Alignment of CHI Materials Management Leaders:

Movement Toward Centralization *

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Abstract

Catholic Health Initiatives is a not-for-profit corporation comprised of 30 member organizations that operate about 70 hospitals scattered within 19 states in the continental Unites States. The individual hospitals operate as market-based organizations that have their own management teams with a loose affiliation to the corporate organization, Catholic Health Initiatives. In an effort to improve the overall performance of the system, the corporate organization has instituted steps and taken measures to advance centralization. One of the major areas of focus of this centralization effort is the supply chain management where the aim is to increase the purchasing through group purchasing organizations from 50% to 75%. In order to achieve this degree of centralization, the corporate has implemented an Enterprise Resource Planning system that would serve to integrate the market-based organizations through business-IT alignment. Furthermore, the corporate level has plans to change the roles of the current materials management leaders at the local level by involving them in improvements related to operational efficiency while allowing the corporate to indulge in strategic sourcing decisions. The proposed change to the overall supply chain management has not yet gained momentum.

LIST OF ABBREVIATIONS USED

CHI	Catholic Health Initiatives
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CNO	Chief Nursing Officer
CSC	Computer Sciences Corporation
FTE	Full Time Equivalent
GPO	Group Purchasing Organization
IBM	International Business Machines
MBO	Market Based Organization
MM	Materials Manager
PPI	Physician Preference Item
SCLHS	Sisters of Charity in Leavenworth Kansas Health System
VA	Value Analysis
VP	Vice President

SUMMARY TABLE

CASE CHARACTERISTIC	DATA
Type of organization	Corporate oversight body with a not-for-profit status
Number of employees	65000 full-time and part-time
Total annual budget	Revenues of $6.8 billion in 2006
Geographical location	Colorado, United States
Service users	Market Based Organizations (MBOs) in 19 states
Main services provided	• Acute care, critical and specialty hospitals • Long-term care, assisted living and residential facilities • Community Health services organizations
Top 2 spend categories	• Employee compensation and benefits • Supply related costs
Main deficit in public procurement	• Lack of coordination among the MBOs for purchasing decisions • Absence of an integrated computer system
Top 3 key requirements to develop public procurement capacity and capability	• Strong MBO buy-in from CEO & CFO • Seamless ERP performance • Successful role and task development for locally placed MMs who report to corporate

*"Shared activities usually fall into three categories. The first and easiest category involved leveraging the size of the enterprise. Included here would be unifying functions like data processing, data and voice networks, basic HR systems, real estate management and **purchasing**."*

- Lou Gerstner, former CEO of IBM

In his book, 'Who says Elephants can't dance', Lou Gerstner lays a sound argument for centralization of diverse functions within a large corporation. There are many examples within literature where it is a sin if an organization does not employ its resources in a strategic manner. The size of the organization should be used as a resource in the procurement function because the skilful use of this resource can improve the bottom line of an organization by a significant percentage.

Part 1: Case description

'The mission of Catholic Health Initiatives is to nurture the healing ministry of the Church by bringing it new life, energy and viability in the 21st century. Fidelity to the Gospel urges us to emphasize human dignity and social justice as we move toward the creation of healthier communities.'

Catholic Health Initiatives (CHI) was established in August, 1995 and it began to operate as an entity in July, 1996. The founding members of this organization were the Catholic Health Corporation of Nebraska, the Franciscan Health System of Pennsylvania and Sisters of Charity Health Care Systems of Ohio. The newly formed organization included 61 hospitals and 50 long-term care facilities in 20 states with combined revenues of $ 4 billion. The steering council appointed Patricia A. Cahill Esq. as the first President and Chief Executive Officer. CHI was the first national health system to win the 2001 National Quality Healthcare award from the National committee for Quality healthcare and Modern Healthcare magazine.

Today, CHI is comprised of 30 member organizations with about 70 hospitals scattered within 19 states across the United States. CHI hospitals employ over 65,000 full-time and part-time employees who serve 70 rural and urban communities. The revenues at the end of fiscal year 2006 stood at $6.8 billion with assets worth $9.6 billion. CHI completed fiscal year 2006 with a sound financial position as evidenced by the $705 million excess of revenues over expenses (before restructuring, impairment and other losses) on the income statement and the 207 days of total cash on the balance sheet (Exhibits K & L).

CHI's local operations are referred to as 'Market based organizations' or MBOs and they are direct providers of healthcare within a defined market (could be a standalone facility or an integrated network of facilities and services). MBOs are present in the following states namely: Arkansas, Colorado, Idaho, Iowa, Kansas, Kentucky, Maryland, Minnesota, Missouri, Nebraska, New Mexico, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, Washington and Wisconsin.

CHI facilities include:

- Acute care hospitals
- Specialty hospitals
- Critical access hospitals
- Long-term care facilities
- Assisted living facilities
- Residential facilities and
- Community Health services organizations

The MBOs are characterized by diversity in terms of their size and complexity.

- CHI member Centura, for example, as Colorado's largest health care system, serves more than half a million people and "encompasses 12 hospitals, eight senior living facilities, and Centura Health at Home, which includes home care, hospice, infusion, home medical equipment and oxygen services."[1]
- CHI member Mercy Health Network in Nebraska comprises five hospitals, four rural community hospitals, 98 physician clinics, 12,200 employs and more that one billion dollars in operating revenues
- CHI member Mercy in South Dakota, comprises only one hospital with a long term care and residential care facility.

The MBOs are characterized by separate management teams that direct the day-to-day functioning of the local institutions/systems. They also have separate governance boards to provide oversight and direction to the management while representing the community and the church. In many ways, despite the corporate structure, CHI might be described as an organization with a heritage of being a "holding company," where collaboration at the corporate level did not extend across a comprehensive range of corporate operation functions.

The current President and Chief Executive Officer, Kevin E. Lofton took over the reigns in 2003 with the following strategic objectives that were based on the mission, vision and core values of the foundation. The core values that have helped the organization include people, quality, stewardship and growth. The desired future state of the organization (the strategic objective) includes:

> "ensuring consistent values throughout the system, a distinctive culture that attracts and retains exceptional people, new operating models that are adaptive and flexible, innovation is embedded in all that the organization does and national and local advocacy that leverages the organization's size and collaborative relationships while demonstrating exceptional and consistent quality across the system, measurable improvements in community health status through selected health management initiatives, core competencies in information management and knowledge sharing, compassion in addressing the needs of the poor and

[1] http://www.centura.org/index.php?s=facility

underserved and leadership in creating collaborations and partnerships to meet community needs."

Innovation has been accepted as a key factor that would determine the future and the organization is working towards increasing the value of these innovations by improving the ability to produce innovation on a daily basis (this includes encouraging innovation and enhancing its spread across the organization) and generating innovation in priority areas (this includes focusing on priority areas that benefit patients and communities throughout the system). CHI has a management team that directs the system as a whole while receiving counsel from a board of trustees and a civil corporation (Exhibit A).

The 2006 excess of revenues over expenses before restructuring, impairment and other losses far exceeded the previous years since the inception of CHI. Of the $705 million, $411 million was from investment income which was the highest in its history too. The revenue from patient services increased by 7%[2] due to favourable rate changes and revenue from non-patient sources increased by 16% due to an increase in donations. However, expenses also increased by 5.8% (after excluding non-recurring restructuring, impairment and other losses). Bad debts and charity care, when combined as a percentage of revenues from patient services, increased to 14% compared to 13% in 2005. Restructuring, impairment and other losses were $12 million in 2006 significantly below the $41 million reported in the previous year.

