

A decorative border surrounds the slide content. It features a mosaic-like pattern of small squares in shades of blue, green, and orange. Overlaid on this border are several artistic illustrations: a cluster of dark blue grapes in the top left, a branch with red and yellow apples in the top right, a tree with a ladder and small orange fruits on the left side, and a cluster of red and yellow apples in the bottom right.

Realigning Lab Focus Beyond Operational Efficiency to Laboratory Medicine that is Tightly Integrated into Patient Care and Clinician Support

Dr. Kevin Breuel, PhD

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Orchard Software

A decorative border surrounds the central text. It features illustrations of various fruits: blueberries in the top-left, peaches in the top-right, a person harvesting oranges in the bottom-left, and apples in the bottom-right. The border is framed by a thick orange line and a dark green patterned inner border.

Showing Lab Value

The slide features four artistic illustrations of fruit in the corners, enclosed within a decorative border. The top-left corner shows a cluster of dark blueberries with green leaves. The top-right corner displays several ripe red and yellow peaches. The bottom-left corner depicts a person on a ladder harvesting oranges from a tree. The bottom-right corner shows a pile of red apples. The central text is in a bold, blue, sans-serif font.

Overview of Healthcare Changes

Changes in Healthcare

- We are seeing more change in healthcare than ever before.
- 5% of the population accounts for 49.9% of healthcare spending.
- Shift in focus: Volume → Value

**End of Fee-for-Service Approaches:
What Should Smart Labs Be Doing Now
to Ensure Financial Sustainability?**

ROBERT L. MICHEL
Editor In Chief

THE DARK REPORT
Spicewood, Texas

**HOW HEALTH INSURERS SEE
HEALTHCARE'S EVOLUTION: WHAT'S
AHEAD WITH INTEGRATED CARE,
GENETIC MEDICINE AND VALUE-BASED
REIMBURSEMENT?**

THE EXECUTIVE WAR COLLEGE

DIANA BRANDON

FRANK DOOKIE

MIKE SNYDER

**Positioning Pathology and Clinical Laboratory
Services to Add Value in the Era of ACOs and
Medical Homes**

Executive War College
New Orleans
April 29, 2014

Richard J. Cote, MD, FCRPath, FCAP

Professor and Joseph R. Coulter Jr. Chair Dept. of Pathology
Professor, Dept. of Biochemistry & Molecular Biology,
Chief of Pathology, Jackson Memorial Hospital
Director, Dr. John T. Macdonald Foundation Biomedical Nanotechnology Institute
University of Miami Miller School of Medicine



UNIVERSITY OF MIAMI
**MILLER SCHOOL
of MEDICINE**

**"Innovating American
Laboratories to Survive the
New Norm?"**

Khosrow Shotorbani
President & Chief Executive Officer
May 2014

**Emerging Business Models in the
Clinical Laboratory Industry**

May 1, 2014

Christopher Jahnle
Managing Director

Haverford Healthcare Advisors

Time of Transition in Healthcare

- Lab plays a central role.
- Diagnostics becomes more critical.

You can't change the direction of the wind, but you can adjust your sails to reach your destination.

- H. Jackson Brown Jr.

Proactive Laboratories can...

- Provide value in ways that support the clinician in daily patient encounters.
- Contribute to overall organizational savings.
- Look at the entire patient episode of care for savings opportunities.

Position Your Lab for Success

- Share problem-solving concepts and ideas.
- Use laboratory tools & knowledge
 - to improve the healthcare of patients.
 - to create organization-wide savings.
 - to develop new business models.

Objectives

Provide useful analytics and business intelligence to your administration.

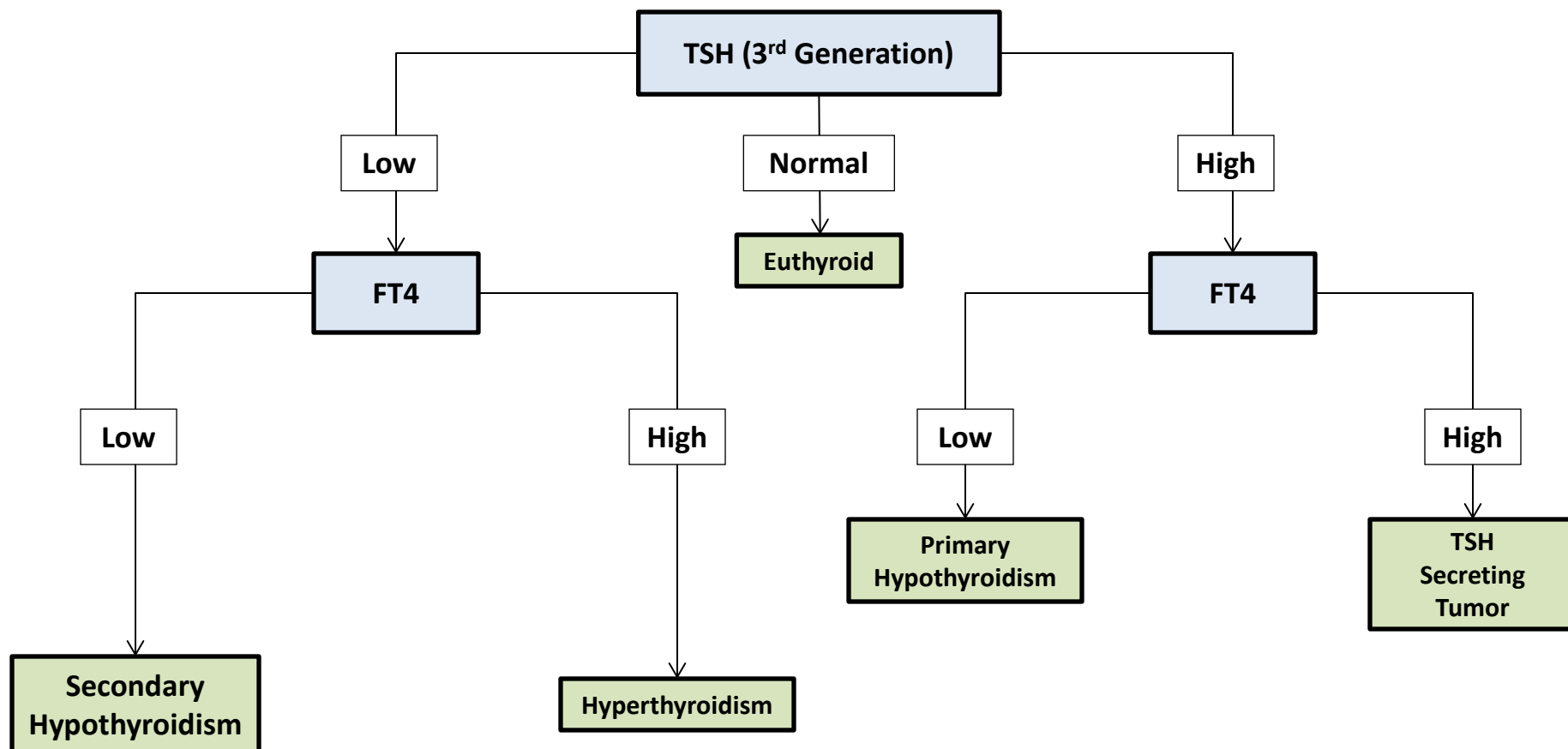
A decorative border surrounds the central text. The top-left corner features a cluster of dark blue grapes with green leaves. The top-right corner shows several ripe red and yellow apples. The bottom-left corner depicts a person on a ladder picking fruit from a tree. The bottom-right corner contains a pile of red and yellow apples. The entire border is set against a dark, patterned background.

