VA Recommendations to the

ASSET AND INFRASTRUCTURE REVIEW COMMISSION

March 2022

Appendix H

Cost Benefit Analysis – VISN 12

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The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 12 Central Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (2.53) is 34.0% lower than the Status Quo COA (3.83) and 14.9% lower than the Modernization COA (2.97).

The VA Recommendation COA is $2.2 B (7.2%) more expensive than the Status Quo COA and $169.6 M (0.5%) more expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo and Modernization COAs, it also increases benefits as seen by a 13-point benefits score compared to 8 for the Status Quo COA and 11 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 1 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($30,632,887,633)	($32,659,489,427)	($32,829,103,804)
Benefit Analysis Score	8	11	13
CBI (Normalized in $Billions)	3.83	2.97	2.53
CBI % Change vs. Status Quo	N/A	-22.5%	-34.0%
CBI % Change vs. Modernization	N/A	N/A	-14.9%

Table 2 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($2,026,601,794)	($2,196,216,172)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($2,026,601,794)	($2,196,216,172)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	($169,614,377)

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 3 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	2	3	3
Facilities and Sustainability	1	2	2
Mission	2	2	2
Total Benefit Score	**8**	**11**	**13**

VA Recommendation

The VA Recommendation for the VISN 12 Central Market COA is detailed below.

- Modernize and realign the Milwaukee VAMC by:
  - Modernizing the operating rooms at the Milwaukee VAMC
  - Modernizing the CLC at the Milwaukee VAMC
  - Constructing a new main clinical facility at the Milwaukee VAMC and relocating inpatient and outpatient services from the existing main clinical facility to the new replacement facility
- Modernize and realign the Madison VAMC by modernizing the emergency department (ED) at the Madison VAMC
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new CBOC in the vicinity of East Madison, Wisconsin
  - Establishing a new CBOC in the vicinity of Fond du Lac, Wisconsin
  - Relocating the Appleton MS CBOC to a new site in the vicinity of Appleton, Wisconsin and closing the existing Appleton MS CBOC

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 12 Central Market across a 30-year horizon. The cost of the VA Recommendation COA ($32.8 B) was higher than the Status Quo COA ($30.6 B) and the Modernization COA ($32.7 B).

For the VISN 12 Central Market, the VA Recommendation COA is $2.2 B (7.2%) more expensive than the Status Quo COA and $169.6 M (0.5%) more expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 12 Central: Capital and Operational Costs Detail.

Table 4 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($30,632,887,633)	($32,659,489,427)	($32,829,103,804)
Capital Cost Variance vs. Status Quo	N/A	($2,026,601,794)	($2,196,216,172)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Non-VA Care Operational Cost Variance	N/A	$0	$0
VA Care Operational Cost Variance	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($2,026,601,794)	($2,196,216,172)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	($169,614,377)

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 12 Central Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 5 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	2	3	3
Facilities and Sustainability	1	2	2
Mission	2	2	2

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Total Benefit Score	**8**	**11**	**13**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 12 Central: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 12 Central for this domain.

Table 6 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 3 because it right-sizes services to meet future Veteran enrollee demand and includes changes to facilities or services that improve VA's ability to meet future Veteran enrollee demand based on guidelines established in the CBA methodology. These changes include the following:

- Establishes a new East Madison CBOC to provide primary care and outpatient mental health services; there are 4,132 enrollees for which the proposed facility is the closest VA point of care within 30 minutes
- Establishes a new Fond du Lac/Winnebago CBOC to provide primary care and outpatient mental health services; there are 3,410 enrollees for which the proposed facility is the closest VA point of care within 30 minutes
- Establishes a new Oconomowoc CBOC to provide primary care and outpatient mental health services; there are 5,369 enrollees for which the proposed facility is the closest VA point of care within 30 minutes

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 12 Central for this domain.

Table 7 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	3

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 3 because access to VA-provided primary care increased 1% or more, specialty care was maintained within 1%, and outpatient mental health care increased 1% or more.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 12 Central for this domain.

Table 8 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	2	3	3

Status Quo: The COA received a score of 2 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 12 Central for this domain.

Table 9 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	2

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 12 Central for this domain.

Table 10 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	2
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**2**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 11 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 12 Central Market, two scenarios changed the outcome of the CBA:

- Increasing the Modernization benefits score by two points
- Increasing the Modernization benefits score by three points

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 12 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	3.83	2.97	2.53	VA Recommendation
+1	3.40	2.72	2.53	VA Recommendation
+2	3.06	2.51	2.53	Modernization
+3	2.78	2.33	2.53	Modernization

Table 13 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	3.83	2.97	2.53	VA Recommendation
50%	3.98	3.17	2.70	VA Recommendation
100%	4.13	3.38	2.88	VA Recommendation
150%	4.29	3.58	3.06	VA Recommendation
200%	4.44	3.78	3.24	VA Recommendation
250%	4.59	3.98	3.42	VA Recommendation
300%	4.74	4.19	3.60	VA Recommendation

Table 14 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	3.83	2.97	2.53	VA Recommendation
50%	5.23	3.99	3.39	VA Recommendation
100%	6.63	5.01	4.25	VA Recommendation
150%	8.04	6.03	5.11	VA Recommendation
200%	9.44	7.05	5.98	VA Recommendation
250%	10.84	8.07	6.84	VA Recommendation
300%	12.24	9.09	7.70	VA Recommendation