The major component of these expenses was employee compensation and benefits and supply related costs. Supply related costs increased by 4% but significantly below the 5% increase in patient revenues. However, when supply expenses were evaluated based on admissions adjusted for case-mix index, supply expenses were 7% higher in 2006 when compared to 2005. As a percentage of net patient services and other revenues, supply expenses slightly decreased to 18.2%. CHI, consistent with the supply chain literature on supply design, contends "that more formalized corporations have more sophisticated information systems and corporations with more advanced information systems achieve performance improvement more effectively." (Kim 237) MBOs have begun to analyze supply related costs and supply contracting as part of CHI Connect which is expected to provide significant supply chain savings. CHI Connect is a system-wide process to standardize and centralize essential business functions including payroll, finance, human resources and supply chain. It is anticipated that CHI Connect will help CHI to allocate more resources towards patient care and community health improvement by reducing duplication and variation in these functions while easing the management of these functions at the MBO level.

[2] A major structural change occurred in 2006, which had an impact on financial comparisons between years. The former Louisville, Kentucky, market-based organization was combined into a joint venture, in which Catholic Health Initiatives established a 25 percent interest with Jewish Hospital Healthcare Services. Thus, beginning in November 2005, the Louisville results were excluded from the consolidated financial statements.

Part 2: Public procurement capacity and capability development – the problem

The 30 member organizations, which collectively have a spend of approximately 1.3 billion dollars each year on supplies, have their own individual autonomy and capacity to engage in strategic sourcing and contracting, standardization, and distribution. The MBOs have designed supply chain structures and strategies to meet their individual needs based on their size and complexity. It is CHI's aspiration to become a "nationalized" operating company that can drive value to its hospitals and to the system.

CHI has been a principal member of Consorta, a group purchasing organization (GPO) that represents over 500 Catholic and non-Catholic hospitals in the US. GPOs in the US, operating under a safe harbor from antitrust, bring together their members to negotiate favorable contracts with suppliers. The GPO pricing should be superior as GPOs reduce the transaction costs between buyers and sellers and, at the same time, accumulate their member's volumes to achieve better pricing.[3] One of the problems that GPOs face, across the United States, is the inability of their members to standardize on products and commit volume in the purchasing process. CHI's purchasing on GPO contracts has been relatively stable – with each of its hospitals entering into individual contracts with suppliers for high cost physician preference items (e.g. hips and knees). CHI currently purchases less than 50% of its products through GPO contracts with contract coverage being just over half of supply expense (Exhibit F). It is anticipated that through nationalization of the supply chain function, with hospital level supply chain managers reporting to the corporate level, GPO contract utilization can increase to 75%.

In the spring of 2007 Consorta agreed to form an alliance with HPG, a GPO that represents HCA, the largest investor owned Hospital Corporation in the United States as well as a number of not-for-profit hospitals. In purchasing for over 1,000 hospitals, HPG was already regarded as one of the most successful GPOs in achieving low pricing for its members. By merging with Consorta, HPG would, indeed have even greater leverage in the market. However if hospitals within Consorta can not commit volumes of products to suppliers, the anticipated value of the entities coming together is diminished.

CHI has recently invested in the Lawson ERP system[4] that has the capability to link together the financial as well as supply chain activities of the entire system to support supply chain nationalization. The over-arching goal of supply chain nationalization is to specify the responsibilities and accountabilities for local supply chain management and ensure that local leaders are equipped to assume them. The Business Case for nationalization is to achieve a projected $43 M savings, and the shift to a new contract portfolio and methodology for value analysis (VA) will require more collaboration and coordination than has historically been the case.

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[3] Eugene S. Schneller and Larry Smeltzer, Strategic Management of the Health Care Supply Chain. Jossey-Bass. 2006.

[4] Please refer to Exhibits H & I for generic information on ERP systems

The goal of the project is to make supply chain management an inherent part of corporate strategy. Within this context it is to goal to advance supply chain management as the "integration and management of supply chain organization and activities through cooperative organizational relationships, effective business processes, and high levels of information sharing to create high-performing value systems that provide member organizations a sustainable competitive advantage."[5] It is the strategic fit between the CHI system, its members, and its GPO that constitute significant challenges for senior CHI management (Exhibit 2).

Current assessment

The current CHI and MBO organization (Exhibit A & B), as detailed in a recent study by Computer Sciences Corporation (CSC) "is unable to effectively leverage scale, and consolidate vendor base." The following are the reasons that have been attributed towards the inability to develop capacity and capability. Findings from literature review and real world business examples have been provided for each of the problems to direct discussion and development of solution.

Problem 1: Lack of CHI national authority to marshal scale

- National has limited authority to mandate use of specific contracts
- Concerns about acceptability of product and service choices at the local level are exaggerated. Few products (and services) are truly "preference" items. Instead, acceptability" is too often a smokescreen for choices based on "relationships" and self-interest of local stakeholders
- Where acceptance is at issue, National has limited authority to mandate a focused VA process characterized by sharing of clinical and financial information.

  <u>Mini-literature review and business examples:</u>

  - Rozemeijer (2003) proposed four suggestions that may capture corporate synergy and provide an ideal model (Exhibit 6)
    - Alignment between corporate and MBO strategies with purchasing synergy initiatives,
    - Extension of focus on negotiation of corporate level contracts beyond common commodities and services,
    - Involvement of local purchasing management personnel and corporate management early in the process (for establishing corporate synergy) and
    - Planning, monitoring and evaluating at the corporate level of benefits and savings that have been achieved

[5] Robert Handfield and Ernest Nichols. Supply Chain Redesign: Transforming Supply Chains into Integrated Value Systems. Prentice Hall 2002.

- IBM example – the first step towards a successful centralization of procurement is the belief within senior management that centralized procurement is the best way to optimize procurement effectiveness[6]

Problem 2: Presence of excessive local autonomy in strategic sourcing and contracting that diminishes scale.

Hospitals utilize tens of thousands of different items to carry out their mission for efficient patient care on a daily basis. This consists of commodity items, physician preference items (e.g., orthopedic implants), and highly expensive capital items such as Magnetic Resonance Imaging (MRI) in radiology. When GPOs develop contracts, they receive favorable pricing by assuring volume compliance with contracts. GPO contracts frequently have tiers – reflecting in tier prices the extent to which a hospital has complied. When hospitals fail to comply with contracts, GPOs future negotiation leverage is compromised.

- Facility MMs and unofficial supply chain FTEs, (e.g., OR and Cath lab buyers), exercise excessive authority to contract for good and services without deference to the interest of CHI as a whole

  Mini-literature review and business examples:

  - Handy (1990) proposed a "federal" organization model that closely resembles the political model of division of power between the central government and local governments (the governance structure in the United States) – this model permits significant autonomy at the local level while enabling "scale benefits" that are synonymous with centralization (planning, allocation of resources, purchasing and others) in business organizations (Rockart, Earl and Ross, 1996)
  - Monsanto and Hewlett-Packard attempted to create the correct balance between commonality and variability (Federalist model). Monsanto standardized 85% of the data while Hewlett-Packard standardized only a small amount of common financial data across the business units (Davenport, 1998)
  - Montgomery and Schneller (2007) have detailed the strategies that hospitals take in working toward standardization to increase their leverage.