Appropriate Testing: Testing Reflexes & Cascades

Testing Reflexes & Cascades

- Promote appropriate testing and reduce waste
- Automate the process with your lab system.
- Use reports to justify/support reflex usage:
 - Generate report of TSH/FT4 orders with normal TSH results to demonstrates number of unnecessary FT4s.
 - Translate into potential healthcare savings.

Algorithm for TSH reflex FT4



Actual (TSH + FT4) and Projected (TSH Reflex FT4) Cost of Thyroid Testing

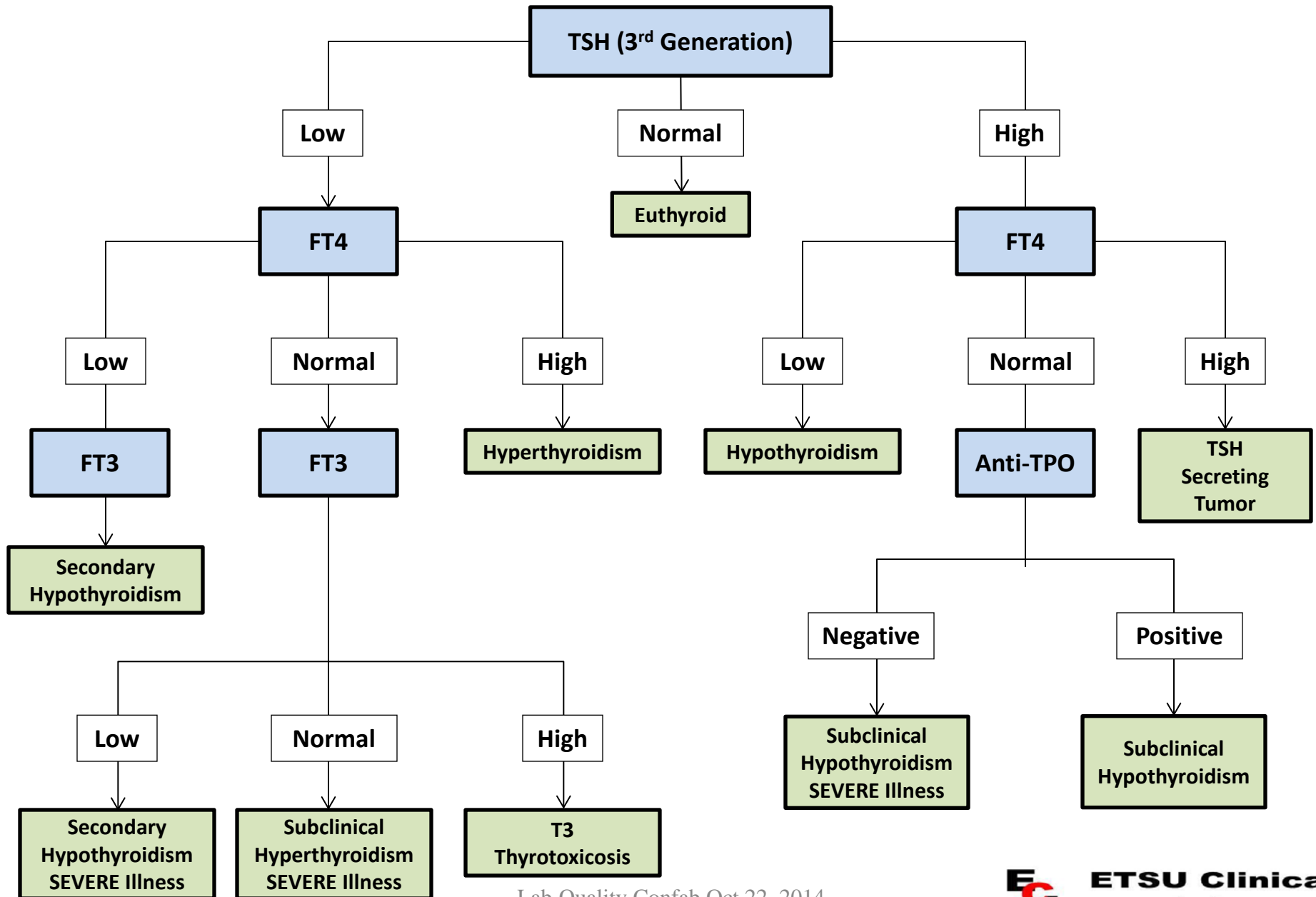
(Data Generated Utilizing Harvest Result Browser)

