Value-based Pathology: The Northwell experience

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Disclosure

Biomedical Research Alliance of New York (BRANY)*

2009- Vice Chair, Managing Committee

ClaraPath (start up from Cold Spring Harbor Laboratories)**

2015- Scientific Advisory Committee

*CRO for Clinical Trials

**Technology Transfer

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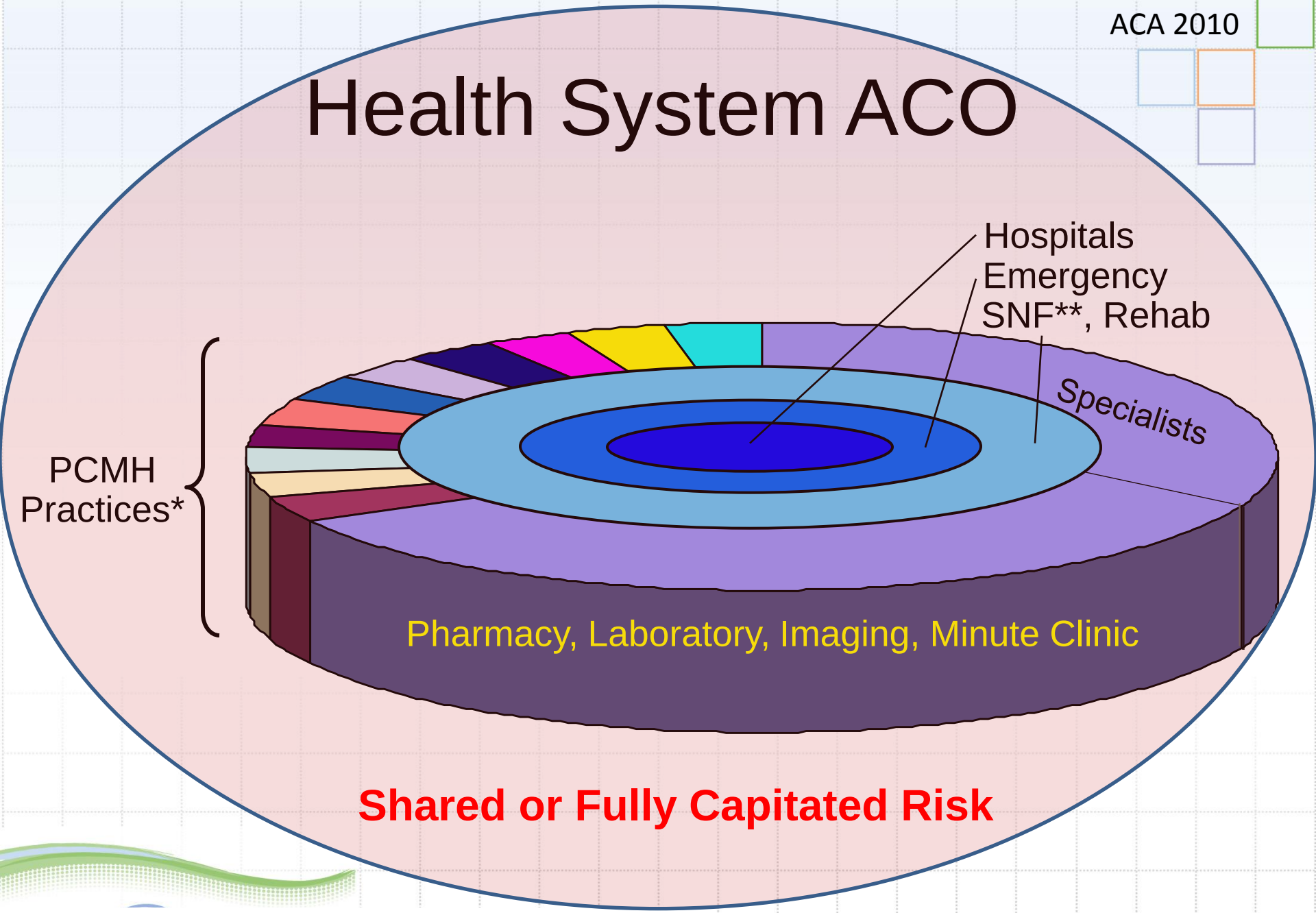
North Shore LIJ Laboratories

Health System ACO



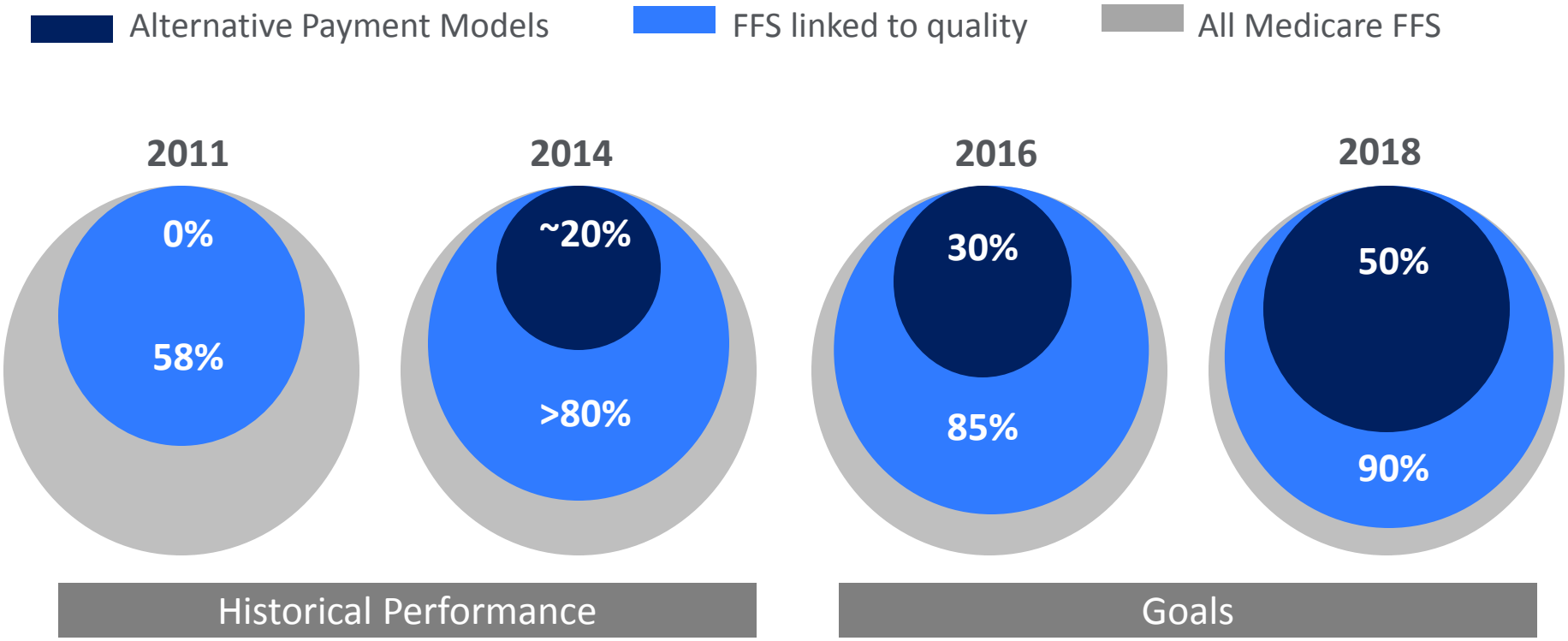
Shared or Fully Capitated Risk

**Patient Centered Medical Home*

***Skilled Nursing Facilities*

Medicare Shifting to Value-Based Care

The Centers for Medicare and Medicaid Services are committed to value-based care, targeting >50% of payments in alternative models by 2018



Continued Expansion of Bundled Products - CCJR

Starting in 2016, participation in bundled payments for hip and knee replacements is mandatory, forcing providers to focus on the total cost of procedures from surgery to post-acute care. Total cost targets are set and **trended by region**, fueling local competition on performance.