[6] Gene Richter, "Centralize!" Editorial Advisory Board, Purchasing , February 6, 2003, http://www.purchasing.com/article/CA273586.html, accessed July 2002

Problem 3: Inability of CHI/MBOs to effectively work with vendors

Vendors develop strong relationships across the supply chain. They directly "detail" physicians and nurses in the hope that they will choose their products and attempt to work with local materials managers (MMs) to favor their products. They are also present at various trade shows attended by MMs and clinicians.

- Vendors view local MMs and unofficial supply chain FTEs as weak links in the SCM organization
- Vendors (losers and winners seeking to increase margin) attempt to undermine deals negotiated at National level through local stakeholders
- On the other hand, vendors are likely to offer better terms when they can count on CHI to deliver promised volumes/market share
- Therefore, maintaining a consistent interface with major suppliers is crucial to sustaining and extending the impact of savings initiatives.
- Hospitals across the US today are instituting programs to control vendor selling within the hospital. Vendors consume a significant amount of employee time and frequently lead to employees requesting goods that are outside of existing contracts. On the positive side, vendors introduce innovations into health care organizations. Centralization in contracting, if carried out effectively, would limit vendor efforts at the local levels for a variety of kinds of goods and services.

Mini-literature review and business examples:

- Briggs, Hoffman and Walden (2007) have proposed four underlying forces that favor centralized IT contract management in order to negotiate effectively with vendors namely information needs for making strategic decisions, opportunism on the part of vendors to capitalize on decentralization, motivation of managers to focus only on projects and not on contract management (the need for exclusive contract managers for the whole organization) and view of the whole organization and its needs that would benefit quantity pricing and avoid duplication

Problem 4: Absence of commitment towards centralization by MBOs

Over the years MBOs have developed competencies associated with supply sourcing and contracting. They are frequently seen as principal decision makers. To the extent that they are engaged in standardization processes with clinical staff, suppliers court local MMs and have an interest in strong local level relationships. And, to the extent to which end of year profitability can be linked to improved supply management, local MMs see themselves as an important part of the reimbursement shortfall solution. MMs are valued, by local CEOs and CFOs for their successes in securing special pricing

for the hospital, rebates and other price concessions. It is no wonder, then, that management teams at the MBO level will be skeptical about the separation of key MM functions from their MBO.

- Centralization would transfer the competencies associated with sourcing and contracting to the corporate level. Such "outsourcing" to the corporate level worries local executives who fear that, if circumstances change, rebuilding such competencies will be expensive.
- Centralization would reduce the ability of local MMs and other hospital executives from engaging in deals that leverage any unique commitments they can secure from medical staff
- If CHI contracting with Consorta/HPG moves toward a supply "formulary," there is some fear that clinicians will be alienated; not all MBOs appear to be prepared to build physician commitment to product equivalencies in order to develop a "capitated" model for product pricing
- It is uncertain how much trust and confidence MBOs have in the ability of central contracting to meet unique local needs

Mini-literature review and business examples:

  - A number of health care systems in the US have moved toward the development of regional purchasing consortia to leverage the volumes of participating hospitals. In the UK, "confederations," and other regional arrangements have reflected the interest in the NHS to develop an "internal marketplace." (Shepherd, 2006)
  - Few hospitals have seen GPOs as an "outsourcing" option for their strategic sourcing and purchasing. There is strong evidence (Schneller and Smeltzer, 2006) that compliance with contracts can be variable both across and within hospitals belonging to the same system.

Problem 5: Presence of re-engineered roles and competencies at the hospital level

As a result of centralization of the sourcing and contracting functions there is a need for individuals who can successfully act as agents of the MBOs to the corporate level and, in turn, agents of the corporate level to the MBOs.

- The re-engineered role of the MM is one that requires careful thought and effective implementation. It appears that the MM works in a hybrid environment of centralized sourcing and contracting and decentralized engagement to achieve process improvement, compliance and innovation.
- While re-engineered roles in other industries have been clearly delineated (e.g., in the aerospace industry where there is a newly described differentiation between the purchasing manager, purchasing executive and planner-buyer, Humphreys et. al. 2000), the extent to which the MM will

apply the skills of purchasing manager, purchasing executive and planner remains uncharted.

- What does seem certain is that the emergent roles will be hands on in an attempt to achieve compliance and efficiency with a reduced supply base. The individual will be an orchestrator of change and an implementer of processes and procedures. All of this is certainly a very different role than the role now experienced by MMs in the typical hospital or system.

The local physician remains the principal party in driving the demand for specific high cost items such as cardiac and orthopedic implants – or what are known as physician preference items (PPIs). Under the centralization design scenario there is a hope to achieve higher levels of standardization and contract compliance on both commodity and physician preference items.

- Supply chain managers at the local level will be charged with working with physicians to engage in standardization and to be more prudent in their selection and utilization of PPIs through the value analysis process. It is likely that both materials managers and CEOs fear that such an engagement will be detrimental to their attempts to develop strong relationships with medical staff. Two models of standardization have been described for the hospital: formulary vs. price capitation (Montgomery and Schneller 2007). The high level of success has been at the capitation level, give the wide range of physician preference. One would anticipate that with centralization, CHI would have substantial leverage in reducing costs on many of the most expensive items.
- With MMs reporting directly to corporate, there is also a fear that MMs will be seen as having an allegiance to corporate strategies and less likely to act to develop and implement local strategies. The duality of such a role may require a set of competencies that are not possessed by MMs now in the MBOs.

Process improvement is viewed as a key to improved profitability, safety, and enhanced clinical outcomes. Local MMs have been less involved in these activities and are less knowledgeable about such activities in relation to their higher level knowledge and skills pertaining to strategic sourcing and purchasing contracts.

- With process improvement and standardization articulated as key competencies associated with MBO on-site materials managers along with improved logistics/distribution, there is a fear within MMs that they (1) do not have the competencies for engaging successfully in these activities and/or (2) that they will not be able to develop such competencies and stand a chance of losing their job

Mini-literature review and business examples:

- Con-way, the freight transportation and logistics services company, reengineered the role of purchasing by combining the purchasing function and accounts payable function through a common IT system across the company; also, MMs are being trained in negotiation, management of supplier relationships and strategic sourcing to develop their overall competencies[7]

Problem 6: Trust and competency at the corporate level

CHI has stated that the goal of the project is to align the materials managers and executives at the local level in order to ensure that CHI develops the leadership skill sets that are required to manage supply inventories, contract implementation, customer service and support of various information systems.

- As CHI continues to move to an operating company environment through the centralization of contracting in its Group Purchasing Organization and implementation of CHI Connect (centralization of procurement, data management), the traditional role of the local materials Management leader is significantly altered.
- With the proposed realignment, supply chain will work to ensure that each local materials manger understands the new role requirements and receives training/instruction that is required to transition to the new role expectations.

Part 3: Public procurement capacity and capability development – possible solutions

Building on the above, the overall process steps considered by CHI are to:

- Create a sense of urgency for change and break "status quo" or complacency with current operations
- Build business case for centralization (Exhibit G)
- Draw parallels with outsourcing and its literature
- Select a champion to lead the process
- Formalize the project plan.

