

Pain Points for Hospital Labs and Their Reference Lab Partners: Making Them Go Away

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Disclosures

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- No financial conflicts to disclose

Setting the stage

- What are the short term realities, especially economically?
- What are the long term possibilities?
- What hospitals do...and what they could do.
- What reference laboratories do...and what they could do.
- What are the “pain points” that hospitals and their reference laboratories share?
 - My belief is that the pains are little different than in the past, just dramatically intensified by today’s economic conditions

The Economic Backdrop: National Healthcare Expenditures

- Projected 2008 NHE=\$2,378.6B (6.1% over 2007)
 - \$7,804 per capita (5.2% over 2007)
 - 16.6% of GDP
 - \$1,108.6B in public (Medicare, Medicaid, etc) funding (7.0% over 2007 and 46.6% of total NHE)
- Projected 2018 NHE=\$4,353.2B (an average 6.2% annual growth rate)
 - \$13,100 per capita
 - 20.3% of GDP
 - \$2,233.0B in public funding (51% of NHE)
- The national dialog has intensified on the sustainability of this growth trajectory, even before the crisis in America's economy developed in 2008

- \$20B in CMS-funded provisions for facilitating HIT adoption by physicians and hospitals
 - Physicians can qualify for financial subsidies to implement electronic medical record systems, and avoid future penalties for non-adoption
 - March 11, 2009 NY Times: Wal Mart announces its intent to work with Dell and eClinicalWorks to provide affordable packages of h/w, s/w, installation, training and maintenance for EMR deployment to small office practices
- \$87B for Medicaid funding payments to states
- \$24.7B for COBRA subsidies (65% for 9 months) for jobs lost after September 1, 2008
- \$500M in funding for Allied Health Professional training
- \$1.1B for “comparative effectiveness” research
 - Focusing on comparing the clinical effectiveness of diagnostics and therapeutics, in particular...lab tests and drugs

Today's Economic Realities in Healthcare and Hospitals

- **Healthcare is not recession-proof, but is (so far) proving to be more resilient than other sectors of the economy**
 - -29% loss in market value over the past year compared to -70% in the Financial sector (The NY Times, Market Gauge)
 - Over the past 12 months hospitals have added ~132,000 new jobs (sustainable?)
- **Impact on hospitals 2008 & beyond (source: AHA)**
 - Access to capital for expansion projects, when it is available, is at a much higher borrowing rate than in the past
 - Patient mix and acuity have changed (e.g., less elective admissions, sicker patients), with projected 5.7% growth in hospital services in 2009 compared to 7.2% in 2008
 - 25% of Americans surveyed say a family member has postponed medical in the past year due to cost concerns
 - Significant rise in uncompensated care due to rising unemployment
 - +1% in unemployment = ~2.5M uninsured employees & dependents
 - Physicians seeking more financial support from hospitals
 - Narrower or negative financial margins
 - Cost reduction pressures
 - Reduced or eliminated state Medicaid funding support

Ripple Effects to Laboratories

- In spite of growing demand for services to meet patient care needs [projected 12.5% AGR over the next 5 years for the laboratory industry], hospital laboratories are seeing:
 - Calls for budget cuts
 - Hiring freezes
 - Open position freezes
 - Delayed or canceled capital expenditure projects
 - Reductions in non-essential program funding (e.g., continuing education)
 - Increasing bad debt
 - Calls to reduce services and/or in-source send-out tests, but only if cost effective to do so
- Projected 6-8% reduction in lab utilization in 2009, exclusive of most anatomic pathology services (Source: Nichols Management Group, February 2009)

The continuing trends in laboratory medicine

- **The commoditization of laboratory-based medical services caused by:**
 - The drive to improve precision and accuracy through method standardization and process automation (improved patient safety, reduced turnaround times, reduced cost of production)
 - We are our own worst enemy!
 - A healthcare system predominated by a fee-for-service (FFS) payment model:
 - Reductions in total spend means reducing volume (utilization), reducing price, or both (Total \$=V x FFS)
 - Aggressive reimbursement reduction pressure (e.g., Medicare) squeezes margins closer and closer to the cost of production
 - Impact of future reductions in the Medicare Clinical Laboratory Fee Schedule (CLFS) and Physician Fee Schedule (PFS)? Health care reform models (e.g., bundled payment, medical home, etc.)
 - “Value” (Value=Quality/Price) does not get rewarded any, if at all, in a commodity-based market pricing model.

