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Dartmouth-Hitchcock Health and GraniteOne Health Executive Summary Report of Efficiency Opportunities

Prepared by PYA, P.C.

June 13, 2019

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EXECUTIVE SUMMARY – EFFICIENCY OPPORTUNITIES FROM INTEGRATION

At the request and direction of General Counsel offices ("Counsel") at Dartmouth-Hitchcock Health ("D-HH") and GraniteOne Health ("GraniteOne" or "GOH") (collectively the "Systems") as detailed in the engagement letter dated March 15, 2019, PYA, P.C. ("PYA") was engaged to identify and summarize efficiency opportunities related to the proposed combination, and subsequent integration, of D-HH and GraniteOne (the "Combination" or "Transaction"). This executive summary report ("Report") contains efficiency opportunities identified through the performance of our scope of services in the timeframe requested by the Systems, as further defined herein. The table below presents, in executive summary form, PYA's identified opportunities to-date. Additional detail pertaining to each opportunity, including our approach to analyze data and estimate savings, key observations, key dependencies, and other integration considerations, is included in pages 17-29 within this Report.

Opportunity	Summary of Identified Efficiency Opportunities in Dartmouth-Hitchcock Health GraniteOne ("New System")	3-Year Cumulative Savings Range	Potential Additional Opportunities
Supply Chain	• Lower supply and pharmaceutical costs through Group Purchase Organization ("GPO") and distribution consolidation • Enhance supply utilization and drive culture of standardization (with scale)	**$4.3M to $18.1M**	• Enter competitive GPO selection process • Explore fee reduction for GPO provided technology solutions • Explore supply chain labor efficiencies
[redacted]	[redacted]	[redacted]	[redacted]
Insurance	• Consolidate various insurance policies • Consolidate medical insurance plans with single Third-Party Administrator ("TPA") • Lower reinsurance premiums	**$0.2M to $0.45M**	• Review medical, pharmacy, and dental plan benefit designs • Explore insurance broker consolidation

SUMMARY OF EFFICIENCY OPPORTUNITIES

Opportunity	Summary of Identified Efficiency Opportunities in Dartmouth-Hitchcock Health GraniteOne ("New System")	3-Year Cumulative Savings Range	Potential Additional Opportunities
Laboratory	• Consolidate operational infrastructure and contracting processes for blood products, courier services, and reference lab	**$0.6M to $1.0M**	• Explore and analyze merits of a single, regional lab to support the entire system • Explore new models for blood donor and stocking systems
Rural Hospital Physician Practice Administration	• Streamline layers of practice management, practice support services, and clinical supervision across rural hospital physician practices	**$1.2M to $1.5M**	• Develop plan for rural physician practices (via comprehensive integration plan)
Purchased Services	• Remove duplicative services separately contracted by individual member hospitals • Reduce purchased services spend with "bulk" negotiations and buying	**$1.3M to $2.4M**	• Conduct detailed review of additional purchased services contracts and pricing • Issue competitive RFPs for key purchased services
Hospital-Based Physician Contracts	• GOH members can access physician services using the established scale of Dartmouth-Hitchcock Clinic • Reduce contract cost and total expenditures to cover hospital-based physician services	**$1.3M to $2.0M**	• Monitor contract discussions for existing GOH professional services
Cost of Capital	• Per Echo Financial Products, execute advance refunding of GOH's existing fixed and variable rate bonds by using D-HH's credit ratings	**$1.1M to $1.2M**	*Not applicable*

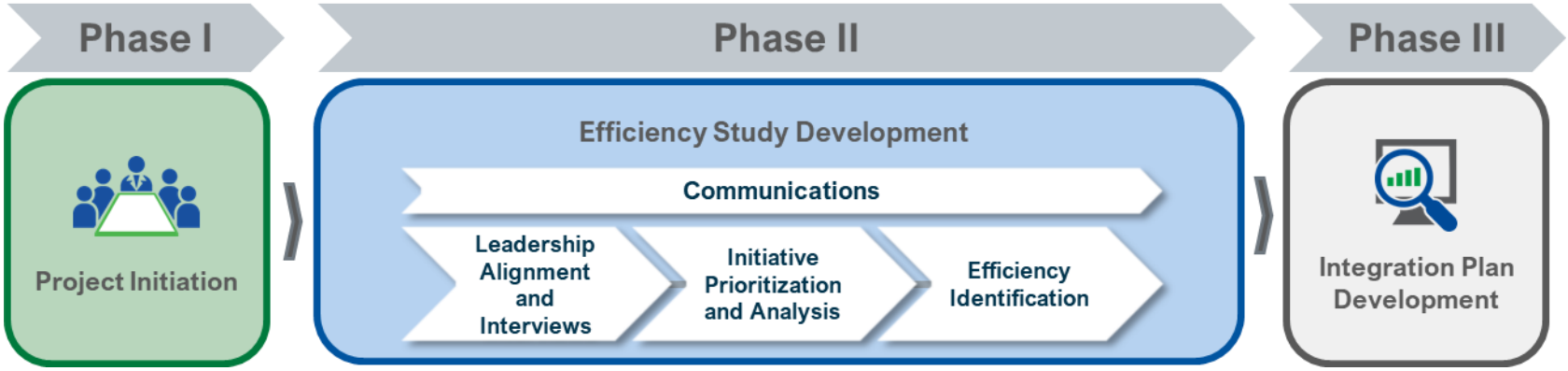
ENGAGEMENT SUMMARY

PYA SCOPE

PYA was engaged to identify and analyze potential synergies and efficiency opportunities available to the Systems as a result of the proposed Combination. PYA understands the services and deliverables are necessary to support the goals of the Combination. More specifically, the services will aid the Systems in considering potential efficiency opportunities anticipated to result from the Transaction.

The work performed by PYA constitutes an attorney-work product and is privileged information. The Report will be used by the Systems and Counsel for internal use purposes only. Therefore, this Report, as described herein, is not contemplated to stand alone, nor be included directly in any filings, unless requested by Counsel and consented to by PYA.