The overall goal is to:

- Bring into alignment the supplier networks, enterprise and distributive networks within CHI to bring ultimate value to the end consumer of materials

[7] Nancy Hitchcock, "Purchasing drives success for Con-way", Purchasing, February 15 2007, http://www.purchasing.com/article/CA6414387.html accessed July 2002

- Build core competencies and contracting (upstream) at the enterprise level and operations and logistics (downstream) at the operating unit level
- Capitalize on the power of Enterprise resource Planning tools by assigning the best people to work on the interface between the corporate and operational environment.

Part 4: Key issues for the future impacting on the development of public procurement capacity and capability

- HPG, which has a strong membership comprised principally of investor owned hospitals, has a strong history in securing favorable contracts on PPIs for their members. CHI desires to build on this HPG competency – but it will need to establish commitment to purchasing through corporate level contracts.

- Centralized purchasing and working toward a more restrictive "formulary" of products requires that MBO's MMs can successfully work with their clinical staff to gain agreement on products. Achieving consensus has varied on the basis of market and medical group characteristics. As suggested earlier, the fear that medical staff will shift admissions to alternative hospitals, if they do not have the autonomy to select products, is perceived as a real threat by many MMs and CEOs and CFOs.

- Materials managers, with the full skill set necessary to carry out value analysis, technology assessment, process improvement, and logistics improvement/redesign is very limited. The success of MBO based supply chain MMs will depend upon recruiting staff with such skills.

Mini-literature review and business examples

The Sisters of Charity in Leavenworth Kansas Health System reported great success working with their GPO on a similar centralization strategy for a best practice business model, based on ERP. SCLHS completed the first phases of the Lawson re-engagement work plan with successful migration to the UNIX hardware platform and a major upgrade of ERP applications software. Affiliate and System Office staff worked with Deloitte Consulting to develop a standardized best practice business model for use within finance, supply chain and human resources/payroll. As a result of these efforts, two major transitions occurred:

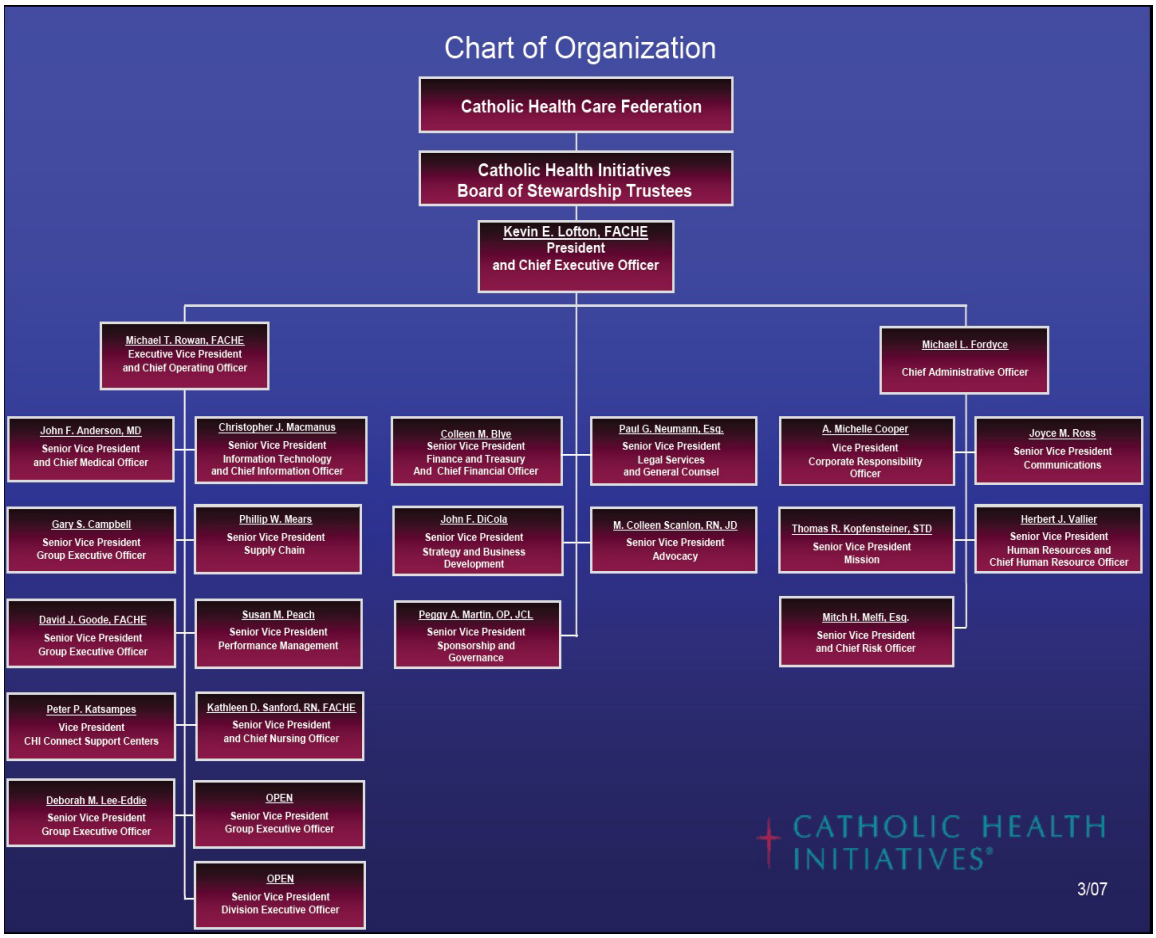
- System-wide transition of supply chain management functions to Broadlane Group Purchasing. Based on the recommendation of an SCLHS Supply Chain Management Task Force, the System transitioned to a procurement process that is highly centralized and standardized and supported by advanced informatics. Broadlane manages the supply chain master files and is the agent of related contract negotiations and issuer of purchase orders for SCLHS

- Centralized Accounts Payable Shared Services concurrent with ERP implementation at Affiliates. This approach offers a seamless interface with the centralized procurement model; increased levels of automation; better management of contracts and compliance; and enhanced analysis of spending practices and correction of inefficiencies

Questions for discussion

1. It has been posited that strategic fit (Schneller and Smeltzer 2006) is a key to achieving supply chain design success. What are factors associated with the ability of CHI to achieve strategic fit with its centralization/corporatization strategy?
2. What steps should CHI take to move forward pertaining to: MBO CEOs, CFOs and MMs?
3. To what extent should strategies be incremental?
4. What are the key factors associated with the transfer of competencies from the MBO to the corporate level?
5. What metrics might one want to employ to (1) assess progress toward centralization and (2) assess success for centralization of the supply function?

Exhibit A CHI Corporate organization chart



Source: CHI archive

Exhibit B Typical MBO supply management organization chart

A typical MBO org chart might include the following… provided by John Gould

Large Hospital - Director of MM with a Purchasing Manager, a Distribution Manager, and, if MM has responsibility for Sterile Processing, a Sterile Procurement Manager. In very large MBO's there might be a position for Value Analysis, but it is usually under Purchasing/MM.

Medium Hosps: Director of MM may include Purchasing Manager responsibilities. They may have a Storeroom/Distribution Manager/Supervisor and possibly a Sterile Proc Manager/Supervisor.

Small hosps: One management position with possibly Supervisors or Lead technicians over various functions.

In some Hospitals, small, med or large, there may be a Surgical Case cart process and accompanying inventory under MM control. In these cases there is usually a Manager, Supervisor or lead, depending on the size of the operation.

