NIH Gaithersburg Distribution Center (GDC) Assessment

Executive Summary
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This briefing provides the Assessment’s Executive Summary; the Comprehensive Assessment is available upon request
Project Overview and Approach

In February 2009, NIH selected PRTM to determine the viability of the GDC including its appropriate size, scope and configuration

PRTM analyzed data from multiple NIH systems including the following:

- OALM Financial Statements since FY2006
- GDC Daily Management Dashboards that include inventory levels and other operational performance data
- Institute and Center sales data from nVision, NBS, AMBIS, and POTS, and shared by Invitrogen

PRTM conducted interviews with GDC leadership, managers, and employees, as well as with customers representing various buying habits

- GDC personnel including Item Managers, Warehouse Managers, Program Analysts, etc.
- Customers representing multiple levels within their respective organizations (technicians, lab managers, staff scientists, principal investigators, etc.) and including frequent, high volume purchasers and infrequent, low volume purchasers
  - Customers from the following organizations were interviewed: NIAID, NCI, NIDDK, CSR, CC, OD ORS, NINDS, NICHD, NIDA, NEI, NIEHS, NHGRI, NHLBI, NIDCR, NIMH and NCCAM
  - Organizations interviewed represented 66% of NIH’s total spending on materials and supplies
Overall Assessment of GDC Operations

GDC is a viable business that provides value to NIH, even though it has not historically been profitable

- GDC’s 32% surcharge is significantly lower than vendors’ average mark-ups
- NIH community has significant confusion about GDC prices; customers have varying opinions based on their own experiences
  - Some products are cheaper through non-GDC channels
  - Many vendors are willing to “beat” GDC prices for large volume purchasers (or advertise that they do)
- In addition, the presence of the GDC forces commercial vendors to discount their prices creating further savings for NIH**

* Estimated average based on samples from POTS, NBS, AMBIS, nVision, and Invitrogen data from Sept 2007 – Sept 2008; mark-up average is 89%; range is between 9% to 404%; does not include transportation and administration costs
** Savings to NIH due to GDC’s effects on competition are not included in this analysis
Overall Assessment of GDC Operations

GDC can increase profitability in the near term
- GDC leadership has undertaken a number of initiatives to improve operations within the last 12 months that are only beginning to reflect in GDC financial statements
- GDC should focus on understanding its customers, incorporating sales forecasts into its operational management, and eliminating stock-outs

Ultimately, OLAO/ Supply should transform GDC into an asset-less business model
- Reduces operational expenses
- Shares risk with 3rd parties
- Focuses NIH energy on strategic sourcing and customer satisfaction
NIH Asked PRTM to Assess the Viability of the GDC

PRTM considered the following options:
1) GDC’s Current State
2) The Impact of Closing the GDC
3) The Impact of Increasing GDC’s Sales and Decreasing its Expenses
4) The Impact of Transforming GDC to Asset-less Operations
PRTM Recommends Increasing Sales & Decreasing Expenses in Preparation for Transitioning to an Asset-less Model

<table>
<thead>
<tr>
<th>Current State</th>
<th>Closure of GDC</th>
<th>Increase Sales and Decrease Expenses</th>
<th>Go Asset-less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue: $28.6M</td>
<td>Revenue: $28.8M</td>
<td>Revenue: $57.8M</td>
<td>Revenue: $114.0M</td>
</tr>
<tr>
<td>COGS: $19.5M</td>
<td>COGS: $24.4M</td>
<td>COGS: $43.8M</td>
<td>COGS: $86.4M</td>
</tr>
<tr>
<td>Gross Profit: $9.1M</td>
<td>Gross Profit: $4.4M</td>
<td>Gross Profit: $14.0M</td>
<td>Gross Profit: $27.6M</td>
</tr>
<tr>
<td>Net Income: $1.0M</td>
<td>Net Income: ($3.7M)</td>
<td>Net Income $5.9M</td>
<td>Net Income: $22.0M</td>
</tr>
</tbody>
</table>