Medscape Medical News

CMS Finalizes Mandatory Hip and Knee Bundled Payment Program

Ken Terry

November 18, 2015

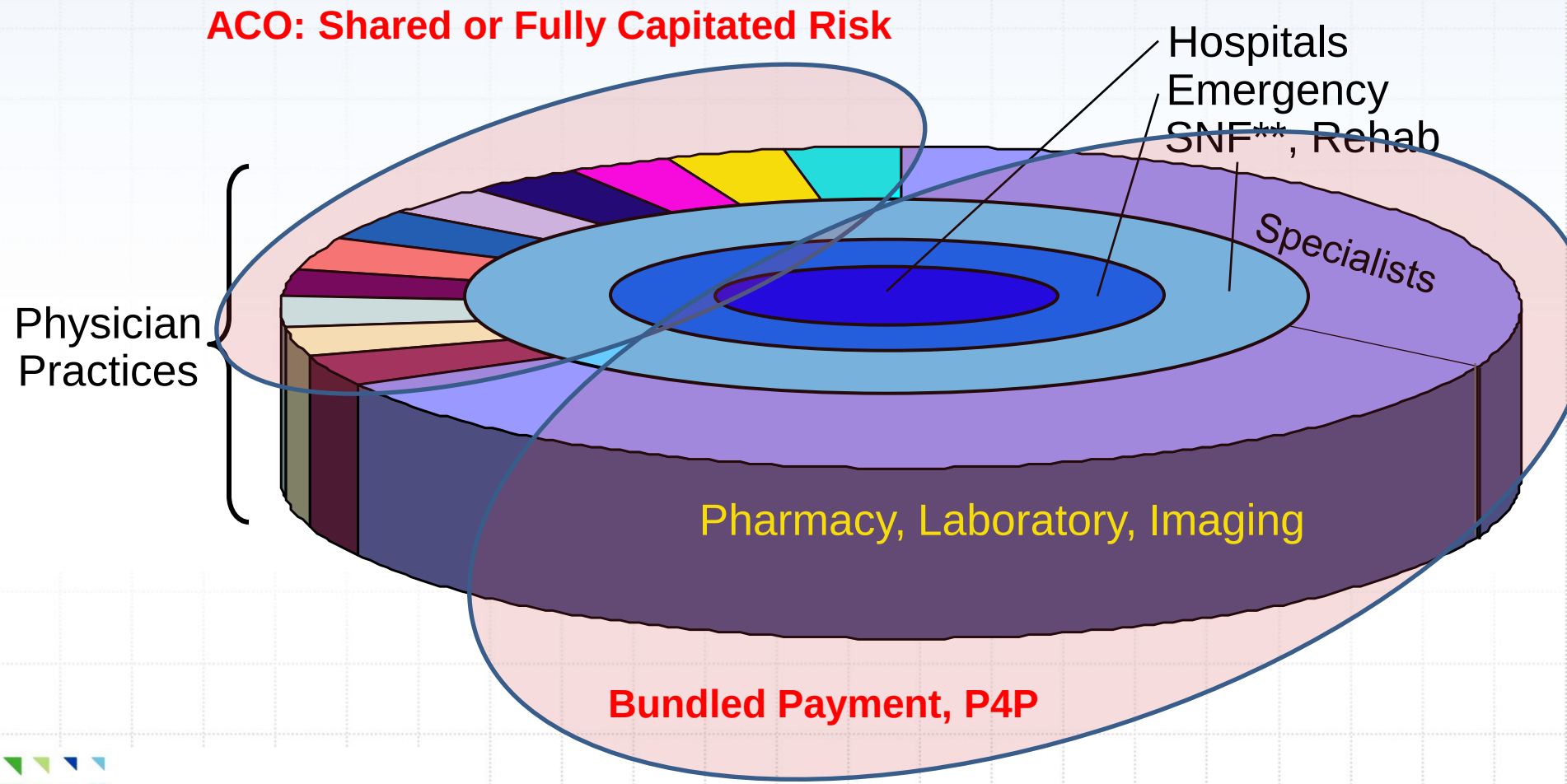
3 comments Print

EDITORS' RECOMMENDATIONS

CMS Solicits Advice on New Medicare Payment Rules

The Centers for Medicare & Medicaid Services (CMS) has finalized its rule for the Comprehensive Care for Joint Replacement Program (CCJR). Although CMS made a few significant changes in the bundled payment program, it is still mandatory for most of the hospitals in the regions the 5-year demonstration covers.

ACOs and Bundled Payments



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***Skilled Nursing Facilities*

MSSP Quality Results: 2014 data

ACO Type	Average weighted total quality score
Hospital System & Physician Group (Both)	76.99
Hospital System	75.44
Physician Group	71.82

http://healthaffairs.org/blog/2014/12/18/aco-quality-results-good-but-not-great/ (February 13, 2016)

MSSP Shared Savings: 2014 data

Type	Earned Shared Savings	Earned Shared Savings with Quality Penalty in Place	Difference (%)
Hospital and Physician Group	$114.6 Million	$86.8 Million	$27.8 Million (24.3%)
Hospital System	$49.1 Million	$38.2 Million	$10.9 Million (22.2%)
Physician Group	$133.1 Million	$100.7 Million	$32.4 Million (24.3%)
Total	$296.8 Million	$225.7 Million	$71.1 Million (24.0%)

http://healthaffairs.org/blog/2014/12/18/aco-quality-results-good-but-not-great/ (February 13, 2016)

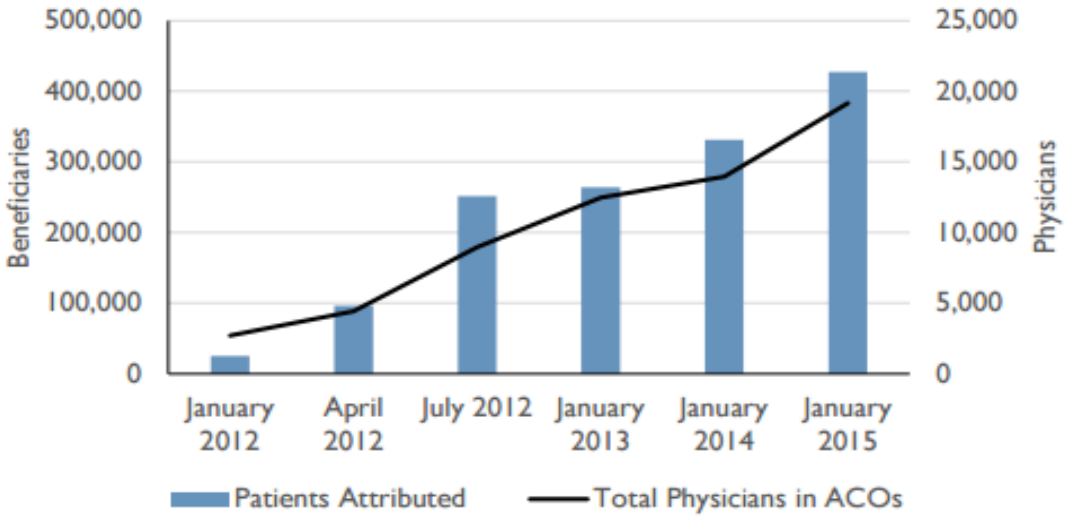
Local Market ACO Performance

MSSP in First Performance Year

ACOs with Savings > MSR	Assigned Beneficiaries	Generated Savings	Shared Savings
The major "competitor" physician group	28,651	$ 21.9 M	$ 10.7 M
Regional non-competitive physician group	12,369	$ 7.4 M	$ 3.6 M
ACOs with Savings < MSR			
Regional market physician group	16,790	$ 3 M	$ -
Regional market physician group	14,769	$ 1.9 M	$ -
Regional market physician group	12,941	$ 1 M	$ -
ACOs with Losses			
Regional "competitor" physician group	25,042	$ (1.5 M)	$ -
Regional "competitor" physician group	14,082	$ (1.5 M)	$ -
Regional "competitor" physician group	16,326	$ (10.8 M)	$ -

Source: NYS Health Foundation

Figure 2. Growth in Medicare ACOs in New York, 2012–15: Beneficiaries and Physicians



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Medicare Access and CHIP Reauthorization Act (MACRA)

- Repealed the Sustainable Growth Rate (SGR) formula in April 2015
- Institutes two options for payment, Alternative Payment Models (APM) or Merit Based Incentive Payment System (MIPS)
- Providers not participating in Alternative Payment Models are subject to potential **penalties ranging from 4%-9%**

MIPS Penalty/Bonus %

MIPS Payment Year	MIPS Maximum Penalty/Bonus
2019	+/-4%
2020	+/-5%
2021	+/-7%
2022 and beyond	+/-9%

APM Benefits

Those who participate in **the most advanced** APMs may be determined to be **qualifying APM participants ("QPs")**. As a result, QPs:

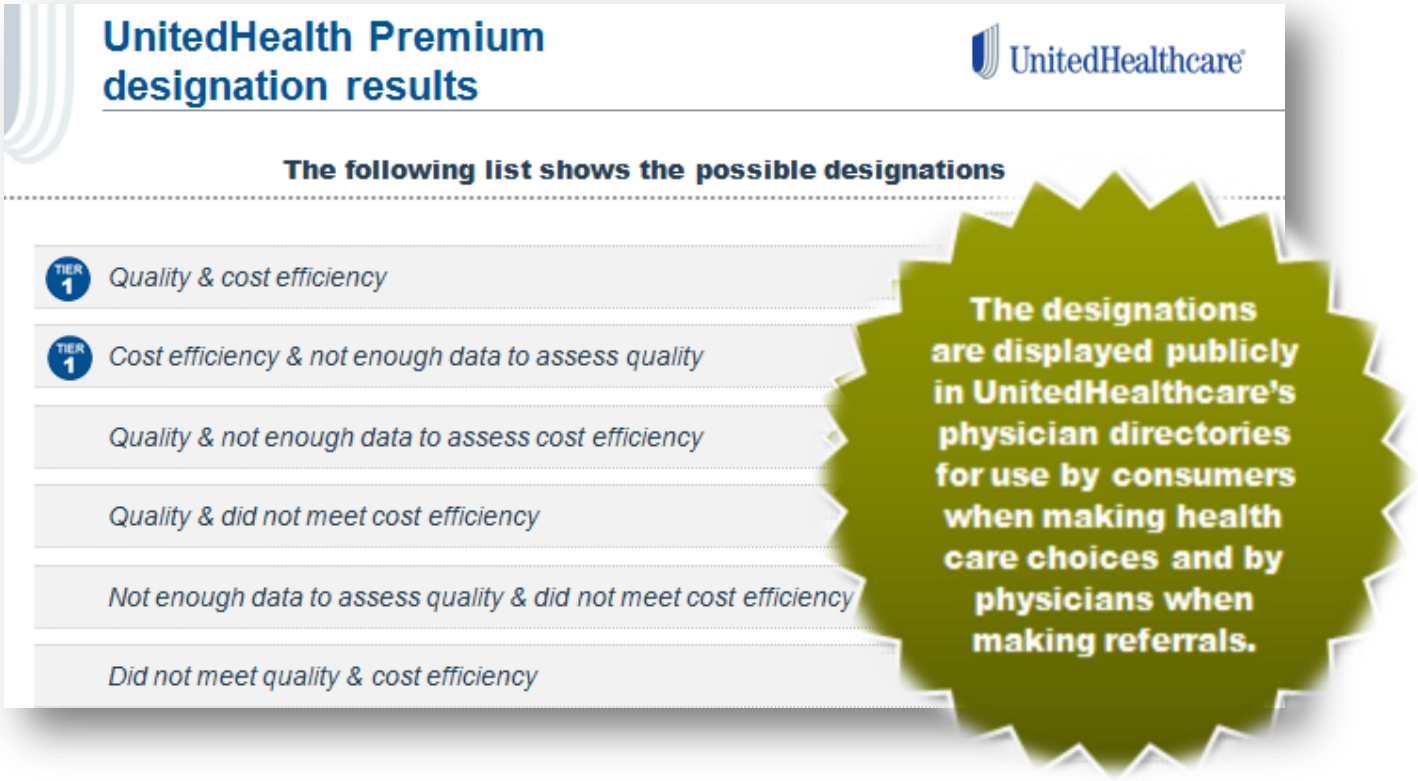
1. Are **not subject** to MIPS
2. Receive 5% lump sum **bonus payments** for years 2019-2024
3. Receive a **higher fee schedule update** for 2026 and onward

Provider Tiers

Physicians are being measured and tiered by commercial insurers based on performance on quality and cost data

Note: 70% of Northwell Physicians are Tier 2

Tier 1 = Met Cost + Quality Threshold



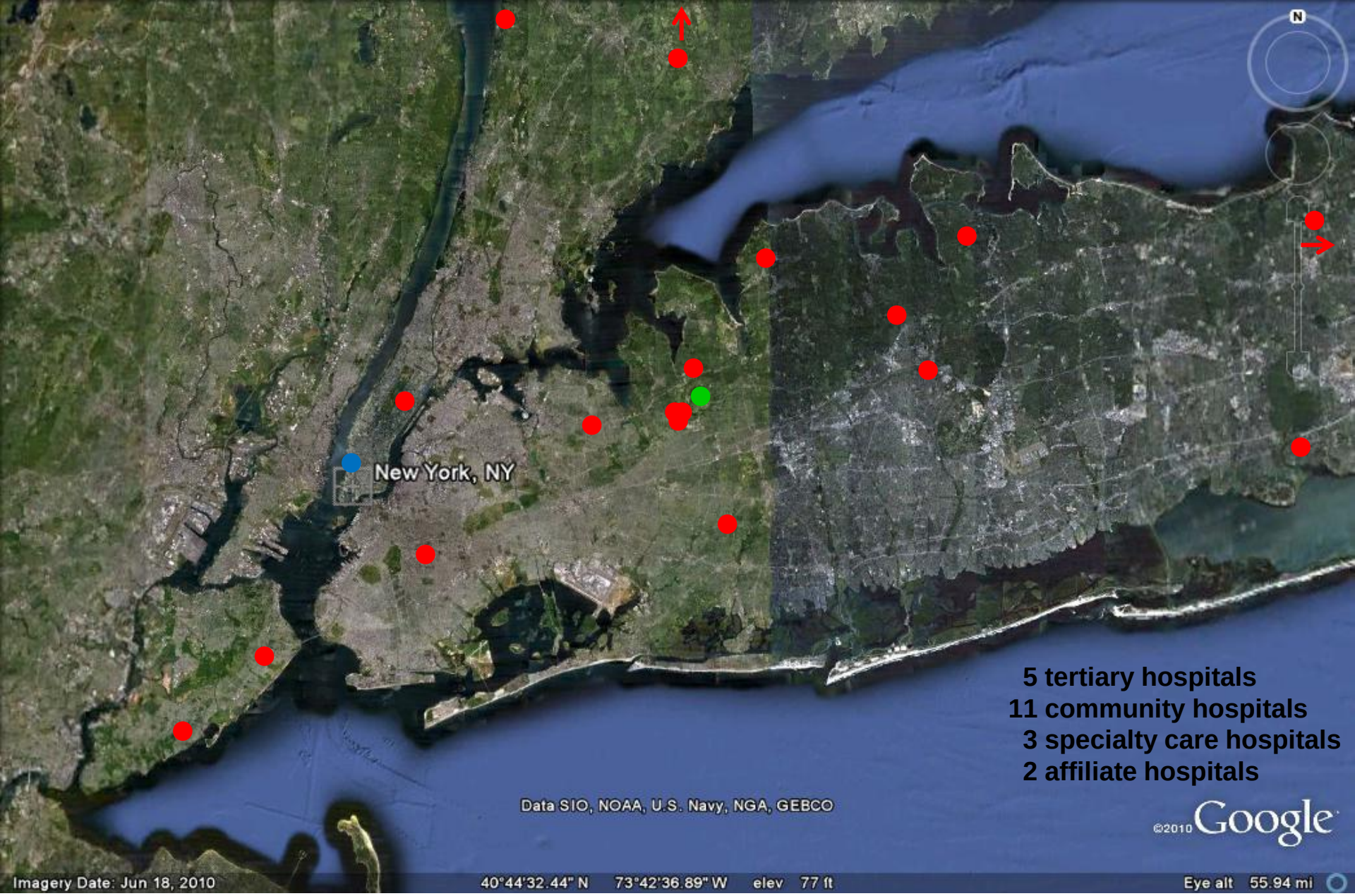
Local Issues and Current Organizational Challenges

Issues

- Being large is no longer the predominant factor in negotiating for maximum revenue or directed volume
- Providing high value care (service, quality AND **cost**) is increasingly becoming the market-share and revenue generating differentiator

Challenges

- Leadership
- Legacy business unit structure
- Building a large integrated network with multiple priorities
- Cost of implementation
- Accelerating contracting alignment



- Reference laboratory (9% of market)
- 21 Hospitals (27% of market)
- Free-standing Emergency Room

Network of SNFs, AmbSurg, UrgiCenters
450+ practice locations
>4M unique patients per year

NSLIJHS Vital Statistics

2014 Key Facts

- Nation's 14th largest health system, largest in New York State, >60,000 employees
- Service area of 7 million people in Long Island, New York City, Westchester.
- 3,126 employed physicians and one of the largest medical groups in the country
- Over 4 million patient contacts per year
- For regional network, over 40,000 live births (**1% of United States**)
- 16,000 unique cancer patients per year
- 367,163 hospital discharges (**26% of greater New York metropolitan market**)
- 664,915 emergency visits
- 688,660 home care visits
- 147,731 ambulatory surgeries
- 102,277 ambulance transports