Whether Supply Chain (usually called Materials Mgt) is led by a Director, a Manager or other, it may report to a variety of positions, including CFO (probably half or more), COO, Comptroller, Support Services VP, or CNO. There is no standard, just as there is no std dept structure.

Other duties/areas that might be part of MM and which might, in very large MBO's have Supervisors or Managers include: Courier/Fleet Service (may be under Facilities, Lab or Security), Print Shop, Linen Distribution, Laundry Services, and in some facilities, Environmental Services. In small operations these might have a Lead (as does Receiving) in many MM/Purchasing Depts.

Source: CHI archive

Exhibit C Job description of a Materials Management coordinator (based on new supply chain organization structure)

Job Title: Material Management Coordinator	**Exempt** ☐ **Non-Exempt** ☒
Reports To: Director or Manager of Materials Management	**Supervisory Responsibility: Yes** ☐ **No** ☒
Group: Supply Chain	**Approval Date:**
	Date Last Revised: 05/2007

I. Job Summary / Job Purpose (briefly state why this job exists in 3-5 lines)

This position is a local position with the MBO. This position will serve as the liaison between local MBO customers and the CHI Procurement Support Center (PSC). This position provides on site support for all procurement related functions and also serves as the local Supply Chain expert for the Lawson ERP system. Directly responsible for their own performance, quality and accuracy. Indirectly responsible for performance, quality and accuracy of the Procurement Support Center function.

II. Key Responsibilities (list 5-8)

1. Provides on site support for procurement customers as required assisting with product sourcing, contract compliance and vendor relations.
2. Serves as the local Supply Chain expert for Lawson ERP
    a. Able to troubleshoot routine questions within requisitioning and inventory management modules of Lawson.
    b. Understands interfaces utilized and able to resolve error reports created
    c. Trains new users on Lawson as required.
    d. May assist with testing as Lawson system upgrades are available.
3. Responsible for problem resolution related to receiving such as over shipments, short shipments or incorrect shipments.
4. Assists PSC staff with reconciling vendor backorders and approving product substitutes.
5. Provides local MBO support related to returns of goods, repairs by initiating vendor contact, completing vendor return form in Lawson, and conducting follow up to assure appropriate credit received from vendor.
6. Facilitates the capital procurement process by assuring appropriate approvals on all paperwork, building requisition in Receiving Self Service (RSS), and scanning supporting documents into ImageNow to link to the Lawson requisition.
7. Submits Item & Agreement Maintenance Form for new products to PSC assuring that Charge Description Master is created for all chargeable supplies.
8. Creates and maintains local shopping lists for departments to facilitate procurement process
9. Maintains the (PC10) patient charge table, which links the CDM and the Lawson item number.
10. Utilizes the Remedy call tracking system to record incoming calls and resolution of all calls.
11. Establishes excellence in customer service relations within the organization.
12. Other duties as assigned locally.

III. CHI Core Expectations

At CHI, we expect all our employees to live the values of Reverence, Integrity, Compassion and Excellence **by:**

- **Honoring and caring for the dignity of all persons in mind, body, and spirit**
- **Ensuring the highest quality of care for those we serve**
- **Working together as a team to achieve our goals**
- **Improving continuously by listening, and asking for and responding to feedback**
- **Seeking new and better ways to meet the needs of those we serve**
- **Using our resources wisely**
- **Understanding how each of our roles contributes to the success of CHI.**

IV. Required Core Job Competencies

Core CHI Behaviors:

- **Teamwork Orientation**: works cooperatively & collaboratively with others toward the accomplishment of shared goals.
- **Service Orientation:** desire to serve and focus one's efforts on discovering and meeting the needs of internal and external customers.
- **Achieves Results:** reflects a drive to achieve and outperform. Continuously looking for improvements. Accepts responsibility for actions and results.
- **Learning and Growth:** has a commitment to continuous professional and organizational learning.
- **Communication:** practices attentive and active listening and can restate opinions of others; communicates messages in a way that has the desired effect.

Role-Specific Behaviors:

- **Action Oriented** – Works diligently and exudes a high level of energy, thinks quickly on one's feet, makes things happen, maximizes spontaneous opportunities and eagerly pursues new challenges.
- **Continuous Learning & Self Development** - Regularly invests time in learning new skills; learns quickly when faced with new challenges; open to change; solicits feedback from others in an effort to improve.
- **Decision making** – Able to make effective, timely decisions based on sound judgment, data and experience, considering implications and consequences.
- **Relationship Building** – Able to develop and maintain relationships with a variety of types of positions and individuals at both the National and MBO level.

Skills, Knowledge or Abilities:

- **Language Skills**: Intermediate: Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of organization
- **Math Skills:** Intermediate: Ability to calculate figures and amounts such as discounts, interest, commissions, proportions, percentages, area, circumference, and volume. Ability to apply concepts of basic algebra and geometry.
- **Reasoning Skills**: Intermediate: Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. Ability to deal with problems involving several concrete variables in standardized situations.
- **Computer Skills**: Personal computer and business solutions software skills, such as Windows XP, Excel, Access & others.

V. Job Requirements / Qualifications

Education / Accreditation / Licensure (required & preferred):

High School Education or GED, Post Secondary education required.

Experience (required and preferred):

- Minimum of 5 years of hospital focused Accounts Payable, Materials Management Purchasing, Inventory Control, or Pharmacy related purchasing experience.
- Experience with large multi-level organizations and the ability to work effectively in geographically diverse environment.
- Familiarity with group purchasing and health care delivery organizations and a working knowledge of purchasing contract elements preferred.
- Commitment to the mission and vision of Supply Chain and CHI overall.

VI. Work Environment/Job Activities

TRAVEL **DEGREE OF FREQUENCY**

Local	☐ High-over 60%	☐ Moderate-31-60%	☐ Light-0-30%	☒ N/A
National	☐ High-over 60%	☐ Moderate-31-60%	☐ Light-0-30%	☒ N/A

PHYSICAL ACTIVITIES/EQUIPMENT USAGE
(Please note the percentage of time the activity or equipment is used as part of the job.

Activities	**HIGH Over 60%**	**MODERATE 31-60%**	**LIGHT 0-30%**	**NONE 0%**
Sitting	☒	☐	☐	☐
Standing	☐	☐	☒	☐
Bending	☐	☐	☒	☐
Walking	☐	☐	☒	☐
Driving	☐	☐	☐	☒
Dexterity	☒	☐	☐	☐
Vision	☒	☐	☐	☐
Hearing	☒	☐	☐	☐
Lifting (20 lbs.)	☒	☐	☒	☐
Repetitive Motions	☒	☐	☐	☐
Equipment				
Computer	☒	☐	☐	☐
Telephone	☒	☐	☐	☐
FAX	☐	☐	☒	☐
Scanner	☐	☐	☒	☐
Copier	☐	☐	☒	☐

Other physical activity or equipment usage if moderate or high (please explain): N/A

VII. Disclaimers

- This job description reflects CHI's assignment of essential functions. It does not prescribe or restrict the tasks that may be assigned.
- Critical features of this job are listed above. They may be subject to change at any time due to reasonable accommodation or other reasons.