	Tests Performed		Cost to Insurance/Patient 2014 Medicare Rates		
Testing Strategy	TSH	FT4	TSH	FT4	Total Cost
TSH + FT4	819	819	\$18,780	\$10,074	\$28,854
TSH Reflex FT4	819	295	\$18,780	\$3,629	\$22,409
				Savings	\$6,445

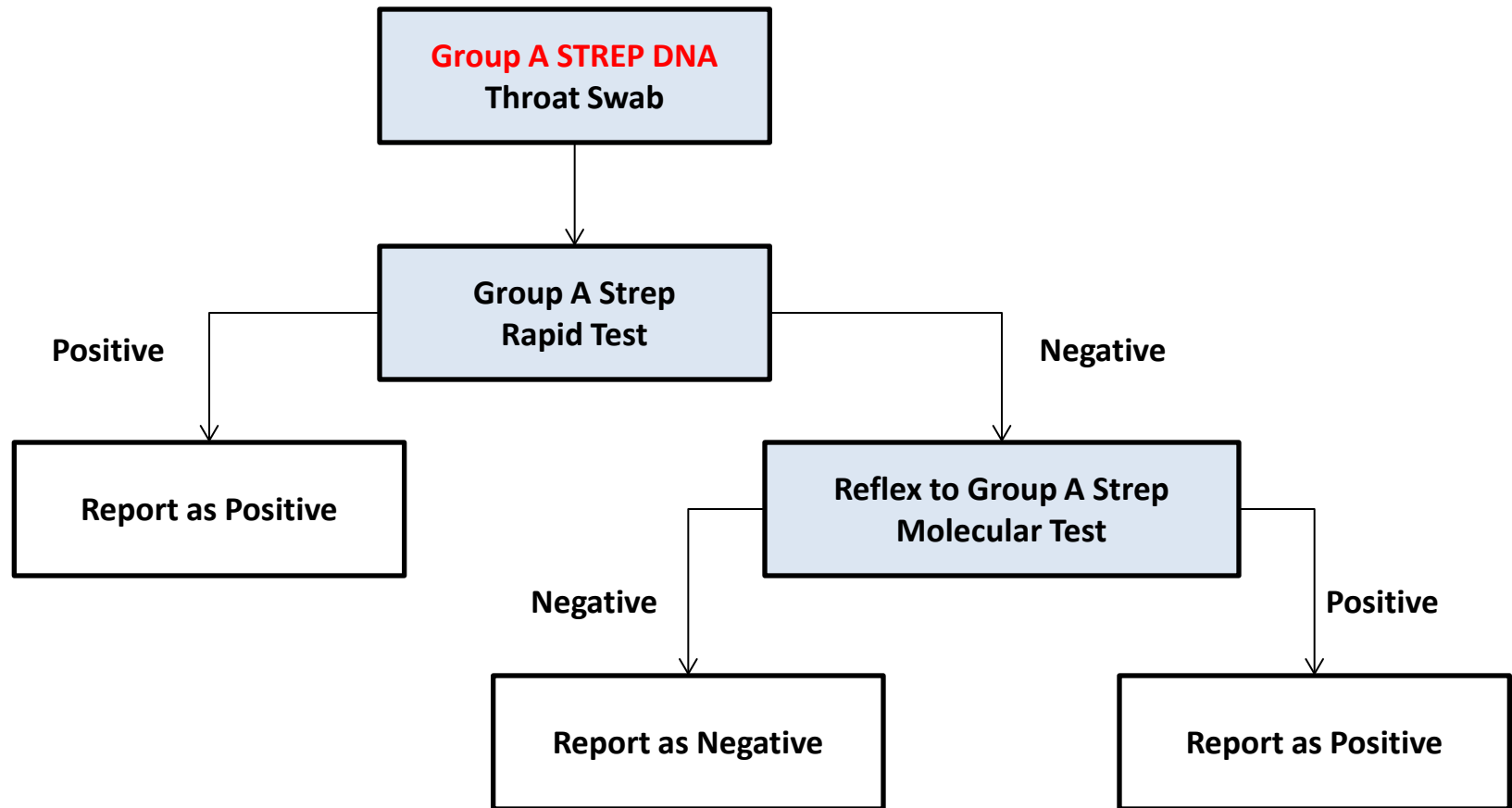
Develop Testing Reflexes & Cascades

- Examples:
 - Thyroid Cascade
 - Group A Strep screen
 - Group B Strep screen
 - Celiac disease
 - HIV Diagnostic