PYA pursued a phased approach to derive the efficiencies in this Report. The below graphic depicts an end-to-end approach for efficiency identification and implementation planning:



As of the date of this Report, PYA has completed Phases I and II, resulting in the identification of initial merger-specific efficiency opportunities as described herein. However, PYA recognizes findings recognized to date are not exhaustive of all potential efficiencies. Phase III, as documented in our engagement letter, is subsequent to the efficiency identification. If the Systems elect to pursue Phase III, a detailed integration plan will be developed with action items to pursue the merger-specific identified efficiencies. Furthermore, Phase III may allow for exploration of and potential additional merger-specific efficiency opportunities.

During Phase I, PYA worked with the Financial Analysis and Synergies ("FAS") workgroup chartered by the Systems to understand prioritized areas of potential efficiency opportunities. The following table summarizes efficiency areas prioritized by the FAS workgroup and evaluated by PYA to generate this Report:

Efficiency Areas Identified and Prioritized by Systems' Leadership
Supply Chain (Group Purchasing/Distribution)
Human Resources/Staffing Synergies
Insurance
Laboratory and Ancillaries
Rural Hospitals
Cost of Capital Reductions
Purchased Services

PYA developed and supplied to the Systems an information request to gather pertinent data which was used to perform analysis specific to these prioritized focus areas. PYA submitted this initial request on March 15, 2019 and a supplemental information request on April 5, 2019. These requests are included for reference in ***Appendix A***. We also worked with the Systems to identify appropriate leaders within these focus areas to supply requested data and perspective related to operations.

During Phase II, PYA subject matter experts conducted a series of interviews with focus area leaders from each of the Systems to understand the current operations, level of integration among member institutions, alignment of management, current contractual relationships, standardization of support systems and processes, and potential efficiency opportunities which could be pursued in the New System. The interviews informed PYA's review of requested information and facilitated analyses of potential efficiency opportunities specific to this proposed Combination.

PYA analyzed data (when made available by the Systems) to gain an understanding of the major efficiency opportunities available. Through data analysis and dialogue with Systems' management, PYA prioritized and quantified these potential efficiency opportunities. The final step to Phase II is the delivery of this Report for further review and comment.

Through the course of executive interviews, PYA also identified areas of potential expense savings not included within the Systems' prioritized list. Additional opportunities identified by PYA included hospital-based physician contracts with third parties, physician practice management infrastructure optimization, and site-of-service optimization. Ultimately, we were able to obtain information related to hospital-based physician contracts with third parties and physician practice management infrastructure to estimate potential efficiencies. Cost analysis for site-of-service optimization was deferred by the Systems to a subsequent phase to allow additional time for the Systems to gather necessary data.

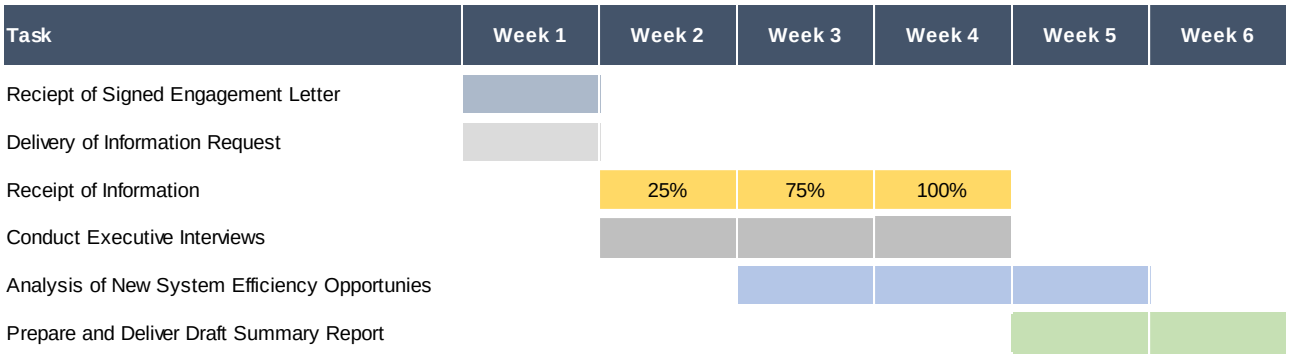
Furthermore, ancillaries became a lower priority initiative after review of initial information; therefore, initial findings have not been noted. Of note, rural hospital efficiencies are included in various other efficiency areas and not in a unique section of this Report. PYA notes there may be additional efficiency opportunities upon further investigation into these areas.

PYA was not asked during Phases I and II to analyze information technology ("IT") or clinical efficiencies, as the Systems have established specific and distinct workgroups focused on those integration and efficiency opportunities. Any incorporation of those initiatives in the overall efficiency opportunities can be assessed as a part of Phase III.

This Report focuses on opportunities deemed to be of highest value by the Systems, prioritizing the many efficiency opportunities available based on economic impact and their ability to support and improve patient/community care. The findings and estimated efficiency opportunities included herein are based on and limited to the information provided to PYA by the Systems. PYA did not validate the accuracy or completeness of the information provided or representations made by the Systems' management. Accordingly, PYA provides no assurance on the information utilized in our analysis to estimate cost efficiency opportunities in the New System.

PROJECT TIMELINE

PYA received the signed engagement letter from the Systems on March 15, 2019 and began the engagement immediately through the issuance of an information request. The Systems requested a first draft of the Report be delivered by April 30, 2019. The following table provides an overview of the timeline used in developing the draft report.



Accordingly, the following sections of this Report contain preliminary findings and estimates from our analysis over the course of the five weeks. Refinement of the identified opportunities and exploration into potential additional efficiency opportunities can occur in Phase III.