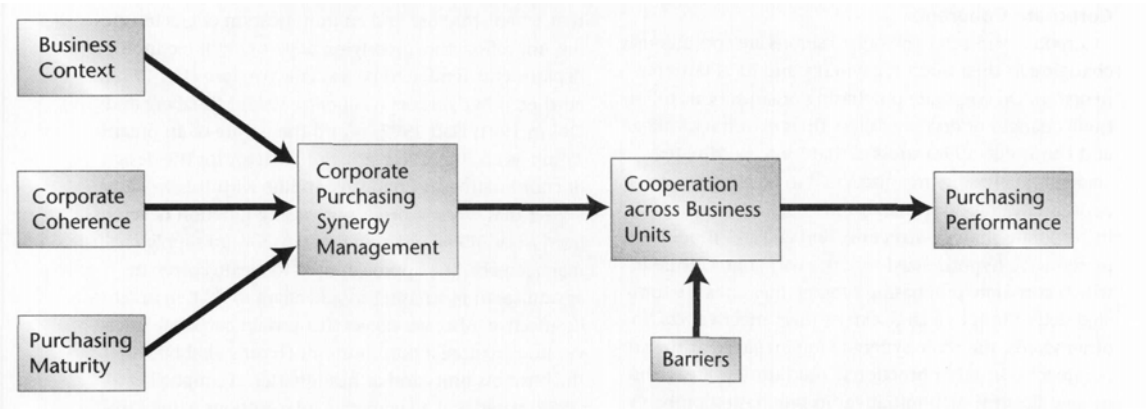
I. Acknowledgement

I have read and received a copy of this job description.

Employee's Signature/Date _____

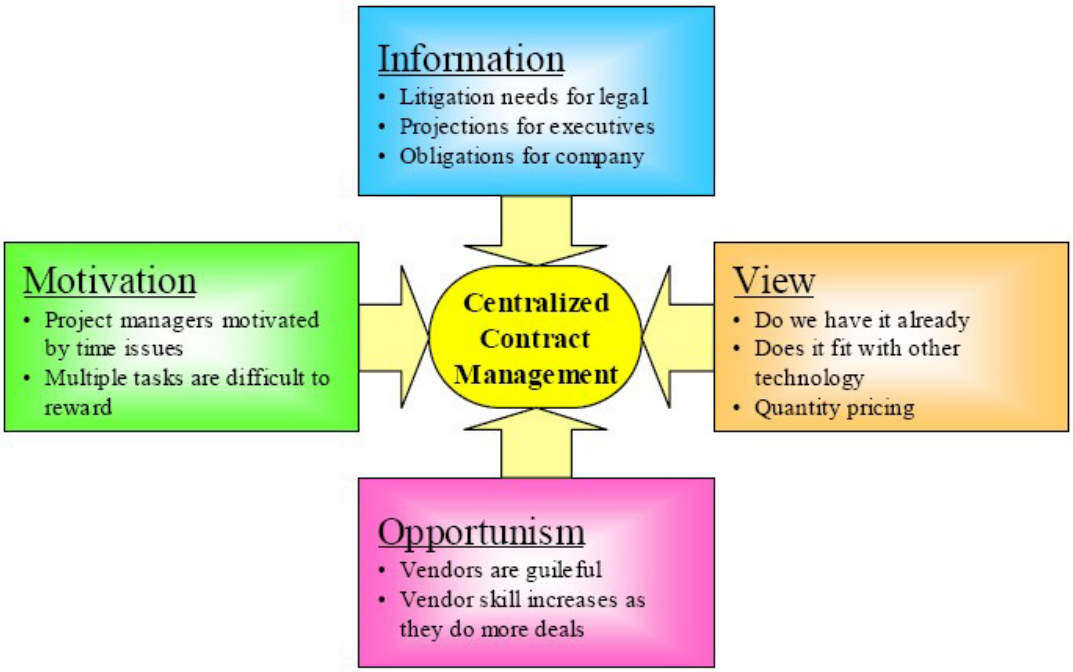
Source: CHI archive

Exhibit D Research model on purchasing synergy



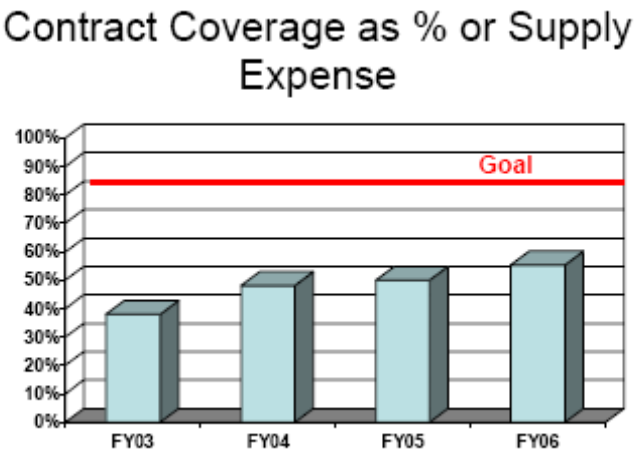
Source: Frank A. Rozemeijer, Arjan van Weele, and Mathieu Weggeman "Creating Corporate Advantage through Purchasing: Toward a Contingency model." *Journal of Supply Chain Management* Winter 2003: 39, 1

Exhibit E Four underlying factors driving an organization towards centralized IT contracts management



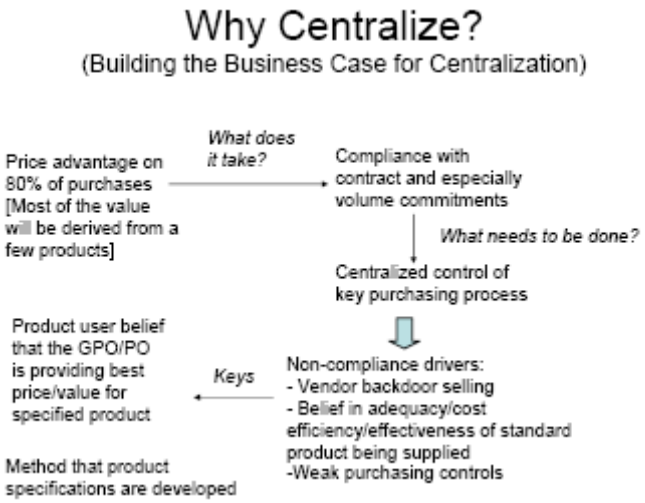
Source: Anthony Briggs, Eric A. Walden and Jim J. Hoffman, "The Case For Centralized IT Contract Management: A Four Force Model", in Marc J. Schniederjans, Ashlyn M. Schniederjans, and Dara G. Schniederjans eds., Outsourcing Management Information Systems, Idea Group Publishing, Hershey, PA, 2007, pp 125-133.

