State of Minnesota
Minnesota’s MMCAP Focus Data Analytics System

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Table of Contents

Executive Summary .............................................................................................................. 1

Award Nomination Description ............................................................................................ 2
Executive Summary: MMCAP Focus - Data Analytics System

The 48 MMCAP Participating States spend nearly two billion dollars on pharmaceutical and other related healthcare goods and services, but to report consolidated information on what, from which categories or suppliers, in what quantities and at what prices in one place required hours of staff time spent on custom reporting. Not anymore!

Minnesota’s new MMCAP Focus data analytics system is a cloud-based comprehensive business analytics. It provides Member states with performance dashboards, enhanced reporting, and self-service capabilities. The State’s previously disparate data collection and reporting systems provided insufficient reporting around key operating metrics for use by MMCAP staff and Member States. This impacted their ability to monitor operational performance and conduct self-service analysis. The purpose of MMCAP Focus data analytics is to provide cleansed classified, enriched and integrated data from existing systems to our partner states in order to pursue strategic procurement opportunities and targeted savings in key product and service areas.

This cloud-based system integrates, classifies and enhances spending information based on internationally recognized standards. It enriches state data with classification details such as United Nations Standard Product and Service Code (UNSPSC), First DataBank, AHFS Classification information and parent/subsidiary relationships between member facilities. It provides an easy-to-use portal to this consolidated information. MMCAP Focus has been implemented for all MMCAP Member States with corresponding data for all Participating Facilities.

Innovation: Data analytic systems have been implemented successfully in the private sector, but we believe Minnesota is the first state to do so with respect to its public sector pharmaceutical and other healthcare products and service comprehensive purchasing. This 48-state-wide multi-agency public sector implementation proved to be complex and time-consuming. Judged on the scale or magnitude of effort, this was an enormous undertaking and required the diligence and perseverance of both state and contractor personnel.

Transferability: Minnesota is already sharing MMCAP Focus benefits with 48 other states partnering with MMCAP. Beyond that, our effort will be replicable in any other state with the leadership support and resources to undertake a comparable initiative. In fact, Minnesota’s contract specifically allows other states with joint purchasing authority to utilize it as their competitively awarded procurement vehicle.

Service improvement: Easier access to better data leads to improved procurement decision-making. The MMCAP project was developed with the input from key pharmacy and procurement stakeholders in each of our 48 partner states. The project is overseen by a diverse Product Team that includes stakeholders both internal and external to MMCAP. Dashboard development and enhancement is driven by user feedback and a multi-state committee of stakeholders. MMCAP Focus is visual, easily understood, and the graphics tell the story to the stakeholder. The general public has also directly benefited as we have used MMCAP Focus to accurately respond to public information requests, auditor inquiries and attorney general requests which would previously have been difficult to consolidate.

Cost reduction: MMCAP Focus data have been utilized for initiatives involving Hepatitis C drugs, influenza vaccines, and medical supply products negotiations among others. MMCAP’s various data-driven sourcing initiatives have saved the MMCAP Member States millions. MMCAP Focus is a key contributor.

Conclusion: Minnesota’s MMCAP Focus system has opened a door to an unprecedented quantity and quality of relevant data. Our challenge is to utilize it creatively and effectively to drive even further efficiencies and savings in what we buy. Citizens deserve the best data-driven procurement decisions. With this tool, that is what we are able to provide.
Why was Minnesota’s MMCAP initially interested in a Data Analytics system?

The State of Minnesota spends millions of dollars on pharmaceutical and other healthcare related goods and services, but consolidating information on what products and services, from which suppliers, in what quantities and at what prices was burdensome on staff. The same could be said for the 48 MMCAP partner states.

Information available from existing systems was frustratingly fragmented and simply did not provide the level of detail we needed for key strategies such as setting standards, leveraging multiple award contracts, negotiating volume-based discounts, negotiating class of trade reduced pricing opportunities, and monitoring member’s contracting opportunities.