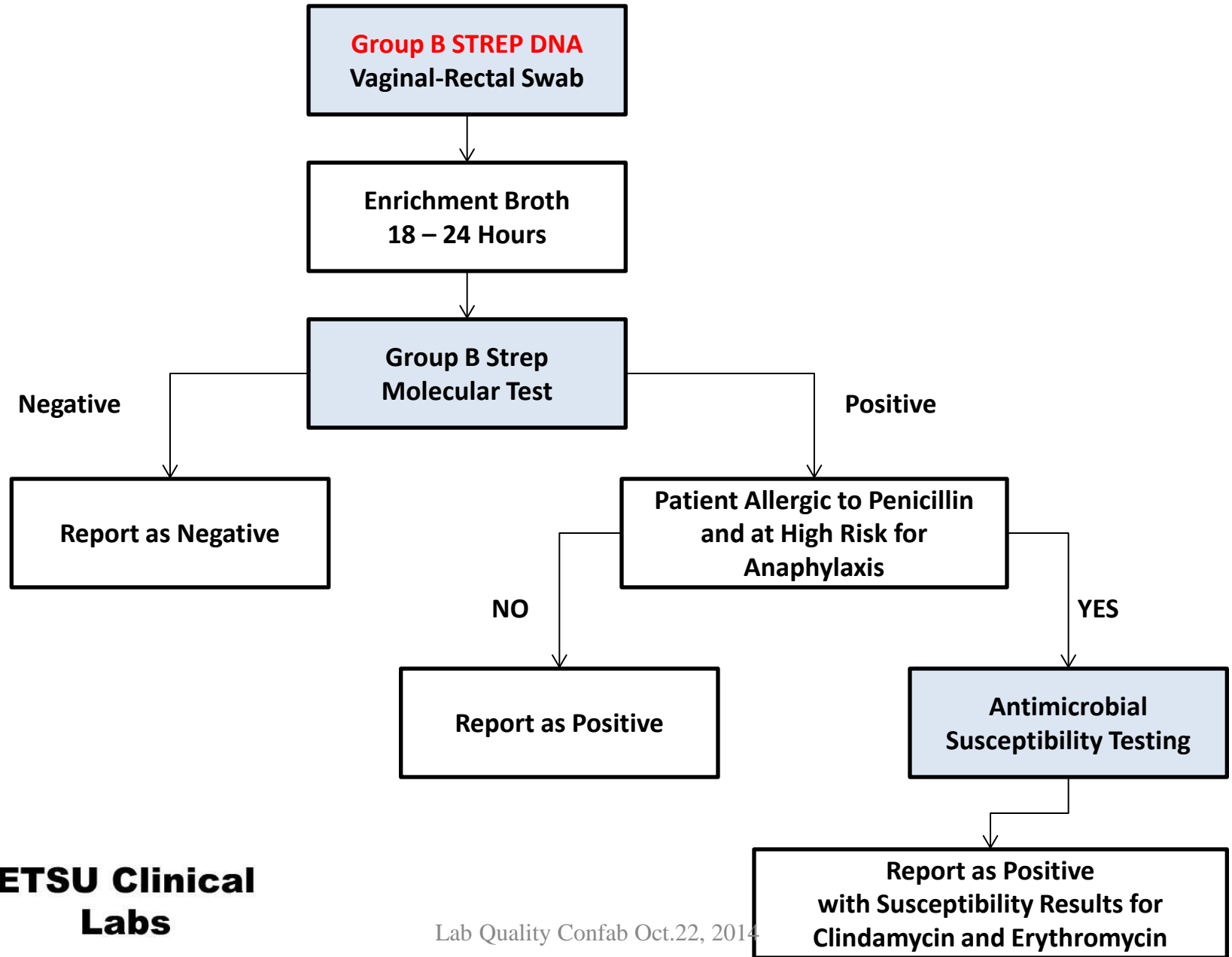
Algorithm for Thyroid Testing (Adapted from “Thyroid Cascade Testing”, 2007. LabCorp)



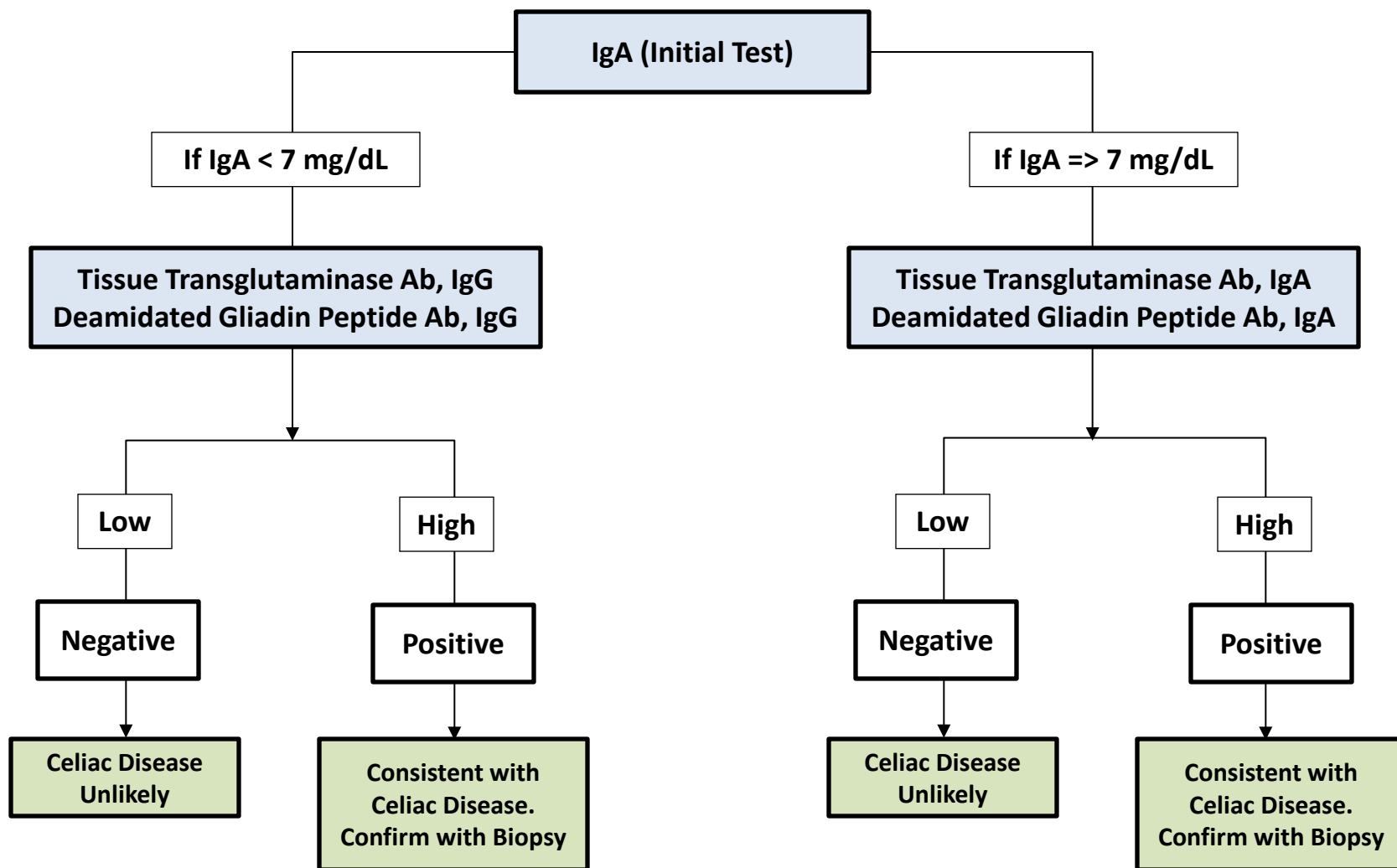
Algorithm for screening for Group A streptococcal (GAS) colonization