KEY ASSUMPTIONS

In addition to the details and key dependencies listed within each section, the opportunities presented in this Report are also dependent on the following key assumptions:

1. Management and governance will support and drive operational decisions to affect the integration efficiencies
    a. The resulting level of integration will be comparable to or exceeding the level of integration effected by D-HH with its current member hospitals
2. Key dependencies required to drive integration will occur within the first 3 years post-combination, including but not limited to:
    a. Common Enterprise Resource Planning ("ERP")
    b. Common GPO
    c. Common contract management system
    d. Consolidated management reporting structures, where appropriate
3. Infrastructure necessary to support the combined system will be assessed and duplicative roles will be mitigated

OVERVIEW OF D-HH AND GRANITEONE COMBINATION

D-HH

D-HH, located in Lebanon, New Hampshire, is New Hampshire's only academic health system serving patients and communities across northern New England. D-HH employs more than 1,300 primary care doctors and specialists in nearly every area of medicine, providing care at its flagship hospital, Dartmouth-Hitchcock Medical Center ("DHMC") in Lebanon, New Hampshire. D-HH also includes the Norris Cotton Cancer Center, the Children's Hospital at Dartmouth-Hitchcock, four member hospitals, and 24 D-H clinics that provide ambulatory services across New Hampshire and Vermont. D-HH serves as the sole corporate member of Mary Hitchcock Memorial Hospital in Lebanon ("MHMH") and Dartmouth-Hitchcock Clinic ("DHC"), which together operate as Dartmouth-Hitchcock ("D-H"), Cheshire Medical Center in Keene ("Cheshire"), New London Hospital in New London ("NLH"), Alice Peck Day Memorial Hospital in Lebanon ("APD") and Mt. Ascutney Hospital and Health Center in Windsor, Vermont ("MAHHC"), and the Visiting Nurse and Hospice for VT and NH ("VNH").

GRANITEONE

GraniteOne is a three-hospital integrated healthcare delivery system that was formed in 2016 to enhance the affiliated hospitals' ability to coordinate the delivery of patient care, implement best practices, mitigate inefficiencies, and collaborate on regional planning. GraniteOne is the sole member of Monadnock Community Hospital ("MCH") and Huggins Hospital ("Huggins") and serves as a co-member of Catholic Medical Center ("CMC").

LETTER OF INTENT SUMMARY AND PROPOSED STRUCTURE

When embarking upon any efficiency analysis process, it is important to understand the goals of the combined entity in order to develop an approach to identify efficiency opportunities. The Systems have signed a non-binding letter of intent ("LOI") describing their plans to combine their health systems to form a more effective vehicle to better serve the health care needs of their patients and communities throughout New Hampshire. Further detail will be set forth in a definitive agreement. Key terms in the LOI include:

- The primary goals of the Combination are to (1) improve access to health care services in New Hampshire, (2) maintain community needs to access health care in rural areas, (3) provide high quality, coordinated, and cost-effective care, and (4) more efficiently deliver preventive services.
- Per Section 2 of the LOI, "The [Systems] have been successful in developing a patient-centered approach to care by utilizing their resources responsibly to deliver more coordinated, convenient and cost-effective care for patients through New Hampshire and Vermont... The [Systems] now intend to seek a tighter integration of their clinical, administrative, and operational resources to better serve their patients and communities, and to achieve the following primary objectives identified to date:
    - Improved Access – Increased demand for health care services has strained the capacity of the [Systems] to provide access to high quality, affordable health care in the communities they serve across New Hampshire and Vermont. The [Systems'] capacity constraints in the face of this growing demand – driven largely by an aging population with chronic and higher acuity health care needs – requires patients to seek care out-of-state, at higher cost and greater inconvenience… Combining their respective systems will enable the [Systems] to provide mission-critical access by more effectively utilizing existing capacity, expanding capacity where necessary, and enhancing services across the continuum of care to offer patients a high quality, lower cost, New Hampshire-based alternative to out-of-state providers.
    - Reinforce Rural Healthcare – The [Systems] intend to use their combined expertise and resources to more rationally coordinate patient transfers for the most appropriate and cost-effective level of care… Acting together, the [Systems] intend to reinforce the fraying rural health care delivery network by utilizing their combined human and technological resources to ensure continued access to care for rural communities, e.g., deploying clinical specialists and building upon their existing telehealth capabilities state-wide and across the region.

  - Population Health and Improved Quality – The [Systems] believe that the Combination is the most effective vehicle for achieving the necessary alignment and efficiency, best positioning them to deliver integrated, high quality care in a cost-effective manner, particularly in Southern New Hampshire. In addition to the [Systems'] complementary primary care physician network, patients in southern New Hampshire will have access to a broader array of specialty services across the continuum of care.
  - Efficiency – From the delivery of health care services to operational expenses to capital investment in supporting infrastructure, the Combination would create synergies to achieve cost savings… the [Systems] intend to coordinate across multiple shared services to derive the considerable benefits of tighter system integration and realize system-wide operational efficiency over time. Finally, the Combination would allow the [Systems] to invest jointly in critical infrastructure at a lower cost of capital.

- The New System, *Dartmouth-Hitchcock Health GraniteOne*, will be governed by a 15-member Board of Trustees ("System Board"). D-HH will appoint 9 members; GOH will appoint 6 members. The System Board will retain certain reserved powers except for certain affairs related to the teachings of the Catholic Church and Ethical and Religious Directives of CMC.
- The New System will be divided operationally into two regions; Region I (northern) and Region II (southern), each having its own CEO.
- Three previously-planned capital projects (by both Systems) will be pursued jointly:
  - D-HH construction of new ambulatory surgery center in Manchester;
  - CMC hospital expansion in Manchester; and
  - Mary Hitchcock Memorial Hospital expansion in Lebanon.