Note: Based on actual Sales and Expenses from March 2008 – February 2009

PRTM Recommendation

- Terminate operations
- Keep warehouse; improve operations; increase customer intimacy
- Transition out of warehouse operations

Note: Based on actual Sales and Expenses from March 2008 – February 2009
The GDC is Viable Today but it Risks Irrelevance at NIH

Current State

Closure of GDC

Increase Sales and Decrease Expenses

Go Asset-less
1) Current State – Ordering and Delivery

GDC Sales Account for 13%* of Total Supply and Material Purchases

NIH resources are not efficiently spent on supply and material purchases; NIH budget that could be spent on research is going elsewhere

* As of Q1 2009
** Estimated average based on samples from POTS, AMBIS, nVision, and Invitrogen data from Sept 2007 – Sept 2008; mark-up average is 89%; range is between 9% to 404%
1) Current State – Workforce

GDC Workforce is Heavily Focused on GDC Operations

- GDC operations include the following:
  - Acquisition services
  - Order Management Services
  - Warehouse Management Services
  - Transportation Services
  - Inventory Management Service

- Workforce is heavily focused on operations—**little or no customer facing functions**

- GDC does not **control the end-to-end customer experience**

* Management is not represented
1) Current State – Customer Impressions

Customers Generally Want to Use GDC When They Can

Pricing

- Significant confusion, but the grand majority believe GDC is competitive and often less expensive
  
  “To me, we’re in the business of conducting research. I wouldn’t use them [GDC] if they were more expensive or didn’t meet my needs” (Lab Manager)

Customer Service

- Customers are frustrated with stock-outs and backorders and find the product catalog cumbersome and inaccurate; however, service is improving
  
  “Items for which the GDC is the only source will go on backorder. Thus our research comes to a halt” (Lab Manager)

  “The catalog is not often updated when new items are available” (Lab Manager)

- Customers appreciate the GDC stores for their convenience and ease of use

Competition

- Customers view GDC in competition with commercial vendors, but have different views of the competition
  
  “Sales reps are here all the time. They bring us lunch, and set up displays. We love it!” (Technician)

  “Reps provide great deals for new PI’s or tenure-track staff, and establish early relationships that lasts” (Lab Manager and Staff Scientist)

  “When the sales reps come around, I pretend that I’m not in” (Principal Investigator)
If the GDC Ceases Operations, NIH Will Not Utilize Research Dollars in the Most Optimal Manner

- Current State
- Closure of GDC
- Increase Sales and Decrease Expenses
- Go Asset-less
2) Closure of GDC
Supply and Material Costs to NIH Would Increase

NIH expenses would increase in the following areas:

- COGS – loss of discounts due to bulk purchases; many non-GDC prices are the result of GDC negotiations with vendors
- Shipping – increased shipping charges to individual institutes and centers
- Costs associated with the management and auditing of Purchase Cards

* Estimated average based on samples from POTS, AMBIS, nVision, and Invitrogen data from Sept 2007 – Sept 2008; mark-up average is 89%; range is between 9% to 404%
2) Closure of GDC – Impact

In Time, NIH Would Likely Return to a Single Source Model

NIH would require at least 6 months to turn half of its current, active inventory

- Remaining inventory of roughly $2.7M would require disposal at significantly less than market value

In addition to the costs associated with closure:

- GDC’s government employees would require relocation within NIH
- NIH Institutes and Centers would incur increased costs associated with their own inventory and purchasing management

Eventually, the NIH Institutes and Centers would likely centralize individual purchasing to reduce costs

- Institutes and Centers would then team together for increased cost savings due to consolidation
- In a “best case” scenario, NIH would develop an asset-less model for consolidated purchasing, but without a clear understanding of the cost structures involved making efficient contracting difficult
- In another scenario, the NIH Institutes and Centers would develop a model similar to the current GDC

**NIH does not gain sufficient value from closing the GDC to warrant its closure**
If GDC Increases Sales and Decreases Expenses, it will Increase Profits and Position Itself to Transform