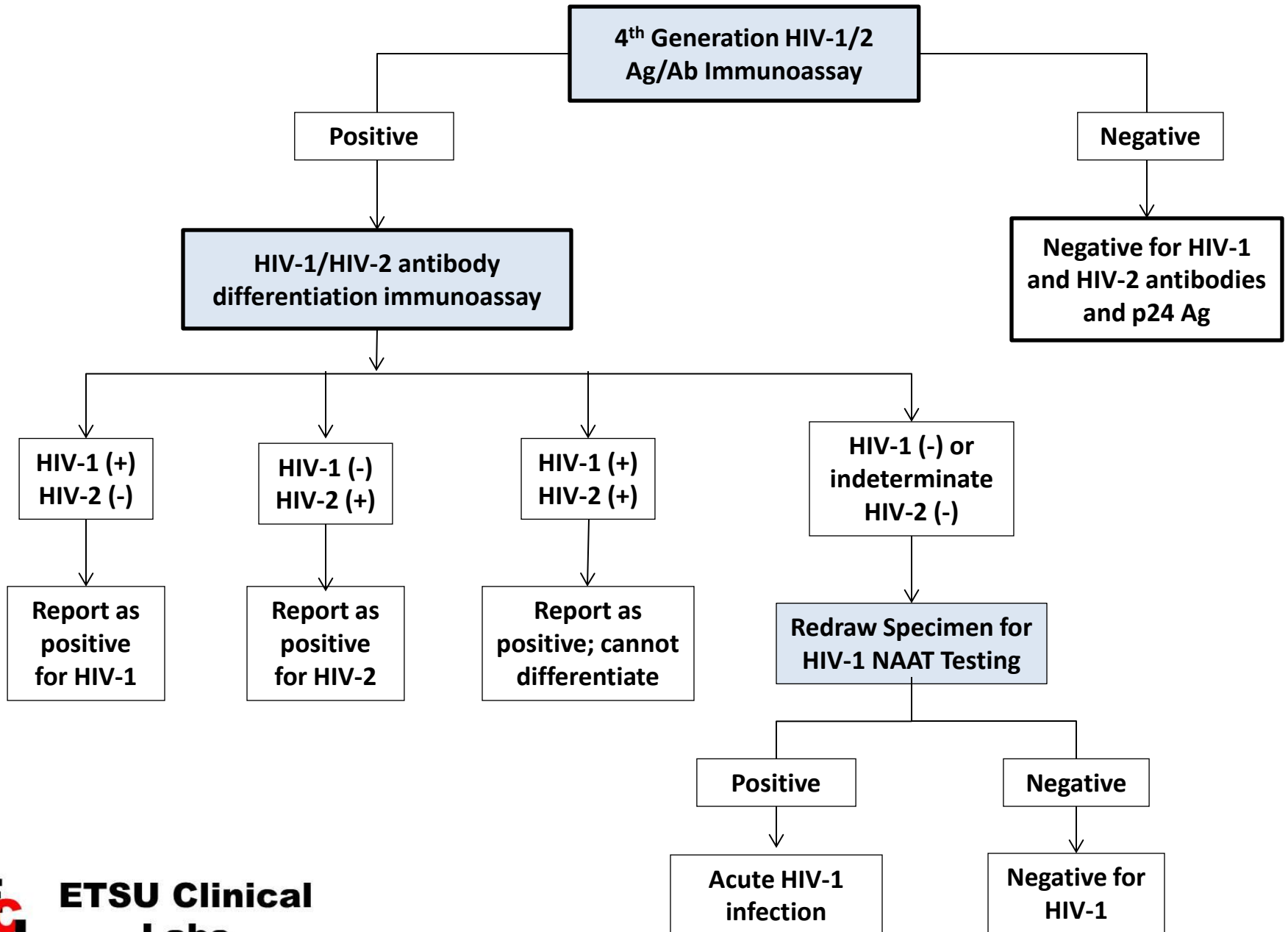
Algorithm for prenatal screening for group B streptococcal (GBS) colonization



Algorithm for Celiac Disease



HIV Diagnostic Algorithm (CDC and APHL, 2010, 2013)



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Speed & Accuracy Of Diagnosis