The proposed structure of the New System is depicted in the following chart:

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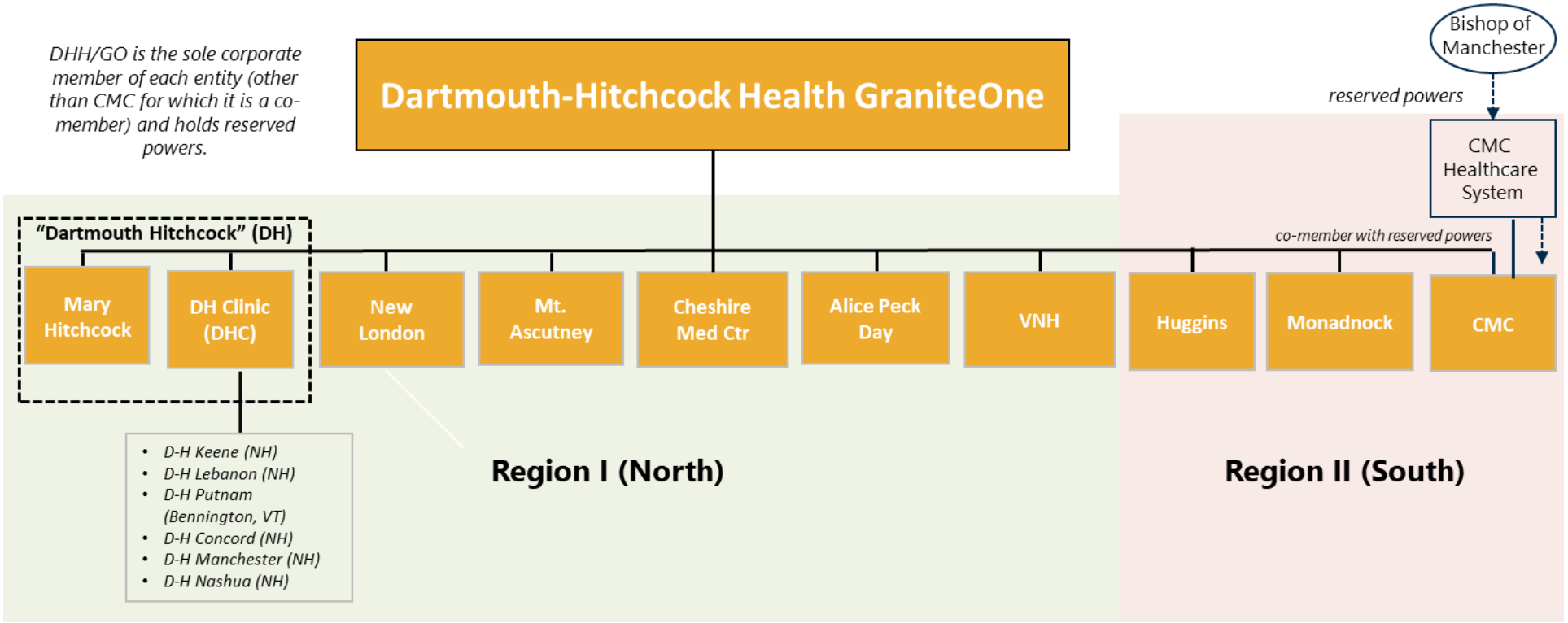
Figure: Proposed Corporate Structure



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SYSTEMS' CURRENT CHARACTERISTICS

Based on our interviews with project stakeholders and our review of requested data, the following table summarizes key system-level characteristics and traits of the two Systems:

	D-HH	GOH
Overall Level of Integration	D-HH and its members are generally very integrated. The D-HH board holds reserved powers. Member hospitals typically share major business functions, including IT systems, clinical staff, purchasing, and other system resources.	GOH primarily works together as a group of cooperative members but has achieved limited integration of operational functions to date. With some exceptions, key business functions and IT systems remain separate at each hospital.
Electronic Health Record ("EHR")	eDH with Epic (D-H, Cheshire, APD); various other EMRs (NLH, MAHHC)	Allscripts (CMC), McKesson Paragon (MCH), CPSI (Huggins)
ERP	PeopleSoft (D-H, Cheshire, APD); various other EMRs (NLH, MAHHC)	Oracle (CMC), McKesson Paragon (MCH), CPSI (Huggins)
Management Structure	D-HH was formed in 2009 as New Hampshire's only academic health system. Since then, five members have been added to the system including NLH, MAHHC, Cheshire, APD, and VNH.	GOH is a 3-hospital affiliation that was finalized in 2017. Huggins and MCH have remained separate, secular (non-religious), non-profit hospitals while CMC has remained a separate, Catholic, non-profit hospital.
GPO Relationships	D-HH uses Vizient as a primary GPO and participates in several aggregation groups to further lower prices including Northeast Purchasing Coalition ("NPC") and New England Alliance for Health ("NEAH").	GOH has not consolidated GPOs. CMC has an ownership stake in Yankee Alliance ("YA"), which is a Premier equity owner. MCH is a member of NEAH through D-HH utilizing Vizient as a primary GPO. Huggins utilizes YA for med/surg GPO and Amerinet for pharmacy GPO.
Lab	D-HH has labs in Manchester, Nashua, Lebanon, and is soon opening a small lab in Concord. D-HH uses American Red Cross, BloodWorks Northwest, Rhode Island Blood Center, and has its own blood donor program.	GOH has labs in Hooksett, Goffstown, Manchester, and Bedford. CMC uses American Red Cross for blood bank. There is currently no blood banking function at MCH or Huggins, but the facilities offer basic screening. MCH has integrated with CMC's lab for most testing.
Medical Staff and Physician Enterprise	D-HH employs nearly all providers through Dartmouth-Hitchcock Clinic ("DHC"), including: • More than 1,300 physicians, residents and fellows, and associate providers • More than 1,800 direct-care nurses • More than 1,200 allied health professionals	GOH members have a mix of employed, independent, and contracted providers: • CMC – Approximately 400 physicians • MCH – Approximately 125 physicians • Huggins – Approximately 55 physicians

INDUSTRY TRANSACTION EFFICIENCIES

TYPICAL SAVINGS OPPORTUNITIES

Hospital and health system combinations are meant to improve the parties' financial sustainability, quality, and patient outcomes. Accordingly, as the Systems identify efficiency opportunities, both qualitative and economic efficiencies are considered. Qualitative efficiencies are usually aligned with clinical initiatives, which are being handled by a separate group and outside the scope of PYA's services, while economic efficiencies are usually aligned with administrative, operational, and support system initiatives.