Current State
Closure of GDC
Increase Sales and Decrease Expenses
Go Asset-less
3) Increasing Sales and Decreasing Expenses – Ordering and Delivery
Grow GDC Revenue Through Increased Focus on Sales to 25%

The majority of GDC’s operating costs are fixed; increased sales will have a
direct affect on profitability and cash flow

* Estimated average based on samples from POTS, AMBIS, nVision, and Invitrogen data from Sept 2007 – Sept 2008; mark-up average is 89%; range is between 9% to 404%
3) Increasing Sales and Decreasing Expenses – Workforce Focus GDC Staff on Sales and “Owning” the Customer Experience

Future State 6-12 months
- Creation of Customer Service Representative positions (government or contractor) that focus on:
  - Improving GDC’s product mix – **ensure that GDC offers what the customers want**
  - Ensuring current customers are aware of GDC products and services
  - **Forecasting product sales to decrease active inventory**
- Disposal of discontinued and inactive inventory
- Reduce pick/ pack/ ship staff
- Increase same-day service
- Specialize inventory management functions
- Consolidate distribution contracts (docks and warehouse) under GDC control to reduce shrinkage and **maintain control of the customer’s experience**

* Roles and responsibilities IAW slide 91; management is unchanged and therefore not represented
3) Increasing Sales and Decreasing Expenses – Impact Creates Opportunity for Increased Profitability and Lower Surcharges

Increasing GDC sales to 25% of NIH supply and material sales would mean:

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDC Annual Revenue</td>
<td>$57.8M</td>
</tr>
<tr>
<td>GDC Annual Cost of Goods Sold</td>
<td>$43.8M</td>
</tr>
<tr>
<td>GDC Gross Profit</td>
<td>$14.0M</td>
</tr>
<tr>
<td>GDC Annual Operating Expenses</td>
<td>$8.1M*</td>
</tr>
<tr>
<td>GDC Annual Profit</td>
<td>$5.9M</td>
</tr>
</tbody>
</table>

*(Profit invested to lower surcharge and increase available funding for research)*

Reduction in inventory due to improved forecasting:

- “Discontinued” inventory: $764k**
- “Active” inventory that isn’t turning: $143k**
- “Active” inventory that turns less than once annually: $1.5M
  *(note: further analysis on this inventory is required to determine cause of low turns)*

Reduction in pick/ pack/ ship staff:

- Reduction in warehouse staff by 33% (4 personnel); estimated annual savings: $260k-$300k***

* Estimated Operating Expenses for FY09 based on analysis of FY06-FY08
** As of 10 February 2009
*** Based on the $1.5M / year SoBran contract; note, this is separate from using SoBran personnel as a part of a consolidated warehouse/ dock contract

(Size of bubble represents Institute / Center spend)
If OLAO/ Supply Transforms, it can Maintain Customer Focus and Market Share With Less Investment

Current State

Closure of GDC

Increase Sales and Decrease Expenses

Go Asset-less
4) Asset-less Business Model – Ordering and Delivery

Vendor Managed Inventory; OLAO Managed Customer Experience

- OLAO/ Supply role shifts to customer relationship management, order management, and shared inventory management (out of “warehouse management”)
- OLAO/ Supply outsources warehouse management and distribution

- OMS (Order Management Services)
- IMS (Inventory Management Services)

Future State – 2 - 5 Years

Suppliers

Vendors (OLAO/ Supply managed contracts)

OLAO/ Supply

50% of sales

OLAO/ Supply Services:
- Customer Relationship Management
- Vendor Management
- Order Management
- Inventory Management (shared with vendors)

Non-GDC

(Purchase Card and Contract Purchases)

50% of sales

Institutes / Centers

Non-GDC

(OLAO/ Supply managed contracts)

Purchases

PRTM

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Future State – 2-5 Years

- Increased sales due to greater number of Customer Service Representatives
- OLAO/ Supply is out of the warehouse and distribution business
- OLAO/ Supply manages relationships with limited number of vendors — vendors manage the suppliers, warehousing, and delivery
- OLAO/ Supply and vendors co-manage inventory levels to guarantee customer service levels