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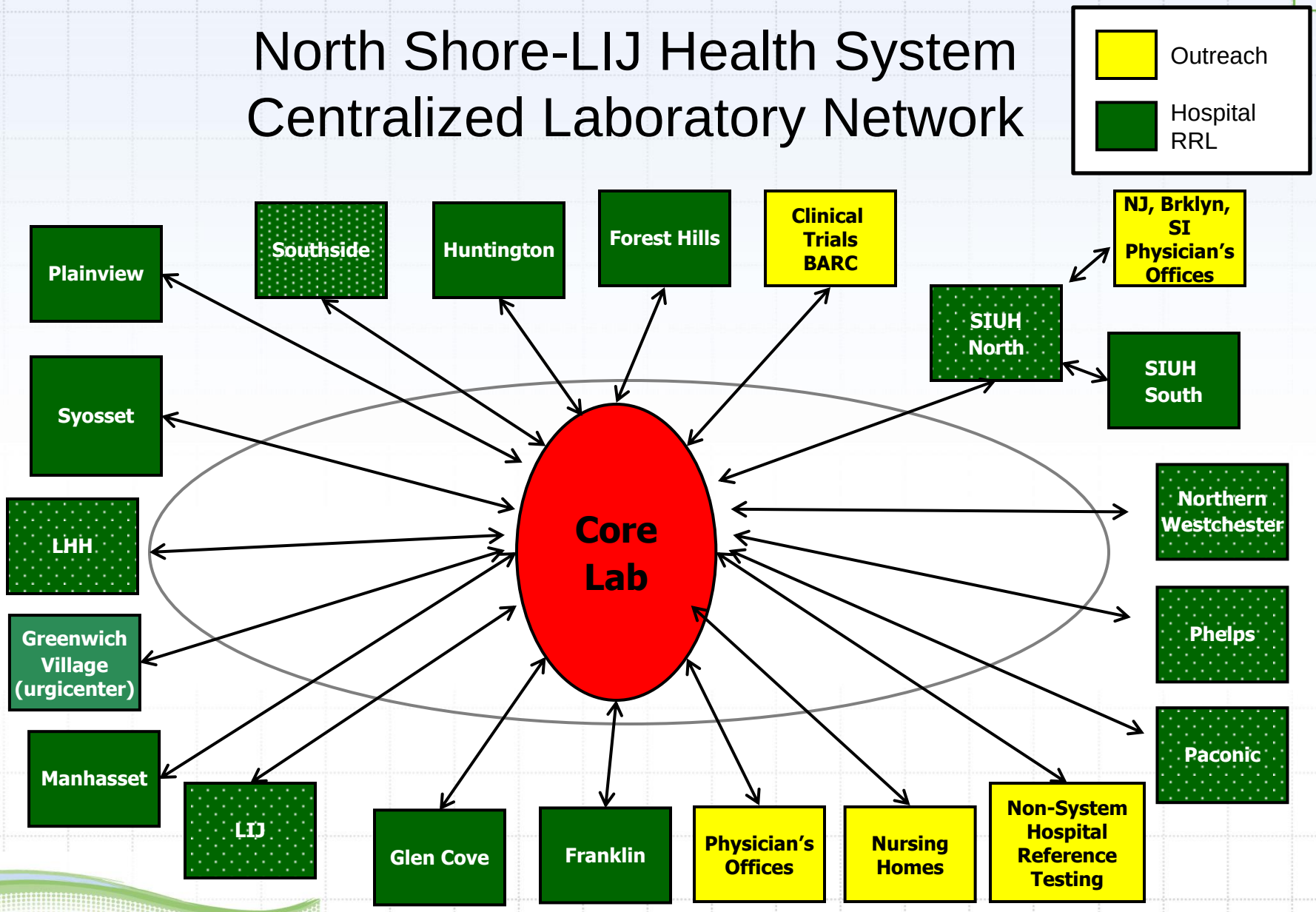
North Shore-LIJ Health System Centralized Laboratory Network



Plus: 32 Patient Service Centers, in-office phlebotomy, home draw, network support of POLs

System Network Model

- Shared Consolidated Core Laboratory
  - Centralized Clinical and Administrative Leadership
  - Standardized Equipment across all Laboratories
  - Standardized SOP's
  - Single Integrated Lab Information System - Cerner
  - Centralized Microbiology, Esoteric, Reference
  - Centralized Quality and Competency Program
- Centralized POCT Division
- Consolidated CLDW* Lab Info
- Coordinated Lab Outreach

***Clinical Laboratory Data Warehouse**

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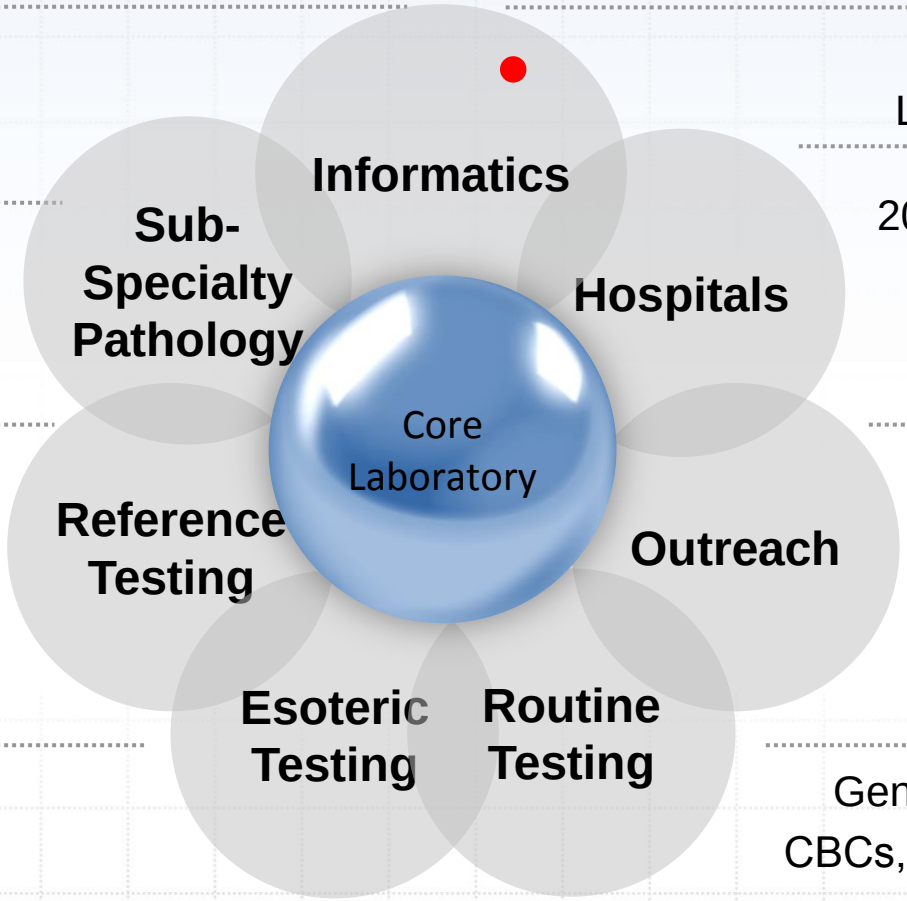
Core Laboratory

High Volume
Fully Automated

GI, Breast, Skin, GU, Liver, HemePath, etc.
Over 40 Pathologists

All Send-out Tests

Molecular
Microbiology/Virology
Cytogenetics, Genomics



Central LIS Support
Lab Informatics Division

20-40% Hospital Related Laboratory Tests

Growth Engine
Business Development
Sales and Marketing
Logistics , PSCs

General Laboratory Testing
CBCs, CMP's, Liver Function,

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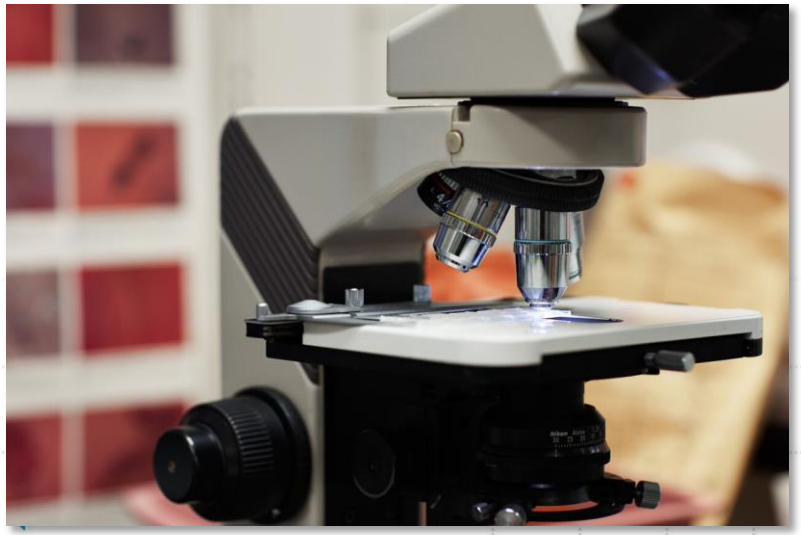
● new in 2014

Rapid Response Laboratories



- **Limited Routine and Stat Test Menu –**
  - **Gen Lab**
  - **Focused Molecular**
  - **Blood Gas**
  - **Blood Bank**
  - **Local Pathology Support**
- **Based upon <6 hour Turn around Time (45 min for Stat)**
- **Onsite Clinical Team Integration**
- **Strategic Outreach Testing**