In January, 2014 MMCAP executed a work order with Charter Solutions, Inc. under the authority of its Master Analytics Contract to: assess and identify opportunities to improve and streamline data import processes; assess and identify opportunities to improve and expand current reporting capabilities; create MMCAP Analytic Product Vision document; facilitate a decision tree process to reach a buy versus partner recommendation; lead product/platform selection process: (a) identify/form selection team; b) gather/document requirements/selection criteria; c) identify vendor/platform options; d) write RFI/RFP/Demo Scripts; e) coordinate and lead meetings; f) facilitate scoring and screening process; g) document selection recommendation; h) draft and final review with MMCAP leadership.); prepare high-level plan/approach for implementing selected product/platform.

The concluding Product Position Statement:

| For MMCAP Member states, Senior Account Executives, and MMCAP Staff |
| Who Desire analytics and reporting to support fact-based decision making |
| The MMCAP Analytics Product Is a blend of online and mobile analytics applications, database technologies, and dedicated support personal |
| That Will provide a core set of standard dashboards and reports, advanced tools for ad-hoc reporting and analysis, online and mobile analytics applications, and comprehensive data integration and management tools and processes. |

In July, 2014 MMCAP began the work effort to: Develop the future state model; transition to new staffing model including roles and responsibilities; establish analytics operating model and processes; adopt product management approach to analytics; execute on training plan/approach; design and build the database; implement analytics data management processes; design, build and publish initial set of data to Tableau cloud; define, build and publish dashboards; roll out MMCAP Focus online to Leadership, Senior Account Executives, MMCAP Advisory Board, MMCAP Staff, MMCAP State Contacts (procurement and pharmacy), and other pilot groups; and finally implement mobile access capability.

What exactly is MMCAP Focus?

MMCAP Focus (commonly known as Tableau) is a cloud-based comprehensive database of purchasing experience. It enables purchasing-related knowledge sharing and analytical reporting. MMCAP Focus is now available to all MMCAP Staff, MMCAP Advisory Board and MMCAP State Contacts both in a procurement function and pharmaceutical function to give new data and capabilities which provide order of magnitude improvements on data from existing systems. Users both internal and external have 24/7 access to MMCAP Focus via the Internet. Access will be from personal computers and mobile devices including iPads, tablets/notebooks, and smartphones.

The State’s previously disparate data collection and reporting systems had mismatched standards for organizing information and did not allow for advanced analysis. The purpose of MMCAP Focus data analytics is to provide cleansed classified, enriched and integrated data from existing systems to our partner states in order to pursue strategic procurement opportunities and targeted savings in key product and service areas.
This cloud-based system integrates, classifies and enhances spending information based on internationally recognized standards (UNSPSC, AHFS and NDC codes). It enriches data with details such as parent/subsidiary relationships between MMCAP Participating Facilities, as well as Class of Trade program information.

MMCAP Focus did not replace our existing automated data and reporting systems. MMCAP Focus uses collected transaction based information as well as other third-party information resources. It provides an easy-to-use portal to this consolidated information and the tools to analyze it. It also provides a means for purchasing professionals and pharmacists to share experience and insights – information that is not usually found within a system’s database. The state can use this integrated intelligence to analyze the “who, what, when, where and how” of its purchases so that they can be managed strategically.

How is the new MMCAP Focus system benefiting Minnesota?

We embarked on a systematic aggressive implementation plan that continues to gain stakeholder support and expand the use of the tool over time. It is definitely a learning process and a cultural change, as we embrace data-driven decision-making – when, in the past, we have operated with limited data. Selected MMCAP staff members received advanced system training during the completion of the implementation process. Some of those trained rely primarily on the dashboards in the system and their use for customer support. Others are more innovative and develop customized inquiries and reports. Several users are highly proficient and assist their peers as needed. Hands-on use of the tool has been extended to the MMCAP Advisory Board and MMCAP State Contacts and their use is broadening their ability to provide state of the art visual analytics to support their mission.

Our systematic approach to program management has proven useful in linking the analysis and execution. We are able to identify the contract and “contracting opportunity” suppliers in one or more UNSPSC codes or AHFS codes, employ long-range planning and reporting to monitor all related sales activity.

