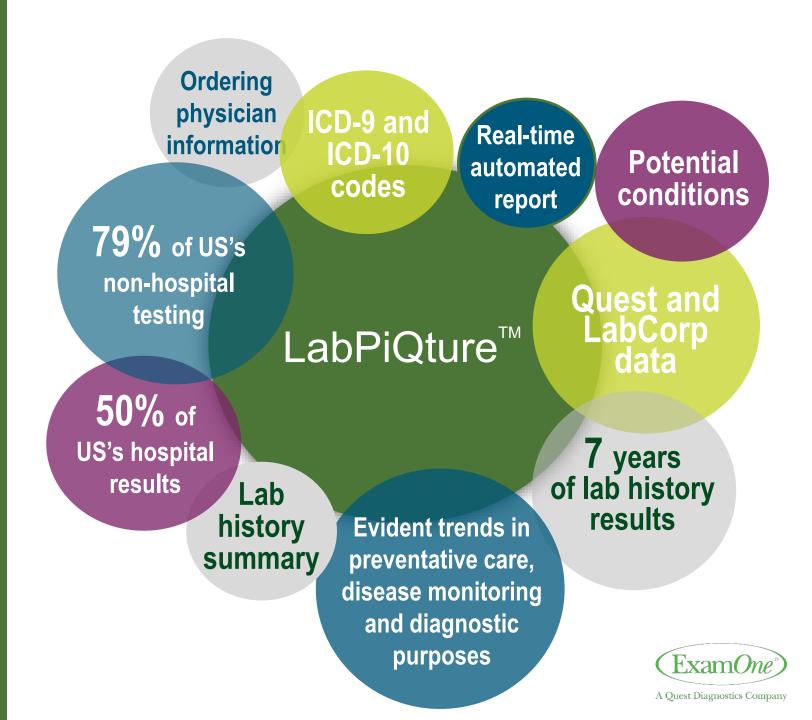
Insurers will quickly uncover CKD vs a more benign course of acute kidney "failure", through laboratory testing results provided through LabPiQture.

<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention. Chronic kidney disease in the United States, 2021. Updated March 4, 2021. Accessed May 12, 2022.

## LabPiQture

Decisions informed by laboratory results

Through an extensive clinical laboratory database, insurers have access to physician-ordered laboratory testing results related to preventative care, disease monitoring, and diagnostic purposes.



## Decisions informed by LabPiQture

- eGFR results will be highlighted in LabPiQture
- The underwriter will look for the stability of the eGFR to make a possible decision; or conversely the instability of the eGFR

#### What is **eGFR**?

- According to the National Kidney Foundation, Glomerular filtration rate (GFR) is the best overall index of kidney function\*
- Healthcare providers use estimated glomerular filtration rate (eGFR) to determine kidney disease, and if so, what stage
- The standard way to estimate eGFR is with a simple blood test

### LabPiQture delivers eGFR results

Stage of CKD	eGFR results	What it means
Stage 1	90 or higher	<ul><li>Mild kidney damage</li><li>Kidneys work as well as normal</li></ul>
Stage 2	60 - 89	<ul><li>Mild kidney damage</li><li>Kidneys still work well</li></ul>
Stage 3a	45 - 59	<ul><li>Mild to moderate kidney damage</li><li>Kidneys don't work as well as they should</li></ul>
Stage 3b	33 - 44	<ul><li>Moderate to severe damage</li><li>Kidneys don't work as well as they should</li></ul>
Stage 4	15 - 29	<ul><li>Severe kidney damage</li><li>Kidneys are close to not working at all</li></ul>
Stage 5	Less than 15	<ul><li>Most severe kidney damage</li><li>Kidneys are very close to not working or have stopped working (failed)</li></ul>

## Results



## Case 1

Female age 63 with 4 eGFR tests done in 2020 through 2023. No diagnosis codes present. According to the records, the applicant never saw a kidney specialist. Evidence of under-treatment is a serious concern in underwriting.

## Case 2

Female age 38. eGFR readings from 2019. While there was a single abnormal eGFR reading, the broader LabPiQture profile suggests that this was likely a transient pregnancy-related issue.



## Case 1: Deteriorating renal function

March 2020 Stage 1 of CKD Normal (eGFR results 92)

July 2020 Slightly increased protein/creatinine ratio in the urine (0.87 mg/mgcr)

March 2021 Stage 3A of CKD Mild to Moderate (eGFR results 56.12)

March 2023 Increased protein/creatinine ratio in the urine (2.37 mg/mgcr)

June 2023 Stage 3B of CKD Moderate to Severe (eGFR results 36.64)

In this case, there is no doctor's specialty that would point in the direction of kidney disease. The GFR results, which are reported in **LabPiQture**, are a great resource for the underwriter to make an informed decision about kidney function.





In this case, **LabPiQture** provides a broader medical context that explains the changes to eGFR. Using **LabPiQture** alone we can see low eGFR related to pregnancy/pre-existing conditions.

## Case 2: Transient renal impairment in pregnancy

January 2019 First eGFR reading on assumed "wellness visit" 69.8 (Stage 2 CKD)

January 2019 Based on labs alone (including drug screens, STI & HIV screens, Hep screens, CBC), assumed pregnant

January 2019 Confirm applicant seeing OBGYN + diagnosis codes for high-risk pregnancy and preexisting hypertension (note: client is obese)

March 2019, first gestational diabetes screening; repeated May 2019, confirming suspicion of pregnancy

June 2019 eGFR back up to 118.31 ("normal")

ExamOne°)
A Quest Diagnostics Company

March 2019



## Summary

#### The value of laboratory data

LabPiQture provides critical information regarding CKD and tremendous insights into an applicant's health profile. By leveraging this extensive clinical laboratory information, carriers may make informed and confident underwriting decisions.