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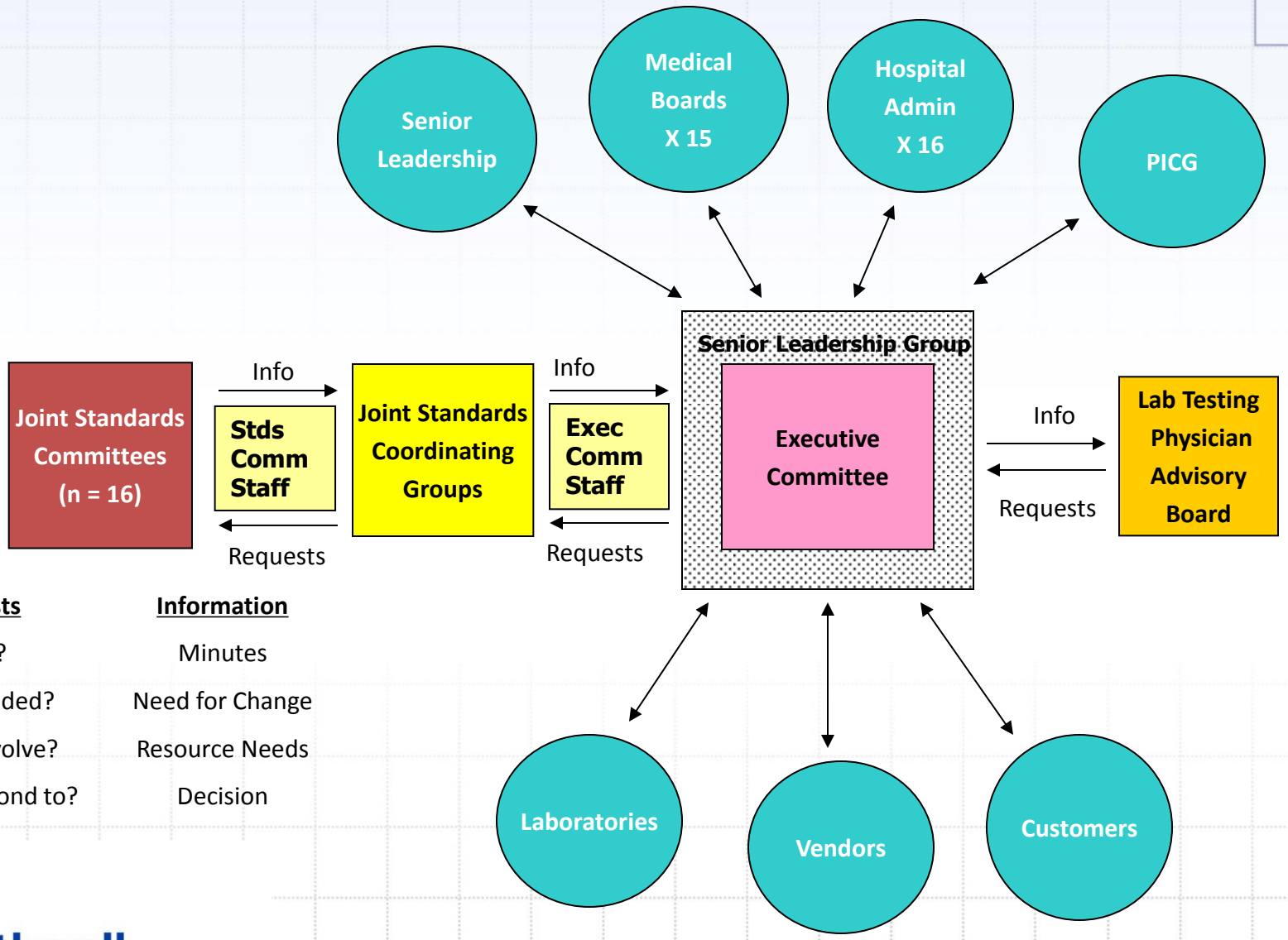
Joint Standards Committee Process



Requests	Information
What?	Minutes
When Needed?	Need for Change
Who to Involve?	Resource Needs
Who to respond to?	Decision

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Selected System Initiatives: 2015

- Phlebotomy Safety
  - Wrong Blood in Tube (WBIT)
  - Cancelled Tests (Mislabeled, Unlabeled, QNS, Clotted….)
  - Patient Experience
  - Competence of Provider (70% by other-than-Phlebotomist)
- Blood Banking/Transfusion Medicine Risk Assessment
- MALDI-TOF & BioFire for rapid diagnostics in Microbiology
- “Physician Portal” → “Patient Portal” for Lab Tests
- Enterprise Data Governance: Role of Laboratory Data
- FNA ROSA in support of Radiology Service Line
- Standardized management of inpatient dysglycemia
- Support of all system Physician Office Laboratories

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Top Priority Initiatives: 2016

- Laboratory Efficiency: “work smart”
  - Increased automation
  - Better (and more automated) Business Intelligence, Quality Reports
  - Improved workflow, removal of duplicative processes
- Laboratory Utilization: all sites, aligned with site strategies
- *Clinical Informatics* (not just Pathology Informatics), especially in support of Coordinated Care
- Building a rigorous Evidence Base for the value-proposition
- Bringing a disciplined and comprehensive program of Genomic Medicine to the Northwell Health system
- Converting research-based biobanking to enterprise-class biobanking
- *And always:* workforce development, patient-centered care

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Northwell: Laboratory Services

- **The Laboratory Service Line:**
  - *All inpatient laboratories*
  - *All ambulatory labs for owned practices*
  - *9% of the "open" regional market*
- **"Own all problems"**:
  - Regardless of source of problem, "Lab" fixes it
- **"Stay ahead of network development":**
  - Lab samples are portable: "no leakage" from network – regardless of geography
  - ***Meet the price-points of network products***

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Formation of a Joint Venture

Northwell

- Central “Core” Laboratory
- 15 Hospital Based Labs
- $350 Million Annual Operating Budget
- Over 2000 FTE’s
- 30 Million Billable Tests/year
- Not-for-Profit Health System
- Focus on Patients, Community and Education

HHC

- 4 “Core” Laboratories
- 11 Hospital Based Labs
- $260 Million Annual Operating Budget
- Approx. 1400 FTE’s
- 16 Million Billable Tests/year
- Public-Benefit Corporation
- Focus on Patients, Community and Education

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HHC NEW YORK CITY HEALTH AND HOSPITALS CORPORATION
How NYC takes care of its own.

Vision

- Shared Consolidated Core Laboratory
  - Standardized Equipment across all Laboratories
  - Standardized Information System
  - Standardized SOP's
  - Standardized Quality Program
  - Seamless Integration
- Increased Quality and Depth of Service
- Decrease Cost: HHC and NSLIJ are projected to see combined >$40M savings annually by 2018

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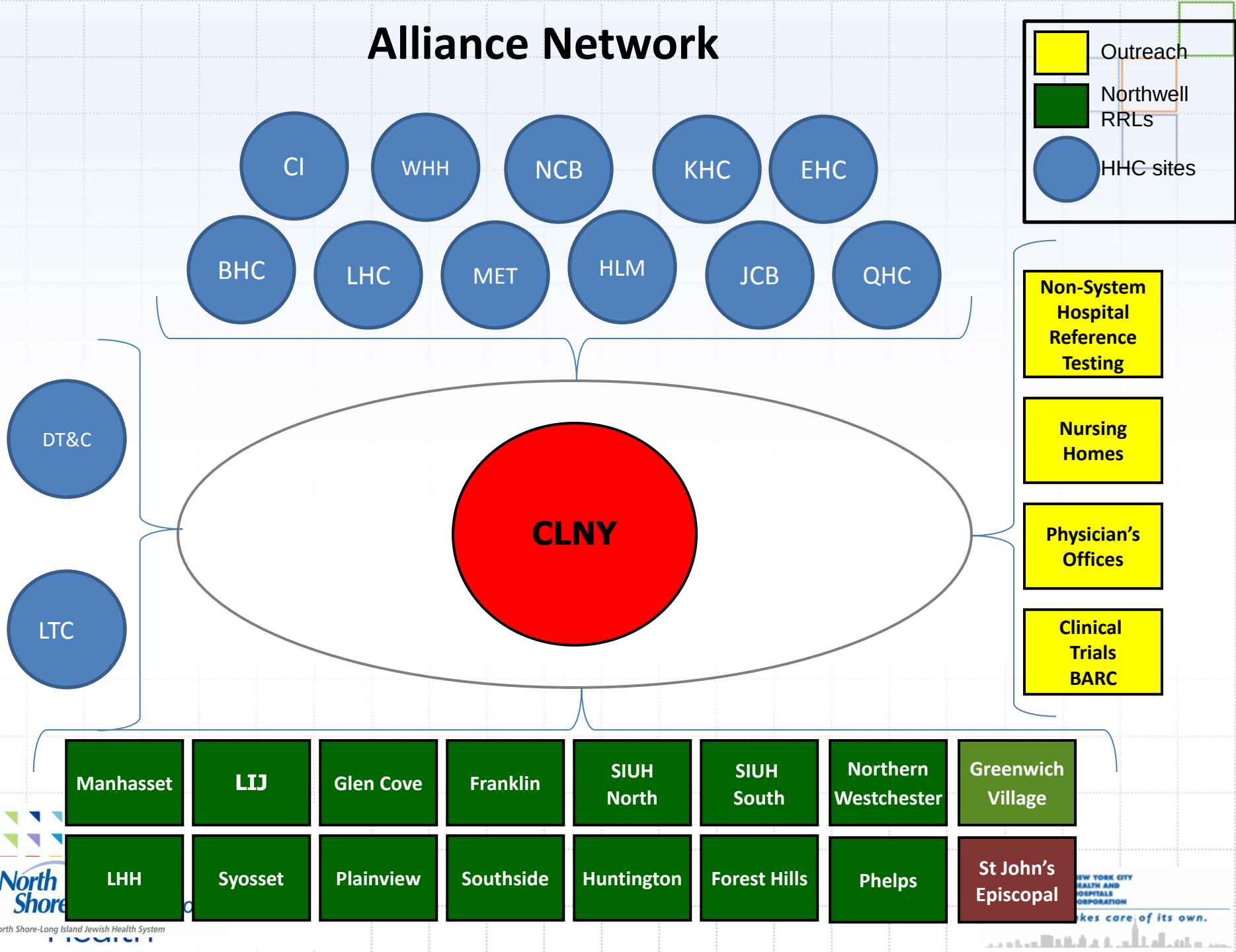
HHC NEW YORK CITY HEALTH AND HOSPITALS CORPORATION
How NYC takes care of its own.