Exhibit F



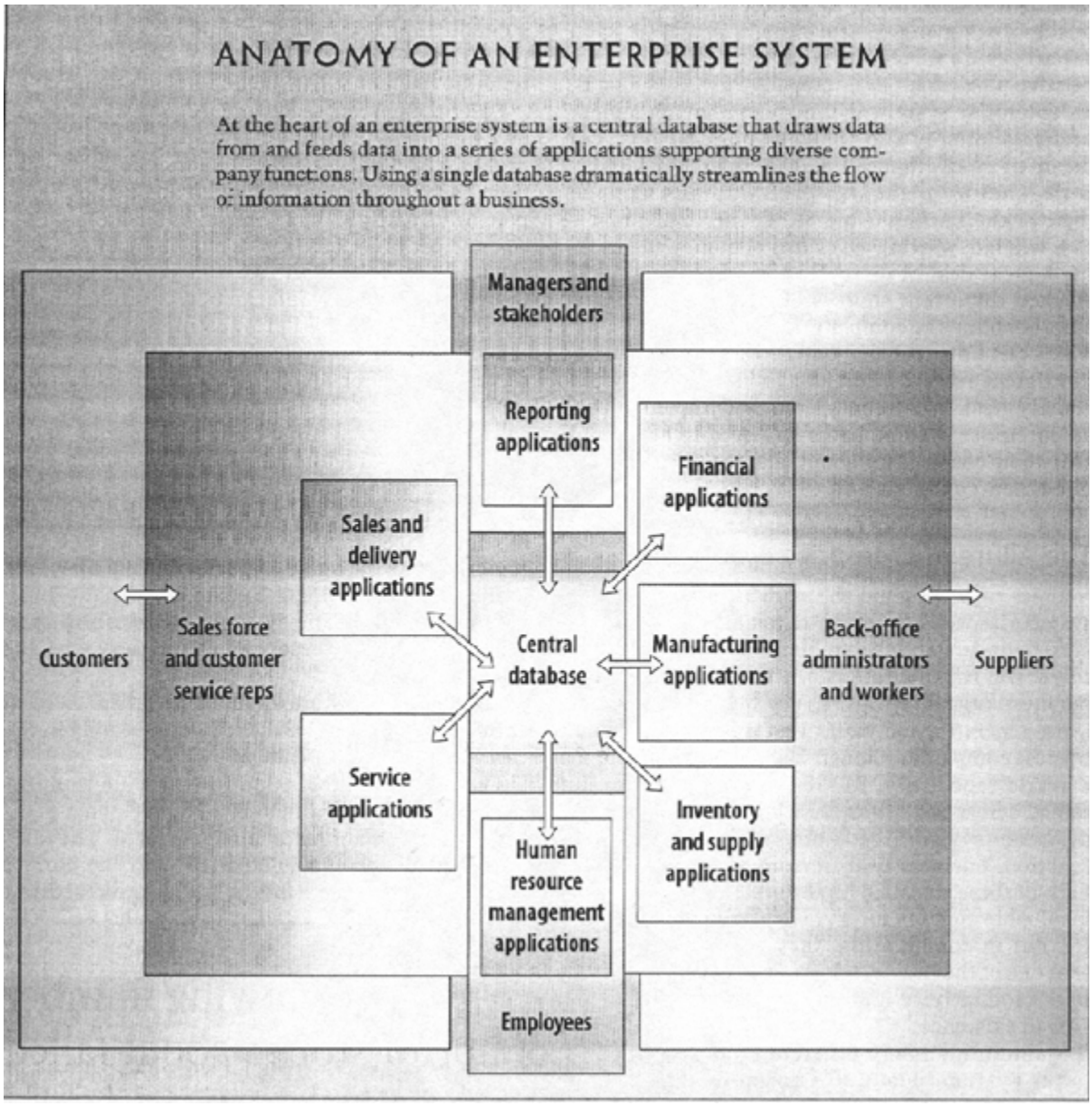
Source: CHI archives

Exhibit G



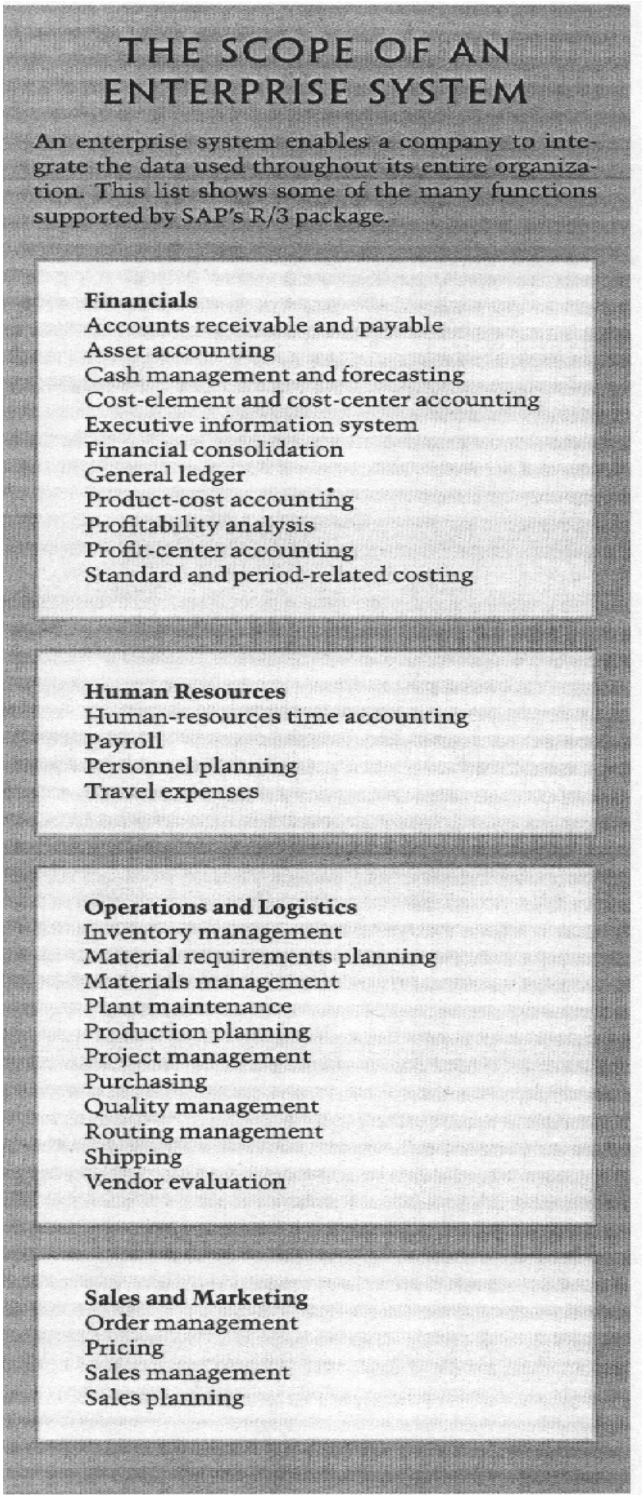
Unpublished source: Charles Emery and Eugene Schneller