Table 15 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	3.83	2.97	2.53	VA Recommendation
50%	4.19	3.23	2.75	VA Recommendation
100%	4.55	3.49	2.97	VA Recommendation
150%	4.91	3.75	3.19	VA Recommendation
200%	5.27	4.02	3.41	VA Recommendation
250%	5.63	4.28	3.63	VA Recommendation

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
300%	5.99	4.54	3.85	VA Recommendation

Appendix A – VISN 12 Central: Capital and Operational Costs Detail

Table 16 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	2,841,417	2,906,467
Build New GSF	-	1,900,654	1,948,839
Renovate In Place GSF	-	74,170	74,829
Matched Convert To GSF	-	201,364	200,705
Demolition GSF	-	2,095,870	2,095,870
Total Build New Cost	$0	($1,970,315,216)	($2,029,434,576)
Total Renovate In Place Cost	$0	($16,988,281)	($17,144,820)
Total Matched Convert To Cost	$0	($89,924,104)	($89,631,168)
Total Demolition Cost	$0	($84,907,796)	($84,907,796)
Total Lease Build-Out Cost	$0	($82,379,996)	($102,259,259)
Total New Lease Cost	$0	($299,949,477)	($331,197,129)
Total Existing Lease Cost	($156,109,391)	($156,109,318)	($127,841,422)
NRM Costs for Owned Facilities	($1,814,788,734)	($331,714,430)	($369,640,532)
FCA Correction Cost	($396,440,105)	N/A	N/A
Estimated Base Modernization Cost	($2,367,338,231)	($3,032,288,617)	($3,152,056,703)
Additional Common/Lobby Space Needed (GSF)	-	665,229	682,094
Cost of Additional Common/Lobby Space	$0	($594,203,935)	($609,397,963)
Additional Parking Cost	$0	($335,146,471)	($352,906,628)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($70,144)	($69,561)
Seismic Correction Cost	($46,267,867)	($1,606,116)	($1,606,116)
Non-Building FCA Correction Cost	($28,612,436)	($28,612,435)	($28,612,436)
Activation Costs	$0	($476,892,610)	($493,785,299)
Estimated Additional Costs for Modernization	($74,880,303)	($1,436,531,711)	($1,486,378,003)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($2,442,218,534)	($4,468,820,328)	($4,638,434,706)

Table 17 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($12,300,856,904)	($12,300,856,904)	($12,300,856,904)
Fixed Direct	($2,094,203,195)	($2,094,203,195)	($2,094,203,195)
VA Specific Direct	($767,935,859)	($767,935,859)	($767,935,859)
Indirect	($5,348,225,356)	($5,348,225,356)	($5,348,225,356)
VA Specific Indirect	($773,144,707)	($773,144,707)	($773,144,707)
Research and Education	($61,728,478)	($61,728,478)	($61,728,478)
VA Overhead	($1,087,735,599)	($1,087,735,599)	($1,087,735,599)
VA Care Operational Cost Total (PV)	($22,433,830,096)	($22,433,830,096)	($22,433,830,096)
CC Direct	($4,134,973,204)	($4,134,973,204)	($4,134,973,204)
Delivery and Operations	($174,346,307)	($174,346,307)	($174,346,307)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($168,371,040)	($168,371,040)	($168,371,040)
CC Overhead	($230,229,534)	($230,229,534)	($230,229,534)
Admin PMPM	($1,048,918,918)	($1,048,918,918)	($1,048,918,918)
Non-VA Care Operational Cost Total (PV)	($5,756,839,002)	($5,756,839,002)	($5,756,839,002)
Estimated Operational Costs (PV)	($28,190,669,098)	($28,190,669,098)	($28,190,669,098)

Appendix B – VISN 12 Central: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 18 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	145	174	139	Under Supplied
IP Med/Surg	141	170	190	Over Supplied
IP MH	34	41	48	Over Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 19 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	20	74%
Under Supplied	7	26%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 20 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 21 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	78.8%	78.8%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	78.8%	78.8%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	96.8%	96.8%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	99.9%	99.9%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	100.0%	100.0%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	78.8%	78.8%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	78.8%	78.8%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	96.8%	96.8%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	99.9%	99.9%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	100.0%	100.0%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	78.8%	84.3%	Increased 1% or more

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	78.8%	84.3%	Increased 1% or more
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	96.8%	97.2%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	99.9%	99.9%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	100.0%	100.0%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 22 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V12) (607) Madison	1951	Yes
(V12) (695) Milwaukee-Wisconsin	1965	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 23 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V12) (607) Madison	IP Med	20 ADC	Yes	Maintain
(V12) (607) Madison	IP Surg	1,600 Cases	Yes	Maintain
(V12) (607) Madison	IP MH	8 ADC	Yes	Maintain
(V12) (695) Milwaukee	IP Med	20 ADC	Yes	Maintain/Replace
(V12) (695) Milwaukee	IP Surg	1,600 Cases	Yes	Maintain/Replace
(V12) (695) Milwaukee	IP MH	8 ADC	Yes	Maintain/Replace

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled “VA Recommendation”. To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 24 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V12) (607) Madison	1951	1992	Yes
(V12) (695) Milwaukee-Wisconsin	1965	2019	Yes

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 25 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
N/A	N/A

Mission

Table 26 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V12) (607) Madison	No impact on training	Maintains or Has Plan to Transition	No PRC Designation	Increases Research Opportunities
(V12) (695) Milwaukee	No impact on training	Maintains or Has Plan to Transition	No PRC Designation	Increases Research Opportunities

VISN 12 Central Illinois

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 12 Central Illinois Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (0.52) is 51.9% lower than the Status Quo COA (1.08) and 34.6% lower than the Modernization COA (0.79).