* Roles and responsibilities IAW slide 91; management is unchanged and therefore not represented
Increasing OLAO/ Supply sales to 50% of NIH supply and material sales would mean:

- OLAO/ Supply Annual Revenue: $114.0M
- OLAO/ Supply Annual Cost of Goods Sold*: $86.4M
- OLAO Gross Profit: $27.6M
- OLAO/ Supply Annual Operating Expenses**: $5.6M
- OLAO/ Supply Annual Profit: $22.0M

Shared risk with vendor

- Vendor owns inventory until sold
- Vendor manages warehouse operations staff and distribution staff

OLAO/ Supply staff focused on strategic sourcing of inventory and customer satisfaction

- Creates a contractually competitive environment where the vendor with the best service and lowest prices receives a greater percentage of sales

To successfully execute an asset-less model, OLAO requires the following:

- Strong understanding of current cost structure
- Mature performance measurement to ensure vendors appropriately incentivized
- Contracting ability to manage in a performance-based environment

* Based on 32% surcharge
** Estimated
Summary and Recommendations

The GDC is a viable business that provides value to NIH

- There are significant opportunities to improve operations and create greater value which would reduce the GDC’s required surcharge and free funding for additional NIH research

1. GDC’s first priority should be to increase sales
   - Improves Return on Fixed Assets and decreases inventory
   - Provides the foundation for a more optimal transition to an asset-less model

2. GDC should then focus on reducing costs and improving operational efficiency

3. GDC should prepare and execute an asset-less business model
   - Gets NIH out of the warehouse operations business
   - Shares profitability risk with contractor
   - Allows NIH to focus on customer needs and vendor sourcing
Summary and Recommendations
Specific Opportunities Include the Following Initiatives:

<table>
<thead>
<tr>
<th>1. Increase Revenue by Improving Sales</th>
<th>One time benefit</th>
<th>Recurring Benefit (low end)</th>
<th>Recurring Benefit (high end)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Incorporate Customer-Focused Performance Measures</td>
<td>Enabling</td>
<td>Enabling</td>
<td>Enabling</td>
</tr>
<tr>
<td>2. Deploy Customer Service Representatives</td>
<td>$143k</td>
<td>$16.3M</td>
<td>$27.7M</td>
</tr>
<tr>
<td>3. Pilot GDC Managed Inventory Strategy</td>
<td>N/A</td>
<td>$89k</td>
<td>$270k</td>
</tr>
<tr>
<td>4. Emphasize Use of Self-Service Stores</td>
<td>Enabling</td>
<td>Enabling</td>
<td>Enabling</td>
</tr>
<tr>
<td>5. Implement a Sales, Inventory &amp; Operations Planning (SI&amp;OP) Process</td>
<td>$523k</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Manage Expenses by Improving Operations</th>
<th>One time benefit</th>
<th>Recurring Benefit (low end)</th>
<th>Recurring Benefit (high end)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Specialize Roles of Item Managers</td>
<td>Enabling</td>
<td>Enabling</td>
<td>Enabling</td>
</tr>
<tr>
<td>7. Optimize Warehouse Staff</td>
<td>N/A</td>
<td>$260k</td>
<td>$300k</td>
</tr>
<tr>
<td>8. Dispose Obsolete Inventory</td>
<td>$31.6k</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>9. Consolidate Vendors</td>
<td>Enabling</td>
<td>Enabling</td>
<td>Enabling</td>
</tr>
</tbody>
</table>

* Reduction in inventory associated with an SI&OP process will provide a recurring benefit through decreased inventory carrying costs; however, this assessment did not include a carrying cost calculation due to the number of assumptions required.
Summary and Recommendations
Specific Opportunities Include the Following Initiatives: ...continued

Transition to an Asset-less Business Model

- Develop a detailed transition roadmap
- Determine customer focused performance measures that will drive NIH partners to meet customer needs
- Determine the level of outsourcing that meets NIH needs
- Establish contracts that incentivize vendor performance
- Measure vendor performance; improve methods of strategic sourcing
Questions