Economic, or quantitative, efficiencies are typically divided into two categories: labor efficiencies and non-labor efficiencies. Identifying these types of efficiencies or expenses, as opposed to the functional areas within which the activity occurs, is often referred to as the "natural" classification of expenses (i.e., the classification of expenses consistent with their presentation in the financial statements).

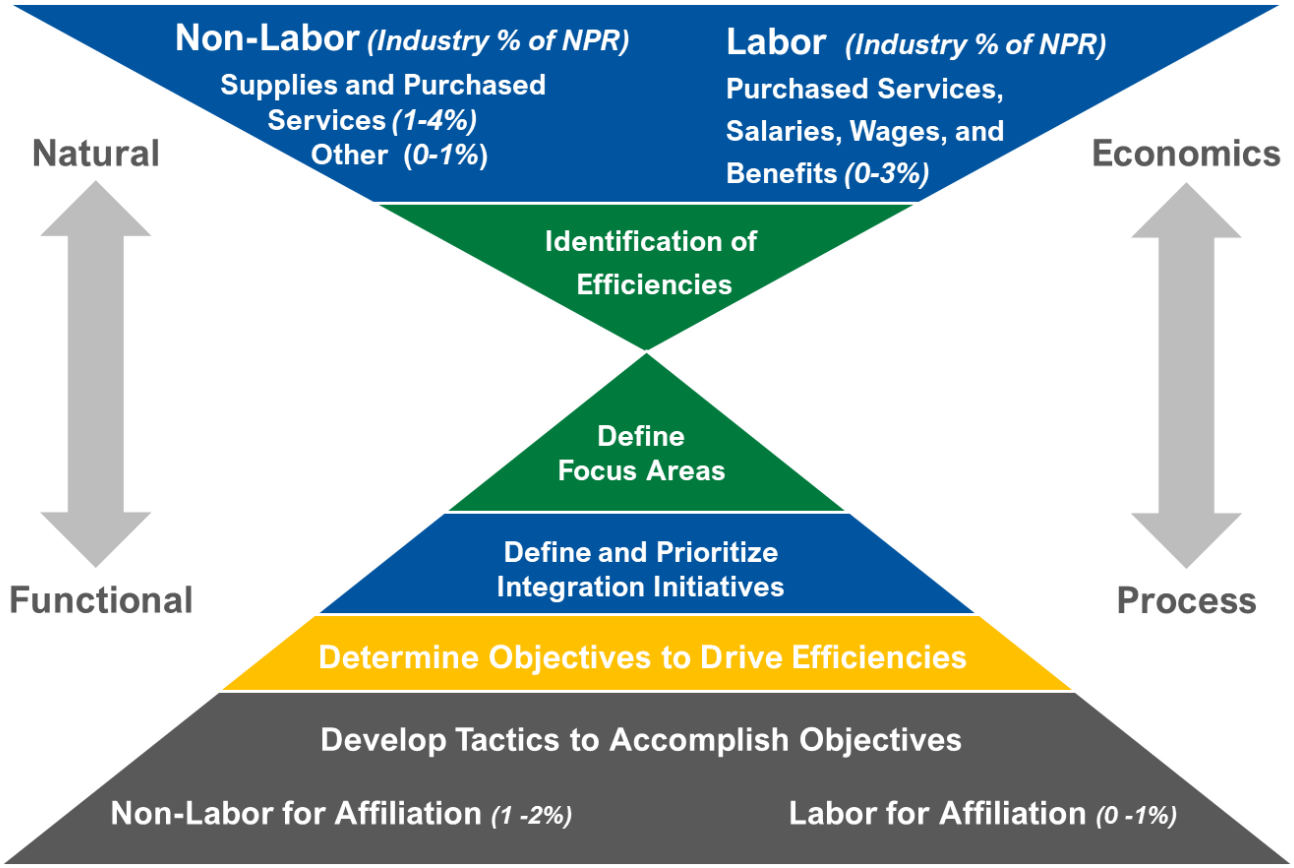
Due to the significant affiliation and combination activity in the past decade in the healthcare industry, there are numerous results to study regarding the levels of economic efficiencies – both planned and achieved – by affiliating entities. In general, industry information is presented using the natural classification of expenses typically found in financial statements.

For example, identified labor efficiencies are typically categorized into Salaries and Wages, Employee Benefits, and Professional or Purchased Services. The most significant non-labor expense categories are typically Supplies Expense, Purchased Services (for those services not involving labor), and Other Expenses specific to the type of transaction (i.e., Interest Expense when debt refinancing is identified as an opportunity).

From this industry experience, we can define the potential ranges of economic efficiencies as follows:

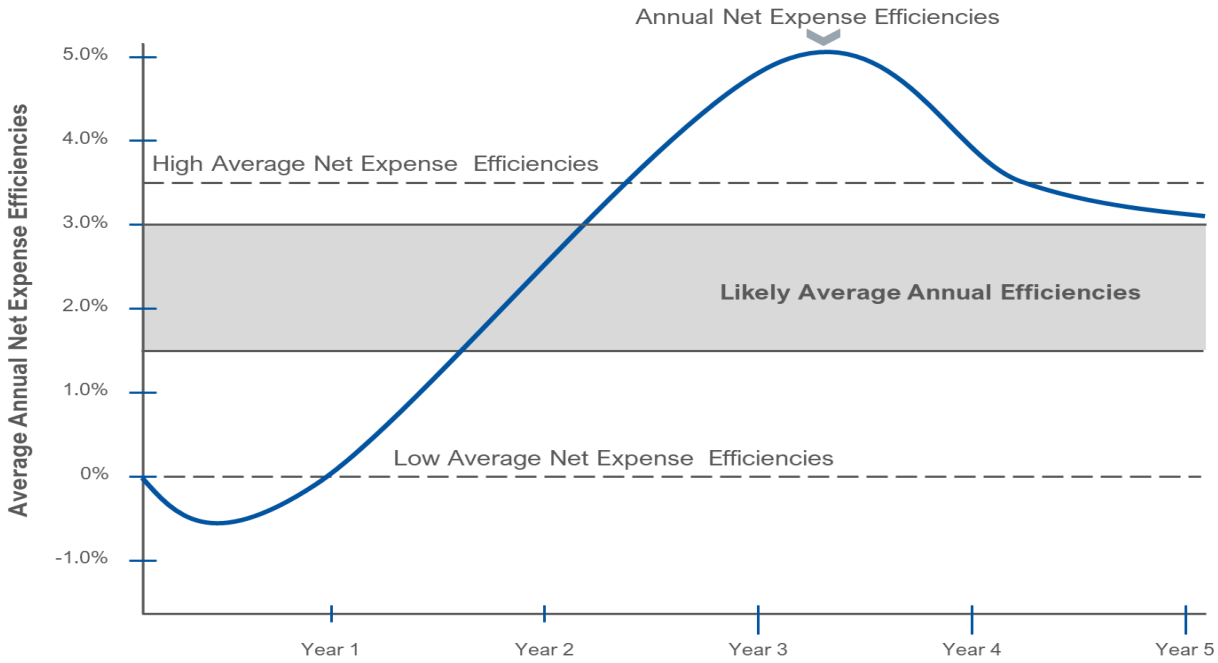
1. Labor efficiencies, resulting from staffing efficiencies, scale, and identification of labor-related purchased service opportunities typically result in expense savings from 0% to 3%.
2. Non-Labor efficiencies resulting from savings on materials and supplies (i.e., Supplies Expense) and non-labor oriented purchased services typically result in expense savings from 1% to 4%. Other non-labor efficiencies identified in other affiliations vary widely, based on the nature of the affiliation.

The following graphic presents the relationship between functional integration and efficiency planning with the natural classification of identified economic efficiencies. The findings in this Report are primarily associated with the natural classification at the top of the graphic. Phase III (Integration Planning) will focus on the objectives and tactics necessary to accomplish the economic efficiencies through functional integration.



EFFICIENCY LIMITATIONS

Our experience is that net annual efficiencies fluctuate over the time periods after the affiliation, with marginal to even negative efficiencies realized in the first year as integration efforts are launched and investments in infrastructure and information systems are made to support the system. Moving into subsequent years, systems begin to realize the positive results of integration initiatives. Based on our experience working with healthcare systems active in affiliations, the average annual net expense efficiencies resulting from affiliation initiatives over a five-year post-affiliation time frame generally range between 0% and 3.5%. The following graph portrays an example of this typical occurrence.



The level of efficiencies any combination can expect to achieve within this range is determined by several factors. These factors include but are not limited to the:

- Legal structure and governance structure for the combination, including the degree of operational autonomy through retained powers of the individual members
- Historical level of integration if the combination is between integrated delivery networks ("IDNs")
- Level of effective management of expenses in prior periods
- Characteristics and attributes of the Systems to position as an attractive partner for supply and service vendors
- Existing infrastructure of Systems to support integration and timing for infrastructure consolidation
- Geographic dispersion of the system members
- Other Factors

The following paragraphs discuss key considerations applicable to this specific Combination that impact the level of savings which can be achieved. A summary of our observations is presented in the following table.

Factor	Impact on Attainable New System Level of Efficiencies
Legal and Governance Structure for the Combination	Nominal
Historical Level of Integration by the Systems	Less challenging than industry norms
Effectiveness of Managing Expenses in Prior Periods	More challenging than industry norms
Attributes of Participants to the Combination	Nominal
Existing Infrastructure of Systems and Timing for Infrastructure Consolidation	Nominal
Geographic Dispersion	More challenging than industry norms
Other Factors: Medical Staff Composition	More challenging than industry norms

Legal and Governance Structure of the Combination

Combinations with the greatest potential for expense efficiencies are those defined as an acquisition resulting in one party to the transaction gaining majority (or unilateral) control of the consolidated entity's governance. In such a case, the party gaining governance control assumes full responsibility for the operations and the economic results of the consolidated entity. The acquirer is better able to direct changes quickly, absent retained powers by the seller in governance. Oftentimes, the acquirer implements its processes and systems early in an integration, reducing the need for the acquired organization's administrative and operational support personnel and information systems.

In this Combination, D-HH will serve as the sole corporate member of MCH and Huggins, and co-member of CMC. CMC, MCH, and Huggins will continue as separately incorporated organizations and separately licensed acute care hospitals at their respective current locations and in furtherance of their respective charitable missions. D-HH will be responsible for the strategic direction and management of the New System. However, the Board of Trustees of each of the GraniteOne members will remain in place and continue to retain operational authority over the provision of health care services at their respective facilities, except for those actions specifically reserved to the New System Board of Trustees.

The structure and rights of the New System Board of Trustees, as contemplated in the LOI, appear to present the opportunity for a level of governance to drive integration comparable to what D-HH has been able to effect with its current member hospitals. This level of integration at D-HH is of a higher degree than that effected by the current GraniteOne structure. Accordingly, we feel this consideration is in line with industry expectations for efficiencies resulting from IDN combinations.

Historical Level of Integration by the Systems

Combinations of highly integrated health systems have limited opportunities to effect significant expense efficiencies. However, health systems or individual hospitals which have disparate systems and infrastructure present opportunities to increase scale and resources. As noted previously, D-HH has taken steps to integrate member hospitals, including deployment of common EHR and ERP systems. GraniteOne has not affected the same level of integration between and among member hospitals. Therefore, there is a greater likelihood of attaining efficiencies at the GraniteOne hospitals compared to the current D-HH member hospitals.

Effectiveness of Managing Expenses in Prior Periods

Sometimes, value is identified in transactions by capitalizing on the lack of prudent financial management by prior management teams. In such cases, an acquirer, or merging parties, can reduce expenses immediately in areas that had previously not been adequately addressed, resulting in efficiency opportunities at or exceeding the high range for the industry. With respect to D-HH and GOH, management teams appear to have effectively managed expenses as evidenced by their financial performance. Therefore, there would not seem to be opportunities to materially reduce expenses in the current operations.