The VA Recommendation COA is $236.7 M (3.1%) more expensive than the Status Quo COA and $153.7 M (1.9%) less expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo COA and decreases costs compared to the Modernization COA, it also increases benefits as seen by a 15-point benefits score compared to 7 for the Status Quo COA and 10 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 27 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($7,535,470,317)	($7,925,829,680)	($7,772,173,112)
Benefit Analysis Score	7	10	15
CBI (Normalized in $Billions)	1.08	0.79	0.52
CBI % Change vs. Status Quo	N/A	-26.4%	-51.9%
CBI % Change vs. Modernization	N/A	N/A	-34.6%

Table 28 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($390,359,364)	($585,879,948)
Operational Cost Variance vs. Status Quo	N/A	$0	$349,177,152
Estimated Total Cost Variance vs. Status Quo	N/A	($390,359,364)	($236,702,795)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$153,656,568

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 29 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	1	2	3
Facilities and Sustainability	1	2	3
Mission	2	2	3
Total Benefit Score	**7**	**10**	**15**

VA Recommendation

The VA Recommendation for the VISN 12 Central Illinois Market COA is detailed below.

- Modernize and realign the Danville VAMC by:
  - Establishing a strategic collaboration to provide inpatient medical and outpatient surgical services and discontinuing those services at the Danville VAMC. If unable to enter a strategic collaboration for inpatient medical and outpatient surgical services, utilize community providers
  - Relocating outpatient specialty care services at the Danville VAMC to current or future VA facilities and discontinuing those services at the Danville VAMC
- Modernize and realign outpatient facilities in the market by relocating the Springfield CBOC to a new site in the vicinity of Springfield, Illinois and closing the existing Springfield CBOC

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 12 Central Illinois Market across a 30-year horizon. The cost of the VA Recommendation COA ($7.8 B) was higher than the Status Quo COA ($7.5 B) and lower than the Modernization COA ($7.9 B).

For the VISN 12 Central Illinois Market, the VA Recommendation COA is $236.7 M (3.1%) more expensive than the Status Quo COA and $153.7 M (1.9%) less expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 12 Central Illinois: Capital and Operational Costs Detail.

Table 30 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($7,535,470,317)	($7,925,829,680)	($7,772,173,112)
Capital Cost Variance vs. Status Quo	N/A	($390,359,364)	($585,879,948)
Operational Cost Variance vs. Status Quo	N/A	$0	$349,177,152
Non-VA Care Operational Cost Variance	N/A	$0	($224,887,848)
VA Care Operational Cost Variance	N/A	$0	$574,065,000
Estimated Total Cost Variance vs. Status Quo	N/A	($390,359,364)	($236,702,795)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$153,656,568

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 12 Central Illinois Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 31 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	1	2	3
Facilities and Sustainability	1	2	3
Mission	2	2	3

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Total Benefit Score	**7**	**10**	**15**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 12 Central Illinois: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 12 Central Illinois for this domain.

Table 32 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 3 because it right-sizes services to meet future Veteran enrollee demand and includes changes to facilities or services that improve VA's ability to meet future Veteran enrollee demand based on guidelines established in the CBA methodology. These changes include the following:

- Expands the McLean County CBOC to a MS CBOC, adding outpatient specialty care services
- Establishes the new Danville, IL (Vermilion) inpatient medicine and outpatient surgery partnership

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 12 Central Illinois for this domain.

Table 33 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	3

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 3 because access to VA-provided primary care increased 1% or more, specialty care increased 1% or more, and outpatient mental health care increased 1% or more.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 12 Central Illinois for this domain.

Table 34 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	1	2	3

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that

sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery. The COA includes the following action to ensure adequate demand across inpatient acute service lines throughout the market:

- Transition Danville-Illinois's low census inpatient medicine program to the inpatient partnership to deliver care in a community provided space with market providers in the Danville area

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 12 Central Illinois for this domain.

Table 35 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	3

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, in addition to modernized infrastructure which may attract providers, it

also includes additional changes to support VA’s ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities). The COA includes the following action to support VA's ability to recruit or retain providers:

- Establishes the new Danville, IL (Vermilion) inpatient medicine and outpatient surgery partnership

Mission

Within the Mission domain, the CBA considers how each COA impacts VA’s ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA’s overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 12 Central Illinois for this domain.

Table 36 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	3
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**3**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 3 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 3 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs. Additionally, the COA includes new (not replacement) infrastructure that creates new opportunities for training within the market.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 37 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 12 Central Illinois Market, no scenarios changed the outcome of the CBA.