Vaginosis/Vaginitis Testing

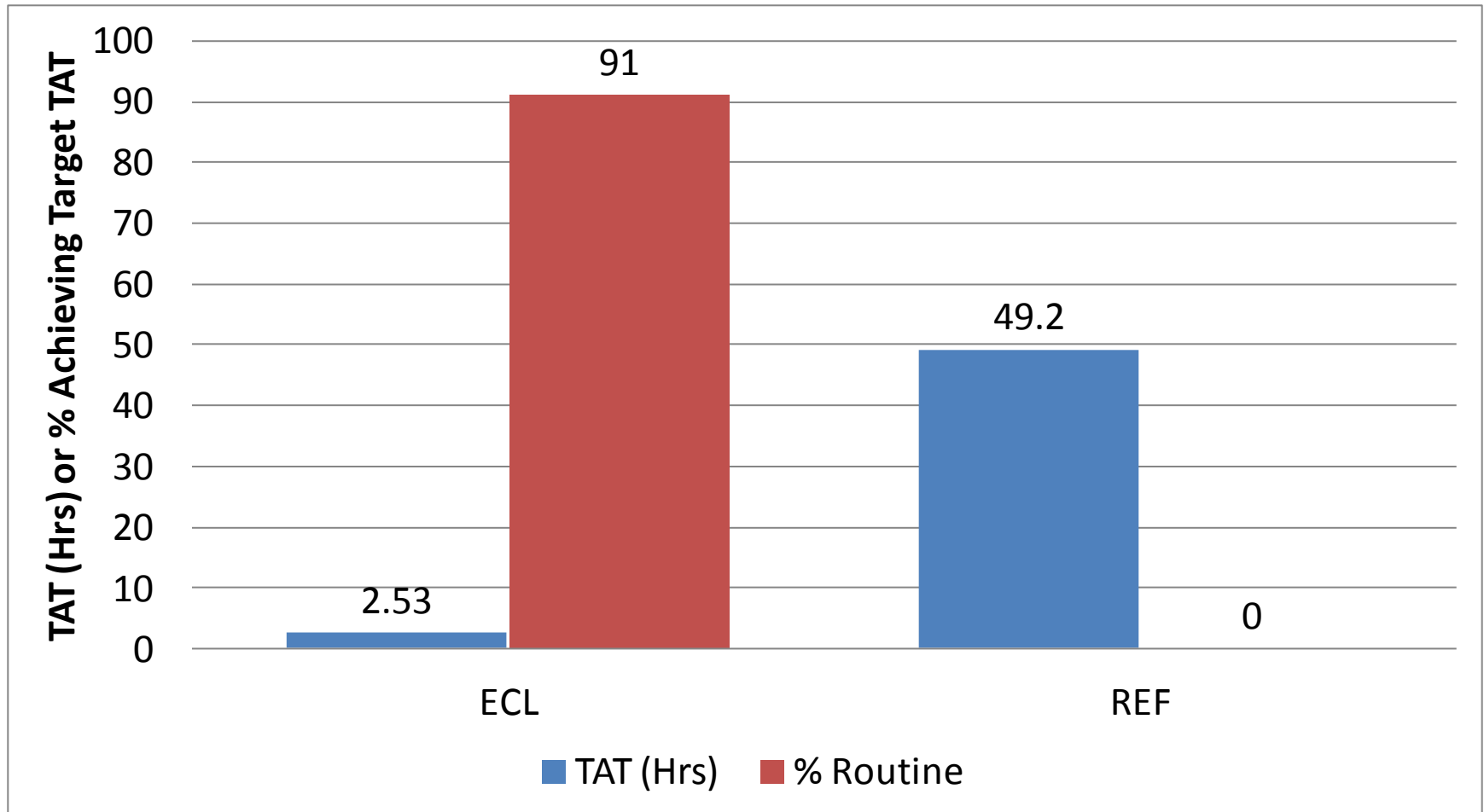
Vaginosis/Vaginitis Testing

- **Vaginitis** is an inflammation of the vagina. It can result in discharge, itching and pain, and is often associated with an irritation or infection of the vulva. It is usually due to infection.
- The three main kinds of vaginitis are **bacterial vaginosis** (BV), **vaginal candidiasis**, and **trichomoniasis**.
- A woman may have any combination of vaginal infections at one time.

Treatments

- Trichomoniasis: Single oral doses of 2 grams of either metronidazole, or tinidazole.
- Bacterial vaginosis: The most commonly used antibiotics are metronidazole, available in both pill and gel form, and clindamycin available in both pill and cream form.
- Yeast infections: Local azole, in the form of ovula and cream. These anti-fungal medications, which are available in over the counter form, are generally used to treat yeast infections. Treatment may last anywhere between one, three, or seven days.

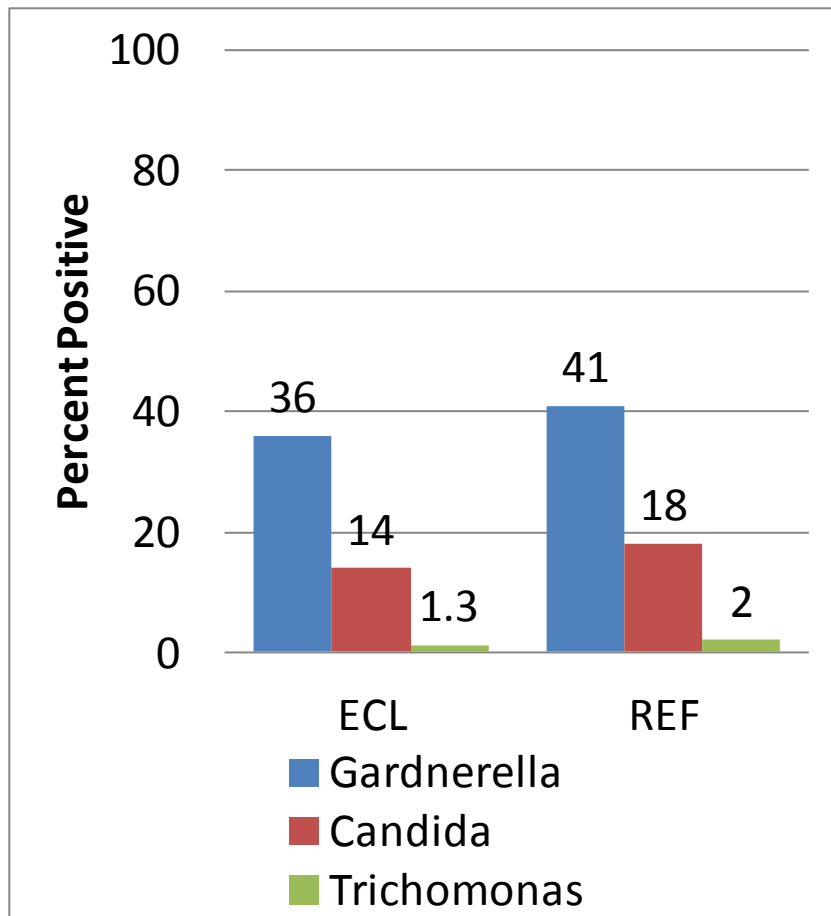
Vaginitis Test Turn-Around-Time (Hrs) and Percent Achieving Target TAT of 3 Hours (Data Generated Utilizing Harvest Turnaround Time Report)