Attributes of Participants to the Combination

In some acquisitions, the buyer (and/or the accumulation of scale through the combination) may be positioned as an attractive partner for vendors looking to contract with large systems. The reputation of participants to the combination can also influence how many vendors are looking to partner with the system, leading to enhanced competition amongst vendors to provide supplies and services to the combined entity. Opportunities to participate in better collaborative arrangements with vendors are often key considerations by many independent hospitals seeking affiliations with larger regional or national healthcare systems.

In this Combination, D-HH is a highly respected academic health system with the only academic medical center in New Hampshire. D-HH has a large physician enterprise in DHC, as well as affiliations with member hospitals. The Combination with GraniteOne results in growth of D-HH by approximately 20%.[1] GraniteOne also brings high quality hospitals to the New System as recognized in national rankings.[2] These factors contribute to some degree of ability to affect further competition by vendors desiring to supply and provide services to the New System.

Existing Infrastructure of Systems and Timing for Infrastructure Consolidation

Expense efficiencies often depend on the consolidation of existing or planned IT infrastructure. In this Combination, both D-HH and GOH are currently implementing different EHR and ERP systems to their members. The use of multiple major IT systems may limit or defer the timing of various expense efficiencies. We later note the consolidation of ERP systems as a key dependency in several of the identified efficiency opportunities. Strategy related to IT integration is being addressed by a separate and distinct workgroup, which will inform these opportunities and impacts at a later time.

Geographic Dispersion

If facilities are centrally located, there is a greater opportunity to consolidate and centralize administrative and operational functions that can still support multiple locations. Additionally, opportunities can exist to leverage proximity to drive efficiencies in clinical services such as laboratory and physician support. In the case of this Combination, the Systems and their members have little overlap of services in most markets (most of the hospitals are at least an hour away from the nearest D-HH or GOH hospital). Per the LOI, the geographic dispersion is significant enough to create two regions, each with local management. Thus, the geographic dispersion likely limits certain efficiencies.

Medical Staff Compositions

Clinical cost savings opportunities often require a certain level of hospital-physician integration. This hospital-physician integration is likely dependent on the medical staff model. Hospitals that have a high degree of integration with their physicians (e.g., employed provider model) are more likely to achieve cost savings on initiatives such as physician preference items than hospitals with a lower degree of integration with physicians.

In this combination, D-HH is highly integrated with the majority of its providers employed through DHC. Cost-savings initiatives (e.g., lowering costs by using a sole vendor for total joint implants) are more likely to be accomplished within this model as compared to GOH, which includes both employed and independent providers and is less integrated with its medical staffs. However, we are not aware of immediate plans to integrate the medical staffs within the New System. Accordingly, we assume that GraniteOne medical staff composition will continue, which could limit some opportunities particularly related to high compliance physician preference item standardization.

[1] Based on net revenue of the respective Systems.
[2] MHMH and CMC are ranked as the first and second hospital in New Hampshire by U.S. News and World Report rankings for 2018-2019. Huggins and MCH are CMS rated four-star hospitals.

Summary

Considering all these and other factors, we would expect that once the Systems have the ability to view, analyze, determine, and implement specific efficiencies, the resulting average net annual expense efficiencies realized by the New System, over a three-year period, would range from 1% to 2.5% of operating expenses, less depreciation. The following section includes detail of specifically identified efficiency opportunities, as well as potential incremental opportunities which can be further explored.

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SUMMARY OF D-HH-GOH COMBINATION EFFICIENCIES

The following pages and tables summarize PYA's review and analysis of various efficiency opportunities resulting from the Combination. Each table represents a different efficiency area, as defined in the Engagement Summary section of this Report. Additional detail, including information received from the Systems, calculations for estimated savings, and assumptions are included in PYA's workpapers but are not included in this Report.

DEFINITIONS

Category	Definition
Opportunity Summary	Brief overview of the efficiency opportunity.
Key Considerations	Overview of the analysis approach and assumptions used to determine financial impact, if any.
Cumulative Estimated Financial Impact Against Baseline	Quantification of savings opportunity presented as a range. Different assumptions may be used for low vs. high estimates. Savings projected over a three-year period. Savings estimates are aggregate year over year, with each succeeding year's savings estimate inclusive of the previous years' savings. Aggregate savings are measured over a baseline period, which approximates the combined fiscal year 2018 operating results from each of the Systems.
Timeline	Estimated time to implement changes and realize savings.
Key Dependencies	Opportunity-specific dependencies to achieve estimated savings.
Key Phase III Initiatives/Potential Additional Opportunities	List of next steps or specific actions for the Combination to achieve stated efficiency opportunities. Where we believe there is also likely additional opportunity to explore that extend beyond the scope of this engagement, we have also noted such potential opportunities here.
Level of Difficulty	Estimated level of difficulty to implement changes to drive opportunity, including ease of implementation, required support from management, and financial investment required.

APPENDIX A: PYA INFORMATION REQUEST

1. Purchasing – Supply Chain

1.1 Summaries of GPO relationships (primary and secondary) for each of the Systems, including any relevant contract overview or analysis of documents previously prepared

1.2 Copies of current GPO participation agreements and associated agreements (including supplemental technology arrangements, guaranteed or shared savings arrangements, etc.) for each System as well as any unique contracts at the facility level

1.3 Fee share statements for each GPO for calendar year ("CY") 2017 and CY 2018 showing quarterly spending of the Systems (including administrative fees, rebates, discounts, and standardization returns)

1.4 Summaries of distributor relationships, annual spend, key contract terms, and corresponding agreements for each of the Systems related to:

- Medical/surgical supplies
- Pharmaceuticals
- Laboratory
- Medical groups

1.5 Total spend data file for CY 2017 and CY 2018, including:

- Major spend category
- Units purchased
- Department
- Vendor name
- Vendor product number
- Manufacturer name
- Manufacturer product number

- Unit of measure and unit of measure conversion factor
- If possible, clarify whether purchased through GPO (primary or secondary), distributor, or a local contract

1.6 Benchmarking supply chain performance reports such as:

- Supply costs as a percent of total expense
- Supply costs as a percent of net revenue
- Supply costs per adjusted admission
- Other relevant measures used by the organization