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 38 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	1.08	0.79	0.52	VA Recommendation

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+1	0.94	0.72	0.52	VA Recommendation
+2	0.84	0.66	0.52	VA Recommendation
+3	0.75	0.61	0.52	VA Recommendation

Table 39 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.08	0.79	0.52	VA Recommendation
50%	1.12	0.84	0.56	VA Recommendation
100%	1.17	0.89	0.60	VA Recommendation
150%	1.21	0.95	0.64	VA Recommendation
200%	1.26	1.00	0.68	VA Recommendation
250%	1.30	1.05	0.72	VA Recommendation
300%	1.35	1.10	0.76	VA Recommendation

Table 40 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.08	0.79	0.52	VA Recommendation

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
50%	1.39	1.01	0.65	VA Recommendation
100%	1.71	1.23	0.77	VA Recommendation
150%	2.02	1.45	0.90	VA Recommendation
200%	2.34	1.67	1.03	VA Recommendation
250%	2.65	1.89	1.16	VA Recommendation
300%	2.97	2.11	1.28	VA Recommendation

Table 41 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.08	0.79	0.52	VA Recommendation
50%	1.25	0.92	0.61	VA Recommendation
100%	1.43	1.04	0.70	VA Recommendation
150%	1.61	1.17	0.79	VA Recommendation
200%	1.79	1.29	0.88	VA Recommendation
250%	1.97	1.42	0.97	VA Recommendation
300%	2.15	1.54	1.06	VA Recommendation

Appendix A – VISN 12 Central Illinois: Capital and Operational Costs Detail

Table 42 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	587,318	640,389
Build New GSF	-	378,363	417,675
Renovate In Place GSF	-	20,163	20,331
Matched Convert To GSF	-	56,365	56,197
Demolition GSF	-	674,930	674,930
Total Build New Cost	$0	($384,168,118)	($424,610,150)
Total Renovate In Place Cost	$0	($2,610,030)	($2,683,949)
Total Matched Convert To Cost	$0	($24,730,859)	($24,726,209)
Total Demolition Cost	$0	($26,996,685)	($26,996,685)
Total Lease Build-Out Cost	$0	($42,704,295)	($67,295,111)
Total New Lease Cost	$0	($196,375,269)	($309,490,810)
Total Existing Lease Cost	($66,580,025)	($66,579,969)	($60,898,333)
NRM Costs for Owned Facilities	($459,881,504)	($68,565,043)	($74,760,713)
FCA Correction Cost	($97,706,984)	N/A	N/A
Estimated Base Modernization Cost	($624,168,514)	($812,730,268)	($991,461,961)
Additional Common/Lobby Space Needed (GSF)	-	132,427	146,186
Cost of Additional Common/Lobby Space	$0	($116,768,703)	($128,900,998)
Additional Parking Cost	$0	($7,536,194)	($9,861,773)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($219,279)	($807,129)
Seismic Correction Cost	$0	$0	$0
Non-Building FCA Correction Cost	($9,417,033)	($9,417,032)	($9,417,033)
Activation Costs	$0	($77,273,434)	($79,016,600)
Estimated Additional Costs for Modernization	($9,417,033)	($211,214,642)	($228,003,532)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($633,585,546)	($1,023,944,910)	($1,219,465,494)

Table 43 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($2,409,745,263)	($2,409,745,263)	($2,086,551,558)
Fixed Direct	($256,520,772)	($256,520,772)	($214,112,840)
VA Specific Direct	($74,264,512)	($74,264,512)	($68,406,276)
Indirect	($1,262,727,784)	($1,262,727,784)	($1,109,667,865)
VA Specific Indirect	($178,325,138)	($178,325,138)	($157,877,134)
Research and Education	($4,436,172)	($4,436,172)	($3,905,912)
VA Overhead	($220,958,507)	($220,958,507)	($192,391,565)
VA Care Operational Cost Total (PV)	($4,406,978,149)	($4,406,978,149)	($3,832,913,149)
CC Direct	($1,678,778,108)	($1,678,778,108)	($1,899,424,954)
Delivery and Operations	($77,243,069)	($77,243,069)	($86,945,340)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($81,525,978)	($81,525,978)	($92,555,641)
CC Overhead	($102,030,795)	($102,030,795)	($114,999,474)
Admin PMPM	($555,328,671)	($555,328,671)	($525,869,060)
Non-VA Care Operational Cost Total (PV)	($2,494,906,622)	($2,494,906,622)	($2,719,794,469)
Estimated Operational Costs (PV)	($6,901,884,770)	($6,901,884,770)	($6,552,707,618)

Appendix B – VISN 12 Central Illinois: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 44 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	69	83	101	Over Supplied
IP Med/Surg	11	13	16	Over Supplied
IP MH	14	17	22	Over Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 45 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	6	22%
Under Supplied	21	78%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 46 - New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 47 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	68.5%	68.5%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	68.5%	68.5%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	89.6%	89.6%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	99.5%	99.5%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	99.8%	99.8%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	68.5%	68.5%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	68.5%	68.5%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	89.6%	89.6%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	99.5%	99.5%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	99.8%	99.8%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	68.5%	77.1%	Increased 1% or more

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	68.5%	77.1%	Increased 1% or more
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	89.6%	96.2%	Increased 1% or more
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	99.5%	99.5%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	99.8%	100.0%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 48 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V12) (550) Danville-Illinois	1934	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 49 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V12) (550) Danville-Illinois	IP Med	20 ADC	No	Partner (VA Delivered)
(V12) (550) Danville-Illinois	IP Surg	1,600 Cases	No Service	N/A
(V12) (550) Danville-Illinois	IP MH	8 ADC	Yes	Maintain

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled “VA Recommendation”. To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 50 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V12) (550) Danville-Illinois	1934	1981	Yes

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 51 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
(V12) Danville, IL (Vermilion) IP/OP Partnership	Yes

Mission

Table 52 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V12) (550) Danville-Illinois	No impact on training	No Research Program	No PRC Designation	Increases Research Opportunities, Increases Training Opportunities

VISN 12 Southern

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 12 Southern Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (3.50) is 39.7% lower than the Status Quo COA (5.81) and 17.4% lower than the Modernization COA (4.24).