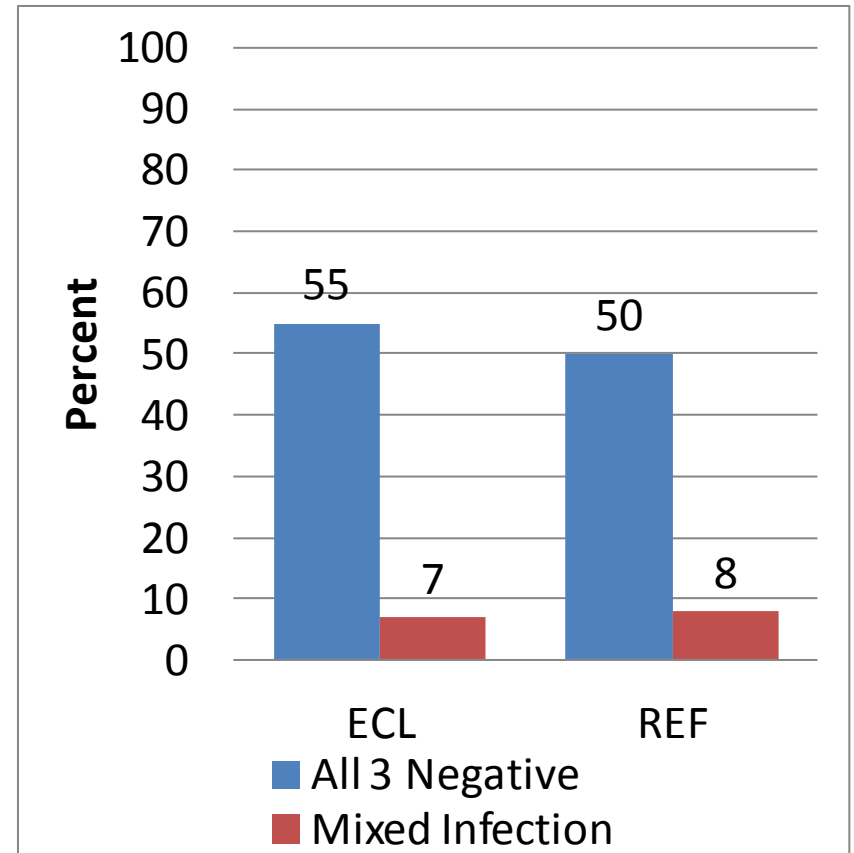
Vaginosis/Vaginitis Testing

(Data Generated Utilizing Harvest Result Browser)

Percent Positive Test Result



Evaluation of Results



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Preventive Testing

Underutilization of Lab Testing

- Delayed or missed diagnosis
- Downstream overutilization or longer LOS
- Improving lab utilization leads to more cost-effective care, regardless of whether appropriate utilization results in more or less lab costs.

TN Healthcare Innovation Initiative

Through Governor Haslam's leadership, the State of Tennessee has launched a state-wide initiative to transition its healthcare payment system to better reward patient-centered, high-quality, high-value health care outcomes for all Tennesseans.

Quality metrics

The episode reimbursement model is designed to reward providers who deliver cost effective care AND who meet certain quality thresholds. A Principal Accountable Provider must meet or exceed all established benchmarks for any quality metric tied to gain sharing in order to be eligible to receive monetary rewards from the episode model. Quality metrics tied to gain sharing are referred to as threshold metrics. Other quality metrics may be tracked and reported for quality improvement purposes but may not be tied directly to gain sharing.

The threshold quality metrics for the perinatal episode (i.e. the quality metrics tied to gain sharing) are: screening rates for HIV and Group B streptococcus and the overall C-section rate.

The quality metrics that will be tracked and reported to providers for the perinatal episode, but that are not directly tied to gain sharing, are: the screening rate for gestational diabetes, the percentage of women screened for asymptomatic bacteriuria, the screening rate for hepatitis B specific antigen, and the Tdap vaccination rate.

Perinatal: Threshold Quality Metrics

- Monitoring testing volumes for HIV screening and Group B strep screening
- Associated with the C-section rate
- Also tracking:
 - Gestational diabetes screening
 - Asymptomatic bacteriuria screening
 - Hep B specific Ag screening
 - Tdap vaccination rate

Goal to Increase Patient Compliance

- High incidence (30-40%) of no-shows for blood draws
- Looking at ways for the lab to increase patient compliance.
- Email patient reminders directly from the LIS or EHR.

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Analytics & Business Intelligence

Physician Quality Reward Program

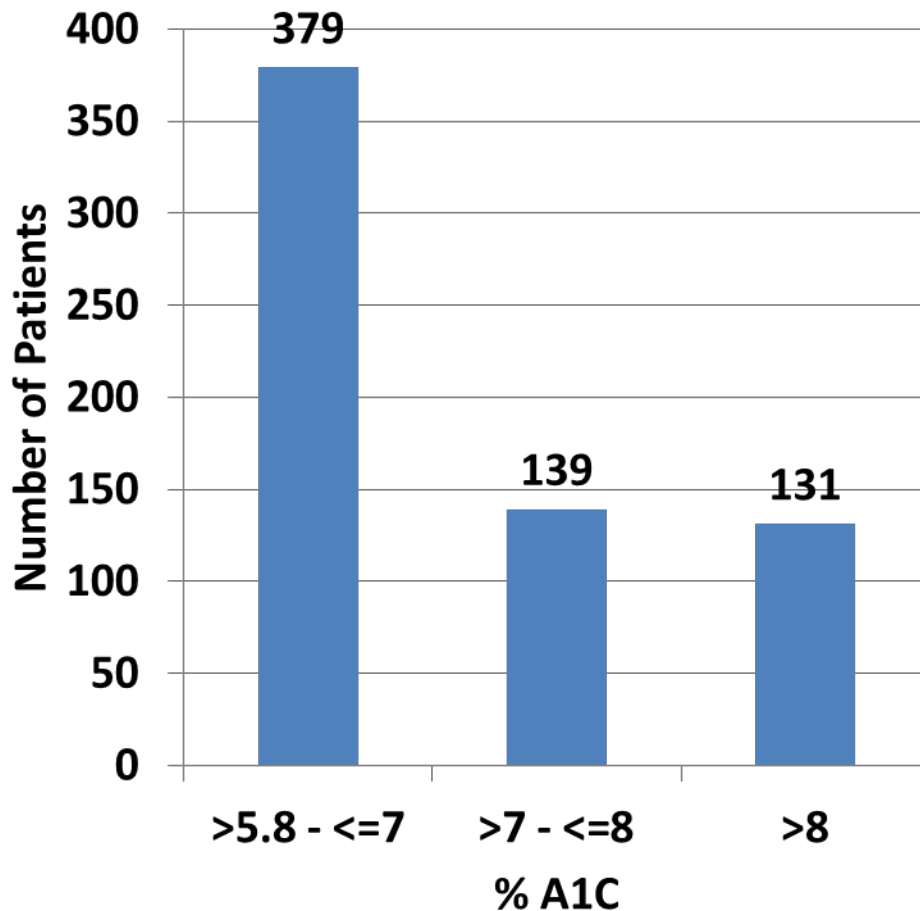
Measures and Goals

Measure	Criteria	Performance Standard	Rate
A1C Poor Control Diabetes	<p>Members who are 50-75 years old (Type 1 or 2)</p> <p>Must ensure that each eligible patient's most recent A1C level is no greater than 9.</p>	=> 84%	\$.50 PMPM
LDL Control Diabetes	<p>Diabetic members, 18 to 75 years old (Type 1 or 2)</p> <p>Must ensure that each eligible patient's most recent LDL-C level is less than 100.</p>	=> 59%	\$.50 PMPM

How well are we taking care of diabetic patients?