1.7 Overview of additional services received from GPO organization beyond supply chain services and technologies

1.8 List of relationship with pharmacies to provide specialty pharmaceuticals/services

2. <u>Labor/Human Resources</u>

2.1 Corporate entity chart

2.2 Organizational charts depicting department/service line managers, directors, and executives for each entity, including name, title, responsible department(s), and (if available) full-time equivalent ("FTE") employees managed

2.3 The most current employee information, in Excel format, from each System's Human Resource Information System ("HRIS") detailing:

- Employee name
- Name
- Job title
- Salary/pay rates
- Benefits paid
- Department Name/ID
- Location

- Full-time equivalency status
- Supervisor/manager name
- Management level

2.4 Any organizational improvement and efficiency studies performed over the past two years, with a denotation whether they have been implemented

3. Insurance

3.1 Summary description of all insurance coverages maintained by each entity including name of insurer, policy expiration date, amount and type of coverage, deductible and premium amounts

3.2 Overview of all employee health plan arrangements

3.3 Summary of employee benefit expenses and number of participants by category (medical, dental, life, etc.) for the last three years

3.4 For each benefit category, breakdown by expense type (premiums, claims, administrative fees, stop-loss premiums, etc.) for the last three years

3.5 Medical malpractice loss run report as of recent date for each entity

3.6 Overview of general liability arrangements

3.7 Annual spending information related to specialty pharmacy costs incurred by the GraniteOne employee health plan(s)

4. Lab/Ancillaries

4.1 For each System, a listing of all locations (including addresses) providing the following non-hospital-based services (collectively the Lab/Ancillary Departments):

- Laboratory
- Imaging
- Urgent care

- Outpatient surgery
- Cancer/infusion
- Physical therapy/outpatient rehab

4.2 Cost accounting reports for CY 2017 and CY 2018 for each of the Lab/Ancillary Departments

5. Rural Hospital

5.1 Year-end financial and statistical reports for each of Huggins Hospital, Monadnock Community Hospital, and D-HH owned or affiliated hospitals other than Dartmouth-Hitchcock Medical Center (collectively, the "Affiliated Hospitals") for CY 2017 and CY 2018. Please include statements of operations, changes in net assets, cash flow, balance sheets, and operating statistics such as financial ratios and benchmarks/targets (profitability, cash position, debt position, liquidity, etc.)

5.2 Detailed general ledger and trial balance for each Affiliated Hospital for CY 2017 and CY 2018.

5.3 Cost accounting reports, by department, of expenses incurred for each Affiliated Hospital

6. Cost of Capital

6.1 Audited financial statements for each audited entity of the Systems for the past two fiscal years

6.2 Year-end financial and statistical reports for each entity for the last two fiscal years and year to date. Please include statements of operations, changes in net assets, cash flow, balance sheets, and operating statistics such as financial ratios and benchmarks/targets (profitability, cash position, debt position, liquidity, etc.)

6.3 Current and future operating and capital budgets for each of the Systems

6.4 Sources and uses (capital plan) for the next two fiscal years for each of the Systems

6.5 Financial forecasts and/or long-range financial plans for each of the Systems

6.6 Bond rating reports and overview of key financial obligations for each of the Systems

7. Purchased Services

7.1 Detailed general ledger and trial balance for each of D-HH and CMC for CY 2017 and CY 2018

7.2 Cost accounting reports, by administrative department, of expenses incurred for each entity of the Systems

7.3 Listing of all purchased services/products with annual spending over $200,000 per year including, but not limited to, the following categories:

- Telecommunication services
- Laundry/linen
- Medical gases
- Blood
- Food and nutrition
- Environmental/housekeeping services
- Biomedical/clinical engineering
- Security
- Facility operations and maintenance
- Document management/retention
- Financial statement audit, tax, and cost reporting services
- Marketing services
- Other outsourced administrative functions

8. Supplemental Requests

8.1 Hospital-Based Physician Contract Details (anesthesiology, radiology, emergency medicine):

- GraniteOne: Key contract details with third parties for the provision of hospital-based specialty services listed above.

GraniteOne	**Catholic Medical Center**	**Monadnock Community Hospital**	**Huggins Hospital**
Anesthesiology Provider FTEs Net annual cost to hospital Contract expiration date(s)			
Radiology Provider FTEs Net annual cost to hospital Contract expiration date(s)			
Emergency Medicine Provider FTEs Net annual cost to hospital Contract expiration date(s)			

- D-HH: Average net profit/loss per physician for the employed hospital-based specialties listed above

8.2 Number of adult medical/surgical inpatient cases (exclude OB, Psych, Rehab, Pediatric) and average direct cost per admission by case mix (for case weights up to 3.0). Please provide the following detail for Fiscal Year 2018:

GraniteOne	**CMI <1.0**	**CMI 1.0 -2.0**	**CMI 2.0 -3.0**
Adult Med/Surg Care Admissions			
Catholic Medical Center			
Monadnock Community Hospital			
Huggins Hospital			
Average Direct Cost per Case[1] (Adult Med/Surg)			
Catholic Medical Center			
Monadnock Community Hospital			
Huggins Hospital			

[1]Direct costs include costs by patient care departments and exclude allocated overhead costs. These costs are typically attributed to patients using cost-charge ratios or true cost-accounting systems.

D-HH	**CMI <1.0**	**CMI 1.0-2.0**	**CMI 2.0-3.0**
Adult Med/Surg Care Admissions			
D-H Memorial Hospital			
Cheshire Medical Center			
New London Hospital			
Alice Peck Day Memorial Hospital			
Mt. Ascutney Hospital			
Average Direct Cost per Case[1] (Adult Med/Surg)			
D-H Memorial Hospital			
Cheshire Medical Center			
New London Hospital			
Alice Peck Day Memorial Hospital			
Mt. Ascutney Hospital			

[1]Direct costs include costs by patient care departments and exclude allocated overhead costs. These costs are typically attributed to patients using cost-charge ratios or true cost-accounting systems.