The VA Recommendation COA is $1.3 B (3.3%) more expensive than the Status Quo COA and $377.9 M (0.9%) less expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo COA and decreases costs compared to the Modernization COA, it also increases benefits as seen by a 12-point benefits score compared to 7 for the Status Quo COA and 10 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 53 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($40,647,368,839)	($42,373,390,042)	($41,995,538,287)
Benefit Analysis Score	7	10	12
CBI (Normalized in $Billions)	5.81	4.24	3.50
CBI % Change vs. Status Quo	N/A	-27.0%	-39.7%
CBI % Change vs. Modernization	N/A	N/A	-17.4%

Table 54 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($1,726,021,203)	($1,348,169,447)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($1,726,021,203)	($1,348,169,447)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$377,851,756

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 55 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	1	2	2
Facilities and Sustainability	1	2	2
Mission	2	2	2
Total Benefit Score	**7**	**10**	**12**

VA Recommendation

The VA Recommendation for the VISN 12 Southern Market COA is detailed below.

- Modernize and realign the Chicago VAMC by:
  - Modernizing the ambulatory facility at the Chicago VAMC
  - Relocating long-term care, RRTP, and rehabilitation medicine services currently at the Chicago VAMC to current or future VA facilities and discontinuing those services at the Chicago VAMC
- Modernize and realign the Hines VAMC by constructing a new replacement Hines VAMC with inpatient medical and surgical services, inpatient mental health services, CLC, RRTP, SCI/D, blind rehabilitation, and rehabilitation medicine
- Modernize and realign the Lovell FHCC by:
  - Modernizing the CLC at the Lovell FHCC
  - Modernizing the RRTP at the Lovell FHCC
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new CBOC in the vicinity of La Porte, Indiana
  - Establishing a new CBOC in the vicinity of Morris, Illinois
  - Relocating the Crown Point MS CBOC to a new site in the vicinity of Crown Point, Indiana and closing the existing the Crown Point MS CBOC
  - Modernizing the existing Joliet MS CBOC

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 12 Southern Market across a 30-year horizon. The cost of the VA Recommendation COA ($42.0 B) was higher than the Status Quo COA ($40.6 B) and lower than the Modernization COA ($42.4 B).

For the VISN 12 Southern Market, the VA Recommendation COA is $1.3 B (3.3%) more expensive than the Status Quo COA and $377.9 M (0.9%) less expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new

facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 12 Southern: Capital and Operational Costs Detail.

Table 56 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($40,647,368,839)	($42,373,390,042)	($41,995,538,287)
Capital Cost Variance vs. Status Quo	N/A	($1,726,021,203)	($1,348,169,447)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Non-VA Care Operational Cost Variance	N/A	$0	$0
VA Care Operational Cost Variance	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($1,726,021,203)	($1,348,169,447)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$377,851,756

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 12 Southern Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 57 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	1	2	2

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	2
Mission	2	2	2
Total Benefit Score	**7**	**10**	**12**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 12 Southern: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 12 Southern for this domain.

Table 58 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 3 because it right-sizes services to meet future Veteran enrollee demand and includes changes to facilities or services that improve VA's ability to meet future Veteran enrollee demand based on guidelines established in the CBA methodology. These changes include the following:

- Establishes a new La Porte/Porter County CBOC to provide primary care and outpatient mental health services; there are 4,186 enrollees for which the proposed facility is the closest VA point of care within 30 minutes
- Establishes a new Grundy County CBOC to provide primary care and outpatient mental health services; there are 2,572 enrollees for which the proposed facility is the closest VA point of care within 30 minutes

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 12 Southern for this domain.

Table 59 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	3

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 3 because access to VA-provided primary care increased 1% or more, specialty care was maintained within 1%, and outpatient mental health care increased 1% or more.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 12 Southern for this domain.

Table 60 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	1	2	2

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 12 Southern for this domain.

Table 61 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	2

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 12 Southern for this domain.

Table 62 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	2
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**2**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 63 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 12 Southern Market, one scenario changed the outcome of the CBA:

- Increasing the Modernization benefits score by three points

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 64 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	5.81	4.24	3.50	VA Recommendation
+1	5.08	3.85	3.50	VA Recommendation
+2	4.52	3.53	3.50	VA Recommendation
+3	4.06	3.26	3.50	Modernization

Table 65 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	5.81	4.24	3.50	VA Recommendation
50%	6.14	4.56	3.75	VA Recommendation
100%	6.47	4.88	4.00	VA Recommendation
150%	6.80	5.19	4.25	VA Recommendation
200%	7.14	5.51	4.50	VA Recommendation
250%	7.47	5.83	4.75	VA Recommendation
300%	7.80	6.15	5.00	VA Recommendation

Table 66 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	5.81	4.24	3.50	VA Recommendation
50%	8.01	5.78	4.78	VA Recommendation
100%	10.21	7.32	6.07	VA Recommendation
150%	12.41	8.86	7.35	VA Recommendation
200%	14.61	10.40	8.64	VA Recommendation
250%	16.82	11.94	9.92	VA Recommendation
300%	19.02	13.48	11.21	VA Recommendation

