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Closing the Care Gap Using an End-to-End Diabetic Retinal Exam Solution in Primary Care

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Disclosure

The data represented in the study shows a high level overview of the current status of the IRIS Diabetic Retinal Exam program for CoxHealth for the dates starting Wednesday, June 01, 2016 and ending Tuesday, May 30, 2017.

There are no conflicts of interest for any of the authors, co-authors, or presenters with the American Diabetes Association.

Prevent Diabetic Blindness with Early Detection



Image of normal eye



Image of eye with diabetic retinopathy

30,000,000

diabetic patients

15,000,000

patients have some form of retinal disorder

3,000,000

diabetic patients are about to go blind

1:10

of diabetic patients are unaware of their eye disease

95%

of vision loss prevented if detected early with a digital retinal exam

Source: American Diabetes Association, 2016

Study Purpose: Close the Care Gap for Diabetic Retinal Exams

CoxHealth needed to address their growing care gap for diabetic retinal exams (DRE) in their diabetic population.

24,000 patients with diabetes **32%** of patients had followed through with a DRE as of June 2016

CoxHealth partnered with IRIS to create an end-to-end solution for DRE in primary care. The solution needed to provide the highest quality images, a workflow process and systems integration from patient identification to reimbursement.

The study examined the CoxHealth program results using the IRIS telemedicine diagnostic solution during the first 12 months beginning June 2016 to include HEDIS compliance and RAF scores.

Method: Implement an End-to-End Diabetic Retinal Exam Solution in Primary Care

CoxHealth identified **fourteen clinic locations**, including primary care and endocrinology. The locations selected served the majority of the population of patients with diabetes. A programmatic approach was deployed.

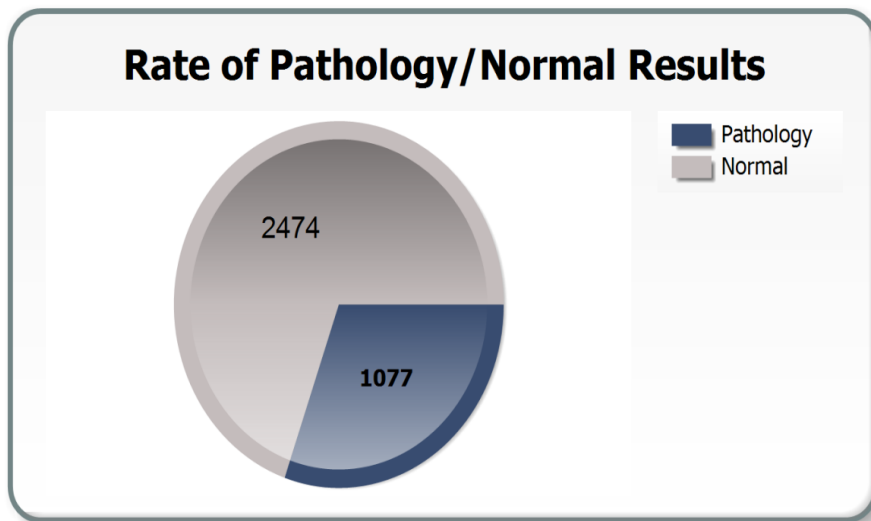
A comprehensive patient ID to reimbursement solution



A bi-directional Cerner EHR interface was built to return discrete data directly into the EHR and patient folders the next day. Technical and clinical workflows were streamlined for ease of use by clinicians. An IRIS Client Success Manager was assigned to help drive utilization with a goal of closing the care gap. Results were measured and reported monthly.

Results: Pathology was Diagnosed in 30% of Patients

Retinal Pathology Diagnoses As a Result of Primary Care Exams

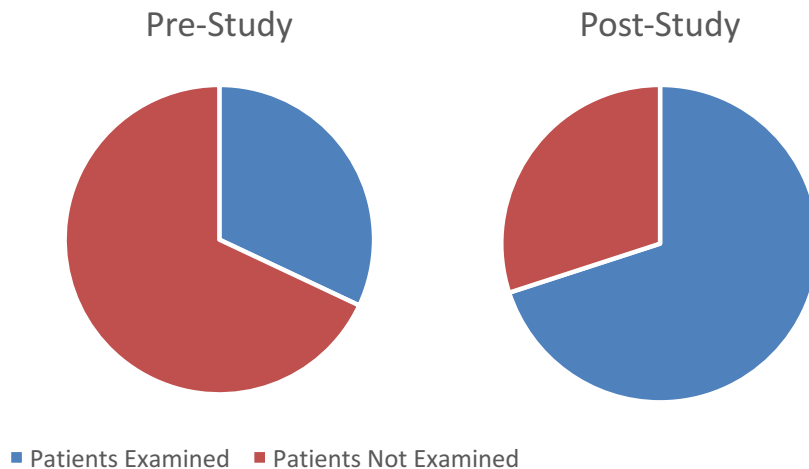


| | # Patients |
|---|------------|
| Examined | 3551 |
| Identified w/Pathology | 1077 |
| Early identification of Diabetic Retinopathy | 520 |
| Early intervention of Advanced Diabetic Retinopathy | 185 |
| Diagnosed w/ Proliferative Diabetic Retinopathy | 32 |
| Identification of Life-saving Co-morbidities | 5 |

Increased identification and patient access to retinal exams in primary care during the patients' routine visits **led to nearly a 50% increase in patients examined**. As a result of closing the care gap, 30% of patients examined were diagnosed with diabetic retinopathy.

Results: HEDIS Compliance and RAF Scores Increased

HEDIS Compliance



A significant increase in HEDIS Compliance was achieved by providing retinal exams for the diabetic population in primary care. This indicates that that care gap was narrowed.

RAF Scores

| RAF Eligible Diagnoses Codes | |
|-------------------------------------|-----------------|
| Level of Severity | Total Diagnoses |
| Nonproliferative No Macular Edema | 420 |
| Nonproliferative with Macular Edema | 196 |
| Proliferative No Macular Edema | 26 |
| Proliferative With Macular Edema | 6 |
| Retinal Edema | 3 |
| Grand Total | 651 |

Prior to implementing a primary care retinal exam program, a significant number of patients had not been identified with disease. Now, **those patients are identified and when attached to a risk-based contract, their HCC RAF score is coded to the highest level of severity.**

Conclusion: The Diabetic Retinal Exam Solution Used in Primary Care Closed the Care Gap

Through strategic program design of technical, clinical and operational workflows and support with ongoing program success management by IRIS and CoxHealth, the following results were achieved:

- Improved Quality Metrics including HEDIS Compliance and Star Performance
- Increased RAF scores, optimizing revenue in risk-based contracts and coding to the highest levels of severity
- Deeper level of diagnostic data to help identify, manage and control the high risk population
- Better patient outcomes as a result early detection and referral

The care gap closure increased HEDIS compliance and control of the high risk diabetic population, leading to early intervention in patients with undiagnosed diabetic retinopathy and resulting in better patient outcomes.

Conclusions

[Click here to view](#) the personal story of a patient who had their sight saved as a result of a diabetic retinal exam done by a primary care provider at CoxHealth