Exhibit H



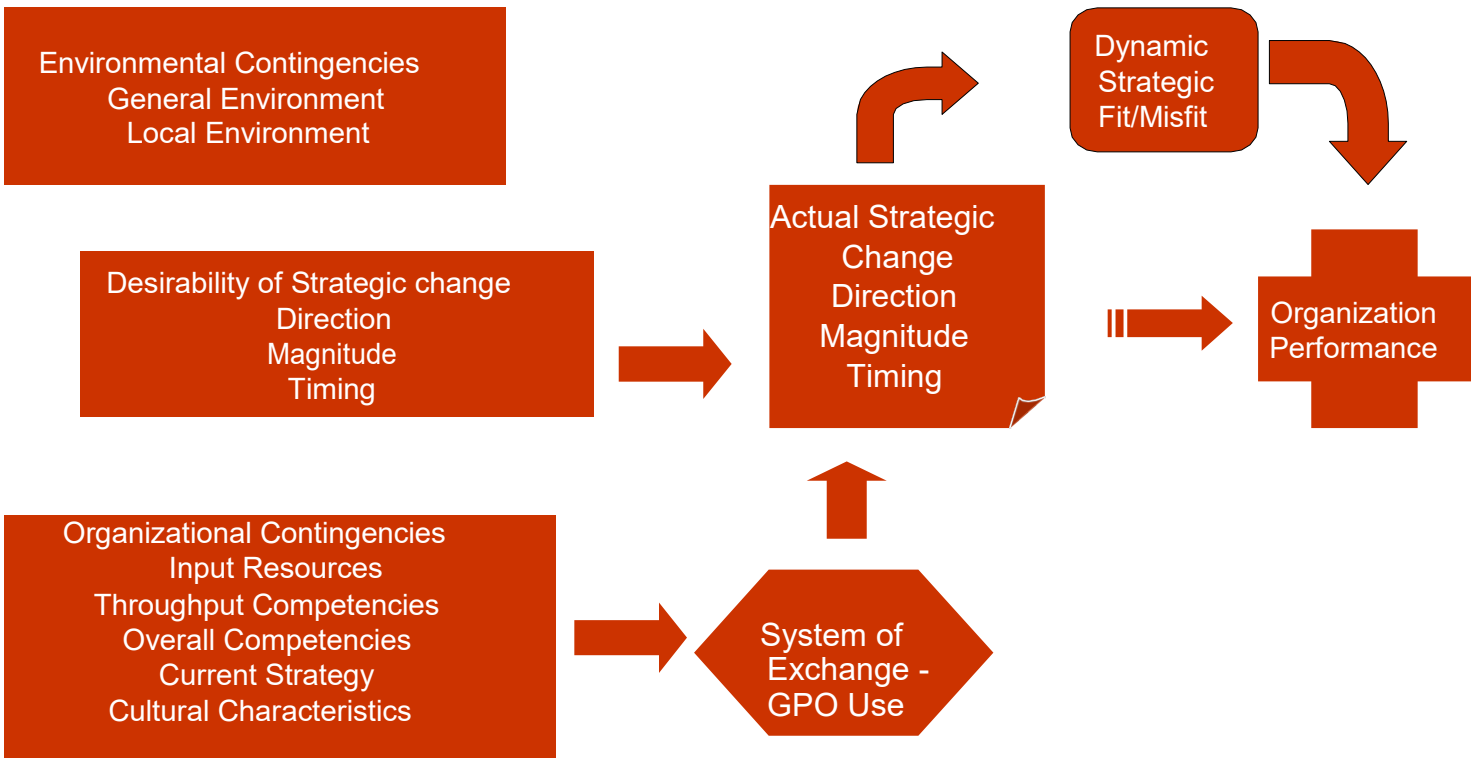
Source: Thomas H. Davenport "Putting the Enterprise into the Enterprise System" *Harvard Business Review* July – August 1998 121-131

Exhibit I



Source: Thomas H. Davenport "Putting the Enterprise into the Enterprise System" *Harvard Business Review* July – August 1998 121-131

Exhibit J Strategic fit and organization performance



Source: Adapted from Edward J. Zajac, Mathew S. Kraatz and Rudi K. F. Bresser "Modeling the dynamics of strategic fit: a normative approach to strategic change." *Strategic Management Journal* 2000: 21, 4, 429-453

Exhibit K

Financial Highlights

Balance Sheets

(in thousands)

	At June 30 2006	2005
Cash, net patient accounts receivable and other current assets	$ 1,641,142	$ 1,645,671
Investments and assets limited as to use	3,780,014	3,623,189
Property and equipment	3,285,001	2,950,269
Other	866,213	621,373
Total Assets	**$ 9,572,370**	**$ 8,840,502**
Accounts payable and other current liabilities	1,202,556	1,132,965
Self-insured reserves and other liabilities	527,702	662,852
Long-term debt	1,970,301	2,072,195
Net assets:		
Unrestricted	5,722,771	4,822,006
Restricted	149,040	150,484
Total Liabilities and Net Assets	**$ 9,572,370**	**$ 8,840,502**

Statement of Operations

(in thousands)

	Year ended June 30 2006	2005
Revenues from patient services	$ 6,826,332	$ 6,501,715
Investment income	410,766	246,701
Revenues from non-patient sources	399,135	343,032
Total Revenues	**$ 7,636,233**	**$ 7,091,448**
Employee compensation and benefits	3,438,053	3,276,359
Supplies	1,302,653	1,254,452
Building and equipment depreciation	356,171	338,086
Patient bad debts	490,219	429,399
Interest on long-term debt	86,489	81,511
Other expenses	1,257,204	1,172,287
Expenses before restructuring, impairment and other losses	**$ 6,930,789**	**$ 6,552,094**
Excess of revenues over expenses, before restructuring, impairment and other losses	705,444	539,354
Restructuring, impairment and other losses	11,743	40,980
Excess of Revenues Over Expenses	**$ 693,701**	**$ 498,374**

Source: CHI annual report, 2006

Exhibit L

Community Benefit Summary

Benefit to the Poor and the Broader Community (in thousands)	Year Ended June 30 2006	2005**
Cost of Community Benefit Provided to the Poor:		
Cost of charity care provided *(Free or reduced-cost health services for people who cannot afford to pay)*	$ 153,610*	$ 154,154*
Unpaid cost of public programs, Medicaid and other indigent care programs *(Cost of services in excess of government reimbursement)*	207,255	187,157
Non-billed services for the poor *(Clinics, meal programs, etc., provided free or at a low cost)*	10,022	9,064
Cash and in-kind donations for the poor *(Donations of food, equipment, supplies, etc., to address the needs of people who are poor or underserved)*	5,155	6,509
Other benefit provided to the poor	5,993	5,432
Cost of community benefit provided to the poor	382,035	362,316
Cost of Community Benefit Provided to the Broader Community:		
Non-billed services for the community *(Health screenings, tests, etc., provided free or at a low cost)*	20,514	21,825
Education and research provided for the community *(Cancer prevention workshops, stop-smoking programs, heart disease programs, etc.)*	22,000	27,118
Other benefit provided to the community	42,714	32,193
Cost of community benefit provided to the broader community	85,228	81,136
Total cost of community benefit	467,263	443,452
Unpaid costs of Medicare *(Costs of services in excess of government reimbursement)*	394,137	353,146
Total Cost of Community Benefit and the Unpaid Cost of Medicare	$ 861,400	$ 796,598

* *The amount shown represents the cost of charity care provided. The amount of charity care provided, determined on the basis of charges, was 2.9 percent of gross patient services revenues in both 2006 and 2005.*

Statistical Highlights (in thousands)	Year ended June 30 2006	2005**
Acute inpatient days	1,827,488	1,938,410
Acute admissions	412,209	423,855
Acute average length of stay, in days	4.4	4.6
Emergency visits	1,185,730	1,193,523
Outpatient visits	4,270,909	4,421,484
Physician visits	3,458,337	3,251,150
Home-based health patients	45,487	54,170
Residential days	625,269	658,964
Long-term care days	722,668	768,860
Full-time equivalent employees	53,531	54,044
Employees	65,070	66,460
Acute inpatient revenues as a percentage of total net revenues from patient services	52.5%	52.4%

** *Certain adjustments were made to the previously reported 2005 community benefit information to conform to the 2006 presentation.*

Source: CHI annual report

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