Table 67 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	5.81	4.24	3.50	VA Recommendation
50%	6.18	4.50	3.71	VA Recommendation
100%	6.54	4.75	3.93	VA Recommendation
150%	6.91	5.01	4.15	VA Recommendation
200%	7.28	5.27	4.36	VA Recommendation
250%	7.65	5.53	4.58	VA Recommendation

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
300%	8.02	5.79	4.79	VA Recommendation

Appendix A – VISN 12 Southern: Capital and Operational Costs Detail

Table 68 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	4,676,424	4,140,225
Build New GSF	-	2,429,555	2,551,817
Renovate In Place GSF	-	634,275	341,201
Matched Convert To GSF	-	762,250	354,071
Demolition GSF	-	3,234,452	1,849,074
Total Build New Cost	$0	($2,950,622,328)	($3,030,843,984)
Total Renovate In Place Cost	$0	($157,334,134)	($37,025,406)
Total Matched Convert To Cost	$0	($407,178,865)	($186,594,613)
Total Demolition Cost	$0	($150,161,927)	($85,063,851)
Total Lease Build-Out Cost	$0	($65,927,697)	($89,212,296)
Total New Lease Cost	$0	($237,034,339)	($327,072,670)
Total Existing Lease Cost	($89,841,591)	($89,841,472)	($57,349,528)
NRM Costs for Owned Facilities	($3,633,755,728)	($545,937,980)	($483,340,673)
FCA Correction Cost	($794,572,026)	N/A	N/A
Estimated Base Modernization Cost	($4,518,169,344)	($4,604,038,741)	($4,296,503,021)
Additional Common/Lobby Space Needed (GSF)	-	850,344	893,136
Cost of Additional Common/Lobby Space	$0	($874,970,536)	($919,112,515)
Additional Parking Cost	$0	($167,948,306)	($211,146,814)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($15,798,305)	($32,682,995)
Seismic Correction Cost	($88,119,590)	($18,929,629)	($9,991,552)
Non-Building FCA Correction Cost	($49,756,670)	($49,756,668)	($20,874,367)
Activation Costs	$0	($650,624,622)	($513,903,788)
Estimated Additional Costs for Modernization	($137,876,260)	($1,778,028,066)	($1,707,712,030)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($4,656,045,604)	($6,382,066,807)	($6,004,215,051)

Table 69 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($16,408,761,572)	($16,408,761,572)	($16,408,761,572)
Fixed Direct	($2,334,916,852)	($2,334,916,852)	($2,334,916,852)
VA Specific Direct	($1,031,780,447)	($1,031,780,447)	($1,031,780,447)
Indirect	($8,426,204,400)	($8,426,204,400)	($8,426,204,400)
VA Specific Indirect	($896,171,275)	($896,171,275)	($896,171,275)
Research and Education	($6,457,655)	($6,457,655)	($6,457,655)
VA Overhead	($1,720,898,777)	($1,720,898,777)	($1,720,898,777)
VA Care Operational Cost Total (PV)	($30,825,190,978)	($30,825,190,978)	($30,825,190,978)
CC Direct	($3,314,056,665)	($3,314,056,665)	($3,314,056,665)
Delivery and Operations	($137,669,417)	($137,669,417)	($137,669,417)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($116,365,223)	($116,365,223)	($116,365,223)
CC Overhead	($179,834,916)	($179,834,916)	($179,834,916)
Admin PMPM	($1,418,206,036)	($1,418,206,036)	($1,418,206,036)
Non-VA Care Operational Cost Total (PV)	($5,166,132,258)	($5,166,132,258)	($5,166,132,258)
Estimated Operational Costs (PV)	($35,991,323,235)	($35,991,323,235)	($35,991,323,235)

Appendix B – VISN 12 Southern: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 70 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	238	286	343	Over Supplied
IP Med/Surg	204	245	231	Adequately Supplied
IP MH	62	75	101	Over Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 71 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	15	56%

Physician Supply Adequacy	Count of Specialties	Percentage
Under Supplied	12	44%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 72 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 73 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	93.7%	93.7%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	93.8%	93.8%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	98.9%	98.9%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	100.0%	100.0%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	100.0%	100.0%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	93.7%	93.7%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	93.8%	93.8%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	98.9%	98.9%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	100.0%	100.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	100.0%	100.0%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	93.7%	96.6%	Increased 1% or more
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	93.8%	96.6%	Increased 1% or more
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	98.9%	98.9%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	100.0%	100.0%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	100.0%	100.0%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 74 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V12) (537) Chicago-Illinois	1955	Yes

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V12) (556) Lovell FHCC	1961	Yes
(V12) (578) Hines	1968	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 75 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V12) (537) Chicago	IP Med	20 ADC	Yes	Maintain
(V12) (537) Chicago	IP Surg	1,600 Cases	Yes	Maintain
(V12) (537) Chicago	IP MH	8 ADC	Yes	Maintain
(V12) (556) Lovell FHCC	IP Med	20 ADC	No	Maintain
(V12) (556) Lovell FHCC	IP Surg	1,600 Cases	Yes	Maintain
(V12) (556) Lovell FHCC	IP MH	8 ADC	No	Maintain
(V12) (578) Hines	IP Med	20 ADC	Yes	Replace
(V12) (578) Hines	IP Surg	1,600 Cases	Yes	Replace
(V12) (578) Hines	IP MH	8 ADC	Yes	Replace