Alliance Network



North Shore-Long Island Jewish Health System

So what is our future role in Value generation (including Utilization)?

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North Shore LIJ Laboratories

What data elements *should* Pathology & Laboratory Medicine contribute?

- ***Risk Stratification*: prior to, or as a result of "lab testing"**
- ***Cost Analysis*: on the entirety of "episode" or "pmpm"**
- ***Safety & Quality*: Lab as a primary source of data**
- ***Patient Outcomes*: improved, as a result of lab data**

From all practice sites:
Ambulatory
Acute Care
Post-Acute Care and SNFs
Home

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Value-based health care: What Pathologists should be doing

- Establish value-added roles in support of ACOs, bundled payment arrangements, P4P, VBP, APM, etc.
- Gain recognition for these roles
- Get paid fairly for these roles

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Northwell Health Labs: Division of Informatics

- New "Division" in lab organization (n = 6 and growing)
- Works constantly with LIS team (n = 35 and growing)
- CMIO and CIO for Laboratory Service Line
  - CMIO: works with clinical stakeholders throughout system
  - CIO: accountable to enterprise IT (CIO, OCIO)
- Design and build infrastructure – Internal and External
  - Hardware
  - Software
- Architect and programmers
- Data integration from multiple systems throughout enterprise
  - "Owning" deliverables from laboratory environment
- Delivery platforms

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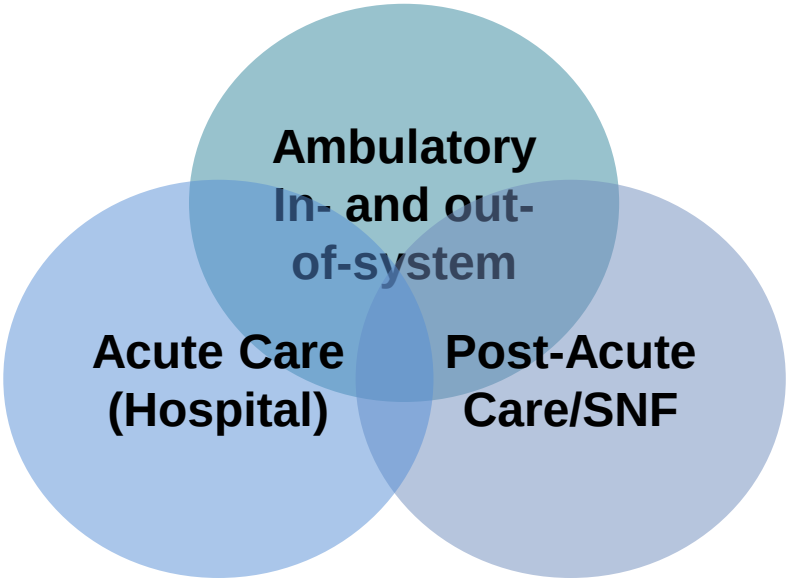
Division of Informatics

- New "Division" in lab organization (n = 5 and growing)
- Works constantly with LIS team (n = 30 and growing)
- CMIO and CIO for Laboratory Service Line
  - CMIO: works with clinical stakeholders throughout system
  - CIO: accountable to enterprise IT (CIO, OCIO)
- Design and build infrastructure – Internal and External
  - Hardware
  - Software
- Architect and programmers
- Data integration from multiple systems throughout enterprise
  - "Owning" deliverables from laboratory environment
- Delivery platforms
- **Return-on-Investment: within first year – *but to health system!***
  - **Benefit does not (yet) derive to Laboratory Service Line**