- Hgb A1c Report
 - In 2013, >100 patients with >8% A1c and >3 months since tested.
 - This tool can be used to support the goal of keeping patients healthier.
 - Identify the “sickest” patients and focus on their follow-up.

Number of Patients Whose Last A1C Result Was Abnormal and Collected Greater Than 90 Days Ago



Process

1. Design the overdue A1C report in Result Browser.
2. Utilize the auto-run report feature to generate and deliver a monthly report.
3. Utilize data generated in result browser to distribute a patient specific cumulative report to the ordering department.

Management Reports

- Business intelligence and analytics are needed for population health management.
- Laboratories have valuable clinical data to share.
- Administrators need these tools as they negotiate contracts.

Make the Best Use of Laboratory Tools

- Laboratorians will need to use every tool available to support better patient care.
- ...Because in non-FFS, we will get paid for how well we provide service.

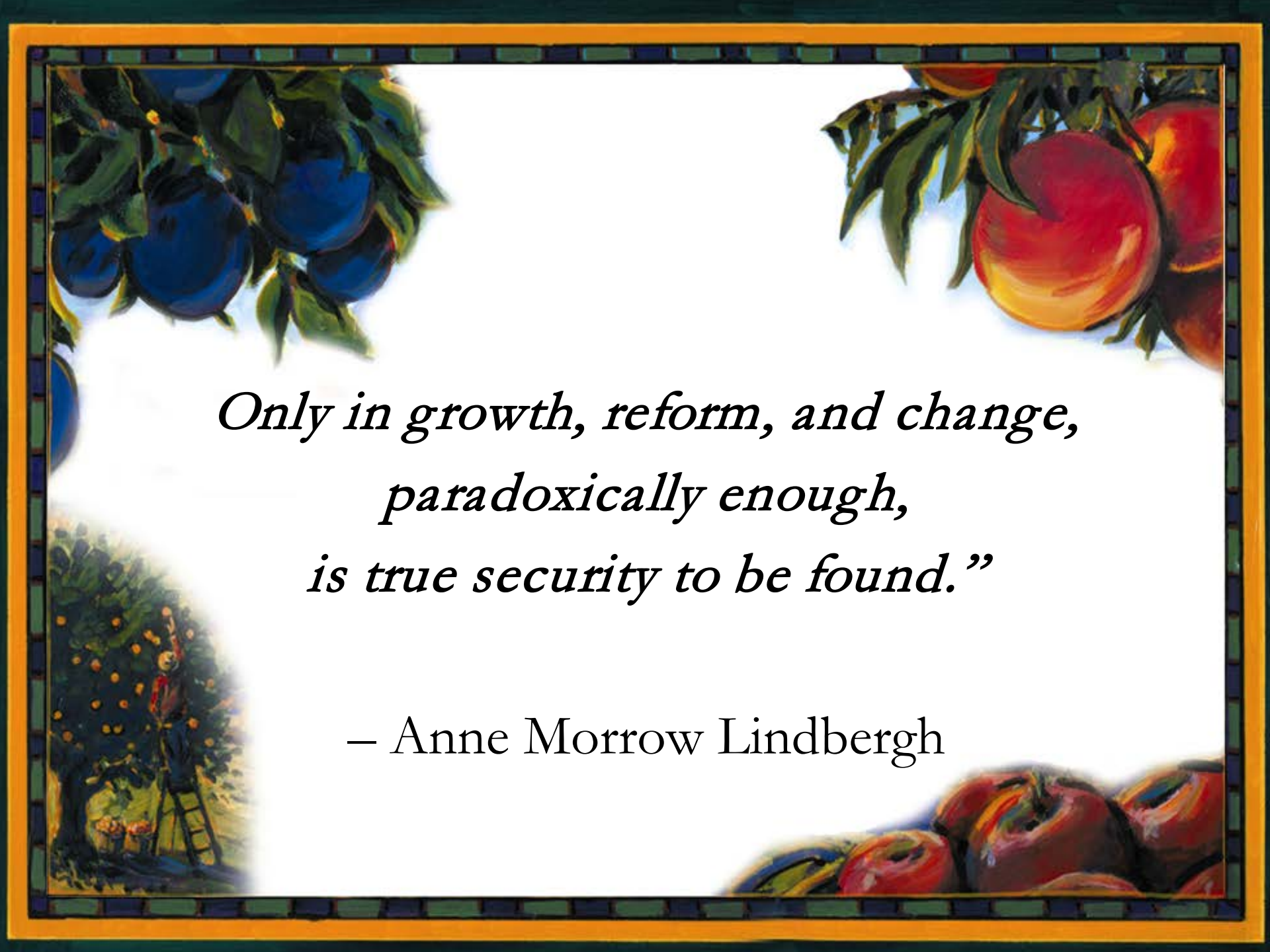
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Communication between Laboratory & Administration

Make Sure the Lab is “In the Loop”

- Lab does not always market itself well; value is enormous but not always well communicated.
- Lab and administration need to have a united focus.
- Keep up-to-date on healthcare changes.
- Understand how they may impact your facility.



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*Only in growth, reform, and change,
paradoxically enough,
is true security to be found.”*

– Anne Morrow Lindbergh



Thank You

Questions?



OrchardSoftware

Harvest the Power