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled “VA Recommendation”. To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 76 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V12) (537) Chicago-Illinois	1955	N/A	Yes
(V12) (556) Lovell FHCC	1961	1996	Yes
(V12) (578) Hines	1968	2014	Yes

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 77 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
N/A	N/A

Mission

Table 78 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V12) (537) Chicago	No impact on training	Maintains or Has Plan to Transition	No PRC Designation	Increases Research Opportunities
(V12) (556) Lovell FHCC	No impact on training	No Research Program	No PRC Designation	Increases Research Opportunities
(V12) (578) Hines	No impact on training	Maintains or Has Plan to Transition	Maintains PRC-designation	Increases Research Opportunities

VISN 12 Northern

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 12 Northern Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (0.90) is 43.8% lower than the Status Quo COA (1.60) and 24.8% lower than the Modernization COA (1.20).

The VA Recommendation COA is $481.6 M (4.3%) more expensive than the Status Quo COA and $260.4 M (2.2%) less expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo COA and decreases costs compared to the Modernization COA, it also increases benefits as seen by a 13-point benefits score compared to 7 for the Status Quo COA and 10 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 79 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($11,222,911,658)	($11,964,974,308)	($11,704,559,660)
Benefit Analysis Score	7	10	13
CBI (Normalized in $Billions)	1.60	1.20	0.90
CBI % Change vs. Status Quo	N/A	-25.4%	-43.8%
CBI % Change vs. Modernization	N/A	N/A	-24.8%

Table 80 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($742,062,650)	($761,014,522)
Operational Cost Variance vs. Status Quo	N/A	$0	$279,366,520
Estimated Total Cost Variance vs. Status Quo	N/A	($742,062,650)	($481,648,002)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$260,414,648

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to Non-VA care.

Table 81 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	1	2	2
Facilities and Sustainability	1	2	3
Mission	2	2	2
Total Benefit Score	**7**	**10**	**13**

VA Recommendation

The VA Recommendation for the VISN 12 Northern Market COA is detailed below.

- Modernize and realign the Tomah VAMC by:
  - Establishing a strategic collaboration to provide acute inpatient medical services and discontinuing acute inpatient medical services at the Tomah VAMC. If unable to enter into a strategic collaboration for acute inpatient medical services, utilize community providers
  - Modernizing the CLC at the Tomah VAMC
- Modernize and realign the Iron Mountain VAMC by establishing a strategic collaboration with a community provider to provide inpatient medical and surgical services, outpatient surgery, and emergency services. If unable to enter into a strategic collaboration for those services, continue to provide these services at the VAMC
- Modernize and realign outpatient facilities in the market by relocating the Wausau CBOC to a new site in the vicinity of Wausau, Wisconsin and closing the existing CBOC

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 12 Northern Market across a 30-year horizon. The cost of the VA Recommendation COA ($11.7 B) was higher than the Status Quo COA ($11.2 B) and the lower than the Modernization COA ($12.0 B).

For the VISN 12 Northern Market, the VA Recommendation COA is $481.6M (4.3%) more expensive than the Status Quo COA and $260.4 M (2.2%) less expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 12 Northern: Capital and Operational Costs Detail.

Table 82 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($11,222,911,658)	($11,964,974,308)	($11,704,559,660)
Capital Cost Variance vs. Status Quo	N/A	($742,062,650)	($761,014,522)
Operational Cost Variance vs. Status Quo	N/A	$0	$279,366,520
Non-VA Care Operational Cost Variance	N/A	$0	($221,676,896)
VA Care Operational Cost Variance	N/A	$0	$501,043,416
Estimated Total Cost Variance vs. Status Quo	N/A	($742,062,650)	($481,648,002)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$260,414,648

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 12 Northern Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 83 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	1	2	2
Facilities and Sustainability	1	2	3
Mission	2	2	2

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Total Benefit Score	**7**	**10**	**13**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 12 Northern: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 12 Northern for this domain.

Table 84 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 3 because it right-sizes services to meet future Veteran enrollee demand and includes changes to facilities or services that improve VA's ability to meet future Veteran enrollee demand based on guidelines established in the CBA methodology. These changes include the following:

- Establishes the new Iron Mountain inpatient medicine and surgery, outpatient surgery, and emergency department partnership
- Establishes the new Tomah, Wisconsin inpatient medicine partnership

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 12 Northern for this domain.

Table 85 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	3

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 3 because access to VA-provided primary care was maintained within 1%, specialty care increased 1% or more, and outpatient mental health care was maintained within 1%.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 12 Northern for this domain.

Table 86 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	1	2	2

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that

sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 12 Northern for this domain.

Table 87 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	3

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, in addition to modernized infrastructure which may attract providers, it also includes additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded

partnerships between VA and academic affiliates, other Federal facilities, or community facilities). The COA includes the following actions to support VA's ability to recruit or retain providers:

- Establishes the new Iron Mountain inpatient medicine and surgery, outpatient surgery, and emergency department partnership
- Establishes the new Tomah, Wisconsin inpatient medicine partnership

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores.

The table below shows the scores for VISN 12 Northern for this domain.

Table 88 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	2
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**2**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 89 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 12 Northern Market, no scenarios changed the outcome of the CBA.