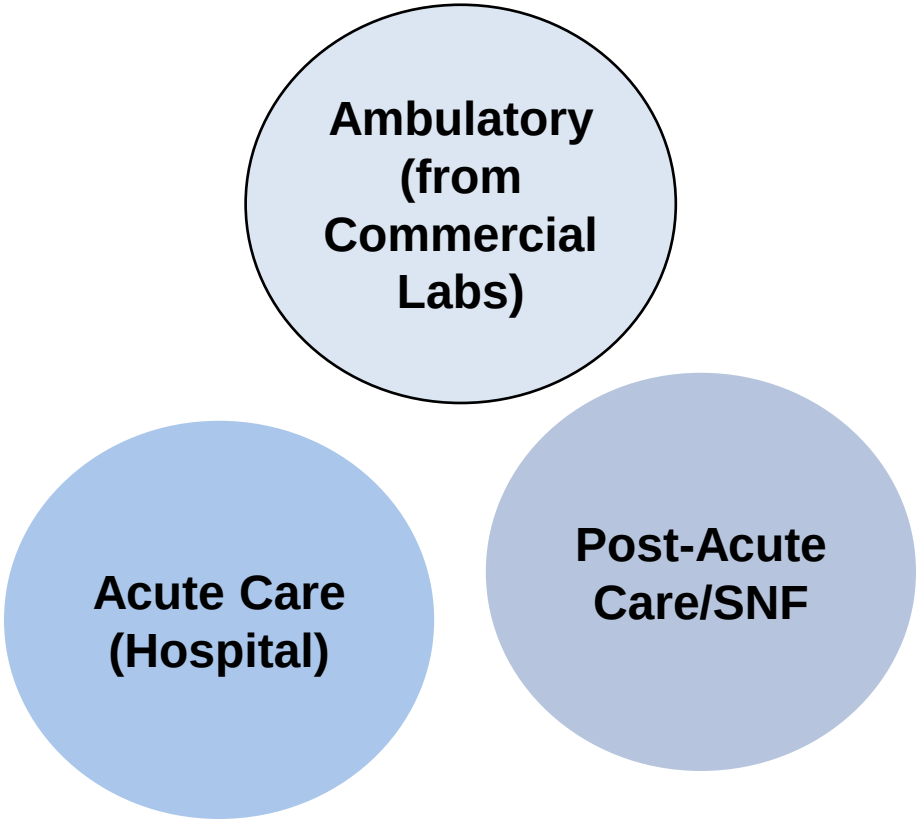
Data Across the Continuum of Care

What Payers Want:
Data Across the Continuum



Results
Billing Info
Member ID
Pt. Demographic
Diagnosis Data

What Payers are Currently Getting



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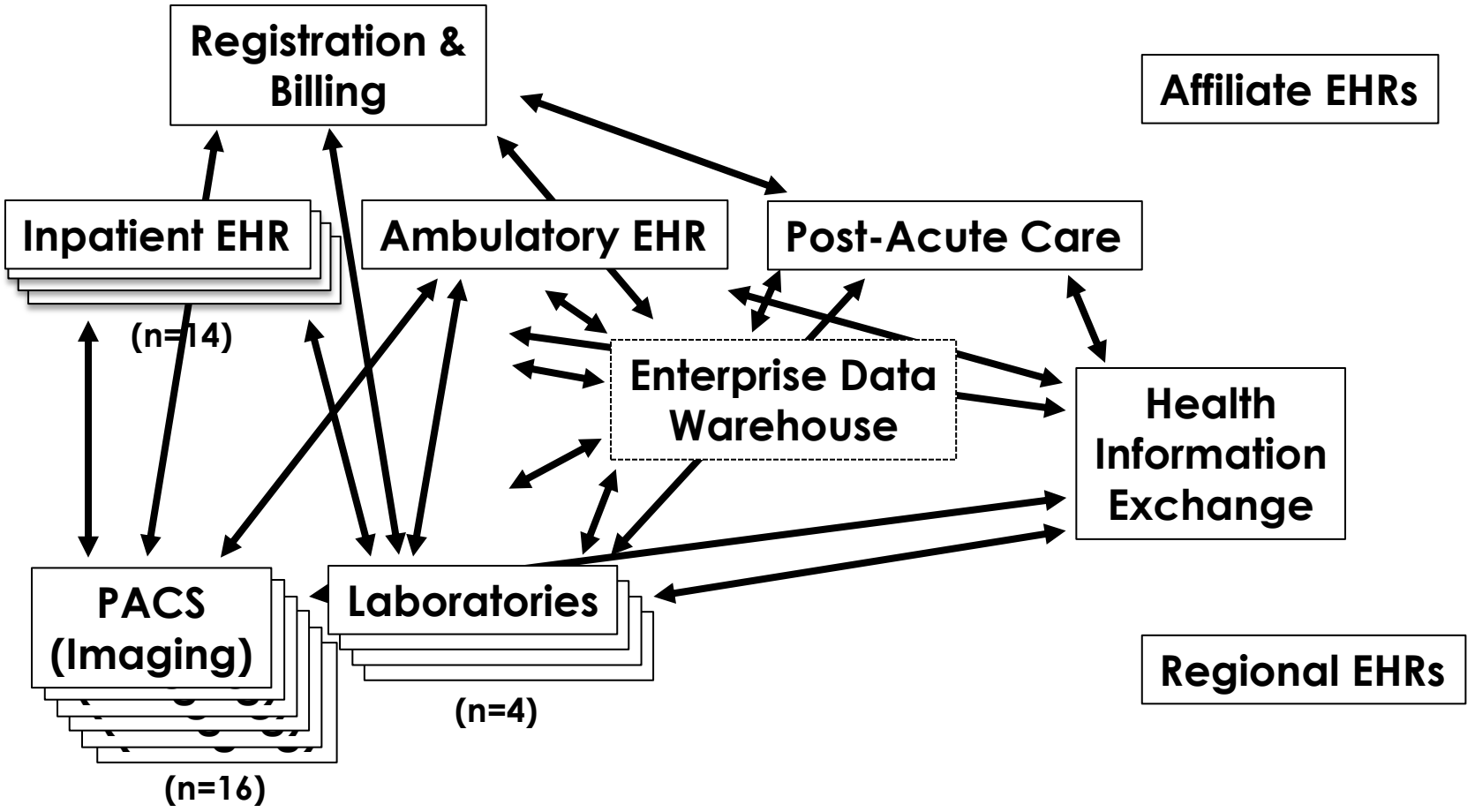
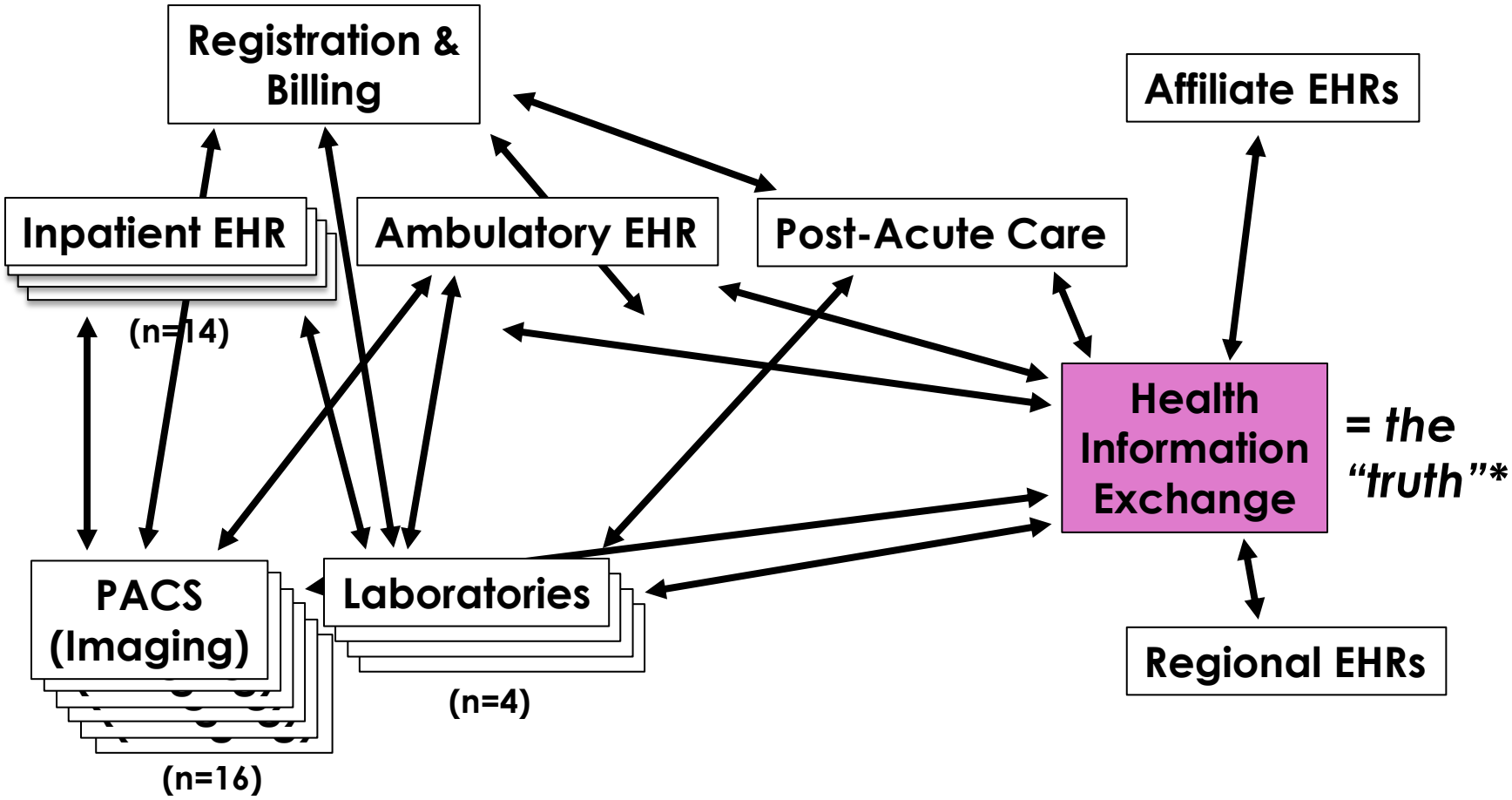
One health system's version of Enterprise Data*



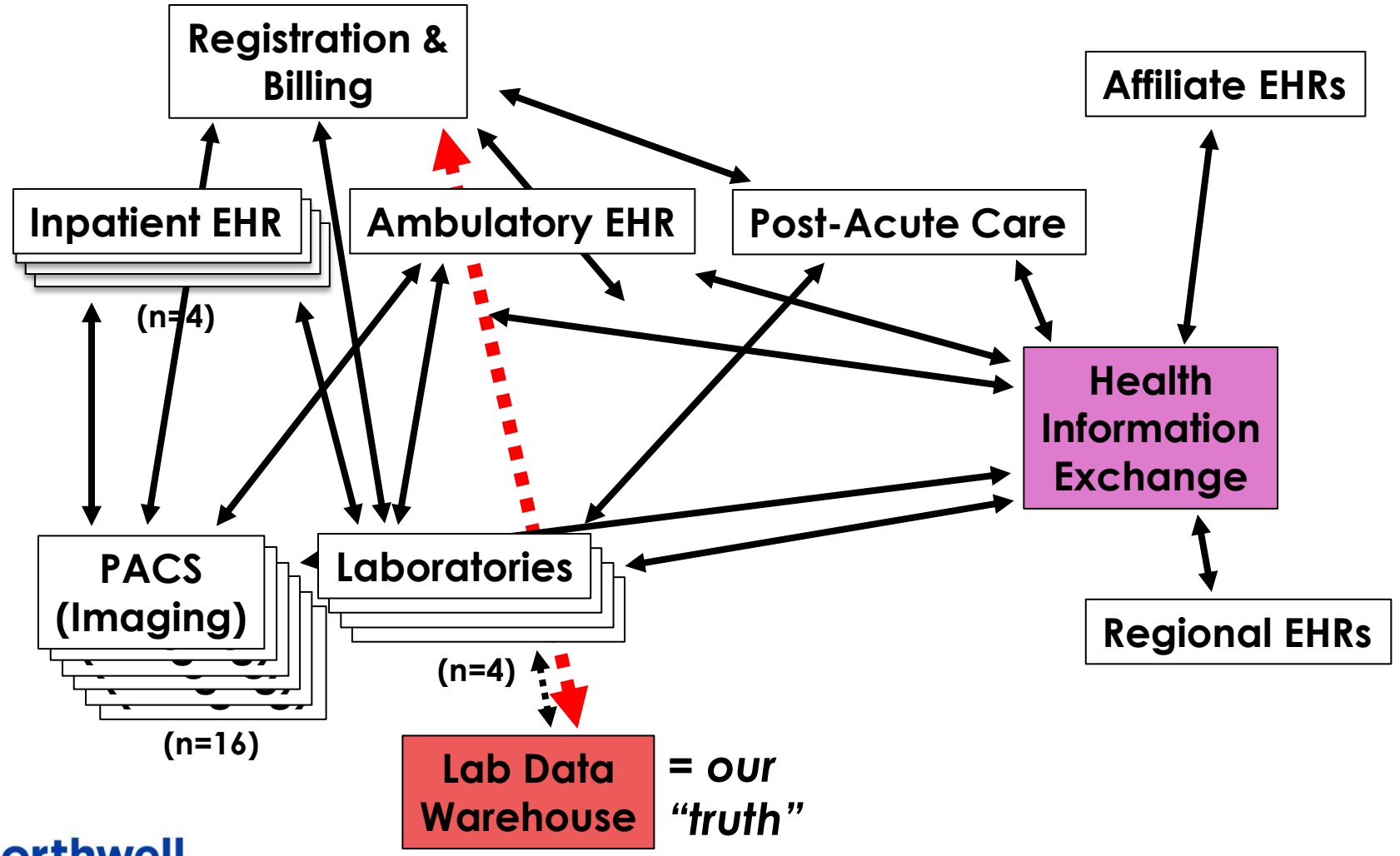
*Northwell Lab's worm's eye view of the Northwell Health