Trends in laboratory medicine, continued

- **Increasing de-centralization of diagnostic services (e.g., POCT) driven by physician-patient demand and by medical device innovation (physician office “black boxes”)**
- **Increasing pressure on physicians to more effectively utilize (often costly) diagnostic services (lab and imaging) to maximize clinical efficacy**
 - Especially with chronic disease management, oncology
 - The ultimate goal is to improve medical appropriateness and patient outcome (efficacy) while reducing spending on unnecessary services
- **Increasing complexity of diagnostic services technology and information/knowledge content**
 - Demands a higher skilled workforce to perform and report
 - Places greater burden on providers, especially primary care, to rationally order and effectively interpret and use the results
- **Growing demand for more medical technologists, with diminishing supply to meet these long term needs**
 - US BLS: 10-12,000 new positions per year needed for the next 10 years, programs only graduating about half that amount.

Trends in laboratory medicine, continued

- **An emerging convergence of laboratory medicine, anatomic pathology and digital imaging that may dramatically change how we practice pathology and laboratory medicine in the not-too-distant future**
 - Partnership between GE and UPMC (Omnyx, Inc.) for digital pathology technology
 - Siemens buys IVD manufacturers...marriage of in vivo and in vitro diagnostics?
- **Hospital outreach for pathology and clinical laboratory services is growing and will continue to represent revenue growth opportunities for hospitals, especially in anatomic pathology**
 - The successful programs continue to compete with the national laboratories for this sector of the industry, and this requires a commitment to operationally “acting like” a commercial laboratory (sales & marketing, client services, service, price, IT)

Our Nation's Hospitals

- **Exist as institutions that generally have very complex systems managing patients and providers with broadly diverse needs and wants:**
 - Specialty hospitals
 - Acute care community hospitals
 - General community care hospitals
 - Tertiary & quaternary care hospitals
 - Academic medical centers
 - Government & military hospitals
- **Provide the locale, facility and process infrastructure for healthcare providers to diagnose, treat and manage the acute and chronic healthcare needs of patients**
- **Hospitals of all types are paid for their services generally through the same system(s) of reimbursement**
 - Third-party insurers, government, and private pay
 - Fee for service
 - Capitation
 - Per diem
 - Per discharge

What do Hospitals Need to Succeed?

- Provide high quality, affordable care
- Inspire confidence from patients, physicians, staff, payers, and employers
- Sustain a strong, referring physician base
- Manage both acute and chronic disease effectively
- Reduce medical errors and costly variation in care delivery
- Judiciously manage and utilize services
- Manage costs effectively

“Disrupting the Hospital Business Model”

- From: CM Christensen, JH Grossman & J Hwang *The Innovator’s Prescription: A Disruptive Solution for Healthcare* (2009)
 - Three hospital business models exist, with most hospitals today trying to compete in the first two realms
 - Solution shops = diagnosing the cause(s) of complicated health problems [**fee for service**]
 - Value-adding processes = medical treatment focused on achieving a specific outcome (e.g., inguinal hernia repair, total hip replacement) well [**bundled fee for outcome**]
 - Facilitated networks = like-minded, like-affected individuals who network to share experiences and information to mutual benefit [**fee for membership**]
 - High volume procedures subsidize unique, low-volume specialized capabilities (“esoteric”)
 - Esoteric procedures/care drive the need to have “ready” access to esoteric ancillary services (imaging, lab, pharmacy)
 - So for hospitals, key strategic attributes like quality, cost-effectiveness, convenience and accessibility, when driven by pricing, performance and quality data, require careful and effective alignment of patient and physician incentives...something that does not widely exist today, in part, at least, because of FFS payment systems

Key Cycles for Hospital Success

- The Patient Cycle
 - Delivery of necessary services, effective patient flow management, optimizing length of stay, providing accessibility, reducing delays and mistakes
- The Revenue Cycle
 - Optimizing clean claims submissions and timely; and as full as possible collections
- The Supply Cycle
 - Optimizing expenses and the hospital's supply chain of vendor products and services