Using the same data engine and separate data extraction routines, we are able to report on the pharmaceutical spend for 48 states. With security implemented to separate the purchases by state, we can review spend by individual states and as a whole. By incorporating AHFS (American Hospital Formulary Service) codes into the MMCAP data, pharmaceutical products can also be rolled up into like grouping for further analysis. MMCAP has already deployed access to the MMCAP Advisory Board and is in the middle of a strategic rollout to all State Contacts. Full release to State Contacts allows unprecedented hands-on access to data and analytical tools regarding the individual states’ own pharmaceutical and other healthcare products and services purchases through MMCAP (Pharmaceutical, Influenza, Returned Goods, Medical Supply Products, Drug Testing Products and Services, Dental Products and Services, and a variety of other MMCAP product and/or service offerings).

We anticipate ever-expanding use of the tool. Over the next year, additional staff in the MMCAP central office will be trained. A set of standard dashboards has been developed that staff will utilize with respect to each of their enterprise contract initiatives. In addition, program specific dashboards are in the final phases of development and will be made available to all users.

How does the MMCAP Focus Data Analytics system meet Cronin Award criteria?

Innovation: Data analytic systems have been implemented successfully in the private sector, but we believe Minnesota is the first state to do so with respect to its public sector pharmaceutical and other healthcare products and service comprehensive purchasing. A 48-state-wide and multi-agency public sector implementation proved to be very complex and time-consuming. For MMCAP transactional data for the system has collected and cleansed data involving more than 4 million transactional lines annually and hundreds of contract vendors and thousands of product manufacturers. Classification of this data required the development of thousands of rules. Judged on the scale or magnitude of effort, this was an enormous undertaking and required diligence and perseverance of state personnel.

Transferability: Minnesota is already sharing MMCAP Focus benefits with 48 other states partnering MMCAP. Beyond that, our effort will be replicable in any other state with the leadership support and resources to undertake a comparable initiative. In fact, Minnesota’s contract with contact with Software House International (SHI) specifically allows other states with joint purchasing authority to utilize it as their competitively awarded procurement vehicle.

Service improvement: Easier access to better data leads to improved procurement decision-making. The MMCAP project was developed with the input from key pharmacy and procurement stakeholders in each of our 48 partner states. The project is overseen by a diverse Product Team that includes stakeholders both internal and external to MMCAP. Dashboard development
and enhancement is driven by user feedback and a multi-state committee of stakeholders. MMCAP Focus is visual, easily understood, and the graphics tell the story to the stakeholder. The general public has also directly benefited as we have used MMCAP Focus to accurately respond to public information requests, auditor inquiries and attorney general requests which would previously have been difficult to consolidate.

**Cost reduction:** Although not solely attributable to MMCAP Focus, MMCAP’s various data-driven sourcing initiatives have saved the MMCAP Member States millions. MMCAP Focus data have been utilized for initiatives involving Hepatitis C drugs, influenza vaccines, and medical supply products negotiations among others. Some of the details are provided below:

- Having the ability to cluster relevant data by the correction class of trade allowed for the negotiation of lower cost HepC drugs saving States $14,152,950 in just 18 months.
- Combining information on class of trade and AFHS allowed MMCAP Contracting unit the ability to negotiate significant reduction in Insulin pricing
- Analysis of Anticoagulants spend provided negotiators with detailed information on volume, class of trade and sourcing.
- Combining information on the Student Health class of trade and contraceptives provided negotiators with detailed spend information in a way that produced reduced pricing opportunities.
- Additional negotiated reduced pricing opportunities include:
  - Naloxone
  - Test Strips
  - Nutritionals
  - Disease-modifying anti-rheumatic agents
  - HCV Antivirals
  - Prescription Filling Service – product pricing

**Conclusion:** Minnesota’s MMCAP Focus system has opened a door to an unprecedented quantity and quality of relevant data. Our challenge is to utilize it creatively and effectively to drive even further efficiencies and savings in what we buy. Citizens deserve the best data-driven procurement decisions. With this tool, that is what we are able to provide.