One health system's version of Enterprise Data



*for the OCIO
…until EDW is built

One health system's version of Enterprise Data



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"Division" of Pathology Informatics

- **Business Analytics***
  - **Financial***
  - **Operational***
  - **Service***
- **Clinical Analytics**
  - **Utilization Management***
  - **Clinical Decision Support***
    - ***Physician Practices****
    - ***Hospitals –Inpatient/Outpatient****
  - **Patient Outcomes†**

***All from Laboratory Data Warehouse**
†Will require data pulls from EDW or HIE

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Northwell Health Value-Based Contracting 2016

- Full Risk (127,000 lives)
  - Northwell Health employees; HealthFirst;
  - CMS Pioneer ACO; CMS Bundled Payments
- Shared Risk (229,250 lives)
  - Products with major payors
  - **CareConnect** (Northwell Health's own insurance product)
- P4P (n/a lives)
  - Products with major payors
- Other (14,550 lives)
  - DSRIP
  - Health Home
  - Independence at Home

Over 400,000 covered lives

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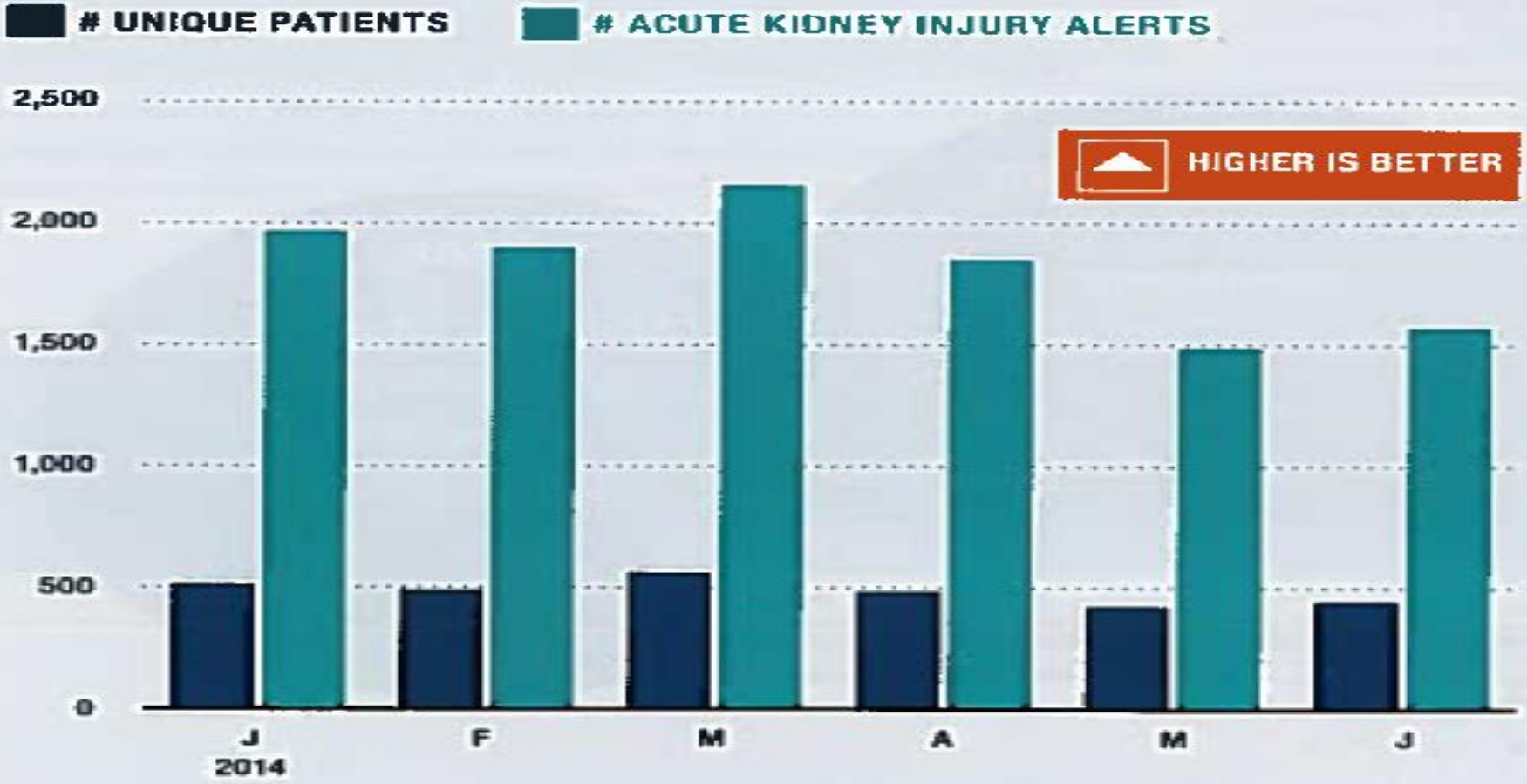
NORTH SHORE-LIJ

Laboratory Alerting System
Proactive Detection of Acute Kidney Injury
Pilot Hospital Results

June 2013 - July 2014



Source: CERNER MILLENNIUM Laboratory Information System
Higher is better
Data as of February 20, 2015

Cost Savings at Forest Hills Hospital Reduction in Excess LOS

- Early detection and treatment of AKI, resulted in approximately a 2 day reduction in LOS for each case
  - Variable cost of $ 400 per excess day
  - Number of excess days reduced per year = 2190
  - 2190 excess days x $400 per day = $ 876,000
- Estimated savings per year ~ $ 875,000 on reduced excess length of stay
- Project now rolled out at all system hospitals

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Enhanced Inpatient Reimbursement (Capturing correct disease severity)

- The system-wide AKI capture rate has increased from 7.4 % (in July 2014) to 12.9 % (in July 2015) since the daily lab AKI reporting and education program for physicians began
- Average revenue increase per DRG with secondary diagnosis of AKI is $700
- Secondary diagnosis count of AKI /month in 2014 (avg.) = 615
- Secondary diagnosis count of AKI / month in 2015 (avg.) = 930
- Increase in secondary diagnosis count of AKI from last year = 315
- Increased in reimbursement / month because of secondary diagnosis of AKI= 315 x 700 = $ 220,500
- Increase in reimbursement for 2015 (imputed) = $ 220,500 x 12 = ~ $ 2.65 million

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“Value” of Lab Diagnostics

[Time-to-Diagnosis]
[Time-to-Effective Care]
[Avoidance of Futile Care]
[Monitoring → Intervention]

Can we develop the Evidence Base to support this premise?

Patient Outcomes
Patient Experience
Cost-Effectiveness of Care

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North Shore LIJ Laboratories

Relationships are Important

- **Clinical Colleagues**
- **Managed Care Division**
- **Insurance Companies – CareConnect (our own)**
- **Vendor Partners – Mutual Interests**
- **Professional Groups – Industry Peers**
- **Customers – Physician Practices, Hospitals**
- ***THE PATIENT (Consumer)***

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Strengths of Pathologists

- We understand “system management” better than any other doctors
- We live-and-breath Quality and Safety
- We have “sight lines” to virtually every sector of healthcare
- Our innovations can be rapidly promulgated throughout a health system
- Our innovations don’t cost much, but can have great impact
- We have data streams on the entire population!

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What current Skill Sets of Pathologists are portable to the new marketplace?

- System Management
- Quality Control
- Continuous Process Improvement
- Data Management
- *Comprehensive understanding of human disease*

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Vulnerabilities of Pathologists

- We do not leverage our unique (current) position
- We (frequently) do not communicate well or step up to leadership opportunities
- We may not "own" problems affecting laboratories, if they are not of our own doing
- We do not have obvious access to the "Value-based" algebra
- We are too comfortable with current practices
- We see Expense Management from the laboratory perspective only

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What new skills must be acquired?

- **Promoting Patient Access to Healthcare Services**
- **Care Coordination**
- **Linking Laboratory Diagnostics to Patient Outcomes**
- **Linking Laboratory Diagnostics to Claims/Costs**
- **Knowledge of HIT data structure, data analytics**

CORE KNOWLEDGE: **ACOs, APM, Care Coordination Patient Centered Care, Access**

ANALYTICS **Informatics** ***Intelligence***

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Opportunities to enhance the "Pathologist" position

- Providing Laboratory Data to Payers
- Utilization and Clinical Decision Support:
  - The right test on the right patient at the right time
  - Clinical Order Sets
  - Test Ordering at Point-of-Care
- Registry ("population") reporting to Providers
  - Practice management and alerts
  - Measures of health outcomes
- Leadership in "Disease Management"
  - Patient Access
  - Chronic Disease Management
  - Acute Disease Diagnosis ("time-to-diagnosis")

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Pathology and Laboratory Medicine: Who does it?

Phlebotomists
Logistics (Couriers)
Accessioning (registering specimens)
Laboratory Technologists
Pathologists Assistants
Supervisors, Managers
Administrative Support
Administrative Directors
Senior Management
Information Services
Physicians (MD, DO)
Clinical Scientists (PhD)
Nurses (e.g., for Pheresis services)
Client Services
Billing
Facilities

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