Patient Cycle management

- **Ready access to decision-making services**
 - Services lines and service menus
 - Broad laboratory menus and access to timely results and consultative, interpretive support (in-sourcing and out-sourcing models--“make v. buy” analyses)
 - *Opportunities to improve testing schedules and analytical turnaround time performance*
- **Minimizing reporting delays through effective and timely process management**
 - Handling exceptions
 - Assessing and acting on specimen integrity and order integrity issues
 - Specimen collection and transport processes
 - Clear collection requirements, ready access for questions, timely courier and carrier process management
 - Robust QC and QA programs
 - Minimize method performance variations and failures
 - *Opportunity to develop effective HIT connectivity solutions between labs and between physician offices and labs*

Revenue Cycle management

- Revenue optimization
 - Attention to payer coverage policies and payment terms
 - Minimizing denials (clean claims) and maximizing collections
 - Physician preference demand patterns can lead to orders for services that are not reimbursed
 - » **Opportunity for utilization management strategies**
- Hospital community outreach successes and the services necessary to support them
 - Sales & marketing, client services, billing & collection, physician office connectivity
 - » **Opportunity for filling laboratory capacity with profitable volume**

Supply Cycle management

- Expense optimization to support the desired service level
 - Contracting and price negotiations
 - What is the goal? To reduce the line-by-line, service-by-service cost? Or, to reduce the aggregate spending on the entire family of services?
 - The “easier way out” is to continue to squeeze suppliers to lower their charges
 - » We should always be looking for ways to improve our costs
 - » But there is just so much that you can squeeze in the short term
 - The “harder” but more sustainable strategy is to drive out unnecessary utilization of costly services so that aggregate spending aligns with optimal clinical outcomes
 - » ***Opportunity to reduce total aggregate spending through utilization management*** because pathology and laboratory medicine are subject to a “***derived demand model***”
 - » Others (attending physicians) decide what we do and thus what we get paid for

The Roles of Reference Laboratories?

- **With very few exceptions, all clinical laboratories contract with reference laboratories for services that they, themselves, can't perform**
 - Lack of expertise and/or necessary equipment
 - Too costly because of low clinical demand
 - Exclusive Intellectual Property rights
- **First and foremost reference laboratories should provide accurate, timely and clinically effective esoteric laboratories services at a reasonable price (their “stock n’ trade” service)**
- **The reference laboratory realm**
 - Large national laboratories
 - Esoteric commercial laboratories
 - Regional independent laboratories
 - Academic medical center laboratories
 - Niche specialized laboratories (many are “one-test ponies”)

Reference Laboratory Contracting

- For most hospitals, these contracts are collectively decided by pathologists, laboratory administrators, purchasing departments & materials managers, and hospital administrators typically following a thorough vetting process (it is a not a trivial undertaking to change reference labs)
- Group Purchasing Organizations (GPO) negotiate contracts on the part of member hospitals and hospital systems, “ideally” balancing price and service quality metrics
 - For those selected reference laboratories (often more than one for large GPO contracts) the award is a “hunting license” requiring further negotiation with each member hospital
 - Reference laboratories pay an administrative fee (usually 3.0% or less) for this privilege
 - Tiered pricing models, “hot list” tests and other pricing models

Reference Laboratory Value-Adds

- Anything beyond a reference laboratory's "stock n' trade" is value-added, but is of variable value and need
 - Consultation services
 - Medical consultations on patient management decisions and test interpretations
 - Tools for effective utilization management of laboratory services to maximize clinical efficacy and patient safety, while minimizing costs
 - Business solutions services (e.g., developing successful outreach programs)
 - IT connectivity solutions
 - LIS-to-LIS interfaces & other means of lab-to-lab communication
 - Assisting with lab-to-physician office EMR connectivity (to support successful outreach services)
 - Logistics management
 - Specimen delivery and specimen tracking, including within systems

Expect your reference lab to help you manage shared pain points

- **Hospitals need to deliver services that their physicians and patients require for appropriate care decision-making**

Reference laboratories can help hospitals provide timely & accurate medical

laboratory services

[Patient Cycle optimization]

- **Hospitals need to effectively manage their primary revenue sources with accurate, timely and collectable claims, minimizing denials; and should consider new revenues sources through outreach**

References laboratories can help hospitals better utilize costly services that may not be reimbursed, and can assist in developing or improving outreach opportunities

[Revenue Cycle optimization]

- **Hospitals need to effectively manage their expenses and suppliers**

Reference laboratories can help hospitals to improve their aggregate spending on send-out services

[Supply Cycle optimization]