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 90 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	1.60	1.20	0.90	VA Recommendation

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+1	1.40	1.09	0.90	VA Recommendation
+2	1.25	1.00	0.90	VA Recommendation
+3	1.12	0.92	0.90	VA Recommendation

Table 91 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.60	1.20	0.90	VA Recommendation
50%	1.66	1.27	0.96	VA Recommendation
100%	1.71	1.35	1.02	VA Recommendation
150%	1.77	1.42	1.08	VA Recommendation
200%	1.82	1.50	1.13	VA Recommendation
250%	1.88	1.57	1.19	VA Recommendation
300%	1.93	1.65	1.25	VA Recommendation

Table 92 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.60	1.20	0.90	VA Recommendation

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
50%	2.02	1.49	1.11	VA Recommendation
100%	2.44	1.78	1.31	VA Recommendation
150%	2.86	2.08	1.52	VA Recommendation
200%	3.28	2.37	1.73	VA Recommendation
250%	3.70	2.66	1.93	VA Recommendation
300%	4.12	2.96	2.14	VA Recommendation

Table 93 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.60	1.20	0.90	VA Recommendation
50%	1.93	1.43	1.09	VA Recommendation
100%	2.26	1.66	1.27	VA Recommendation
150%	2.59	1.88	1.46	VA Recommendation
200%	2.91	2.11	1.64	VA Recommendation
250%	3.24	2.34	1.83	VA Recommendation
300%	3.57	2.57	2.01	VA Recommendation

Appendix A – VISN 12 Northern: Capital and Operational Costs Detail

Table 94 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	1,043,414	1,039,923
Build New GSF	-	687,918	685,332
Renovate In Place GSF	-	45,878	45,878
Matched Convert To GSF	-	68,847	68,847
Demolition GSF	-	896,999	896,999
Total Build New Cost	$0	($649,011,661)	($645,687,257)
Total Renovate In Place Cost	$0	($6,458,614)	($6,458,615)
Total Matched Convert To Cost	$0	($28,641,962)	($28,667,005)
Total Demolition Cost	$0	($33,400,446)	($33,400,446)
Total Lease Build-Out Cost	$0	($69,864,439)	($77,506,370)
Total New Lease Cost	$0	($211,644,572)	($233,948,166)
Total Existing Lease Cost	($31,972,722)	($31,972,579)	($27,896,243)
NRM Costs for Owned Facilities	($606,759,198)	($121,810,910)	($121,403,350)
FCA Correction Cost	($115,837,352)	N/A	N/A
Estimated Base Modernization Cost	($754,569,273)	($1,152,805,183)	($1,174,967,453)
Additional Common/Lobby Space Needed (GSF)	-	240,771	239,866
Cost of Additional Common/Lobby Space	$0	($197,262,663)	($196,789,457)
Additional Parking Cost	$0	($20,910,087)	($20,839,156)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($4,482,778)	($4,459,585)
Seismic Correction Cost	$0	$0	$0
Non-Building FCA Correction Cost	($8,911,534)	($8,911,533)	($8,911,534)
Activation Costs	$0	($121,171,212)	($118,528,143)
Estimated Additional Costs for Modernization	($8,911,534)	($352,738,273)	($349,527,876)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($763,480,806)	($1,505,543,456)	($1,524,495,328)

Table 95 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($3,054,494,560)	($3,054,494,560)	($2,805,548,481)
Fixed Direct	($357,150,723)	($357,150,723)	($329,105,565)
VA Specific Direct	($97,140,488)	($97,140,488)	($93,699,348)
Indirect	($1,818,547,745)	($1,818,547,745)	($1,650,488,159)
VA Specific Indirect	($237,199,777)	($237,199,777)	($211,387,693)
Research and Education	($1,062,176)	($1,062,176)	($1,062,176)
VA Overhead	($307,205,245)	($307,205,245)	($280,465,877)
VA Care Operational Cost Total (PV)	($5,872,800,714)	($5,872,800,714)	($5,371,757,298)
CC Direct	($3,514,470,729)	($3,514,470,729)	($3,699,808,449)
Delivery and Operations	($162,093,254)	($162,093,254)	($168,415,231)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($165,464,398)	($165,464,398)	($172,169,977)
CC Overhead	($206,276,034)	($206,276,034)	($214,713,598)
Admin PMPM	($538,325,722)	($538,325,722)	($553,199,777)
Non-VA Care Operational Cost Total (PV)	($4,586,630,137)	($4,586,630,137)	($4,808,307,033)
Estimated Operational Costs (PV)	($10,459,430,851)	($10,459,430,851)	($10,180,064,331)

Appendix B – VISN 12 Northern: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 96 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	181	217	185	Adequately Supplied
IP Med/Surg	24	29	27	Adequately Supplied
IP MH	10	12	11	Adequately Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 97 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	1	4%
Under Supplied	26	96%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 98 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 99 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	62.9%	62.9%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	62.9%	62.9%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	58.6%	58.6%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	95.0%	95.0%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	98.1%	98.1%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.8%	99.8%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	62.9%	62.9%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	62.9%	62.9%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	58.6%	58.6%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	95.0%	95.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	98.1%	98.1%	Maintained within 1%

COA	Measure	Current	Future	Result
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.8%	99.8%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	62.9%	62.9%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	62.9%	62.9%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	58.6%	69.2%	Increased 1% or more
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	95.0%	95.0%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	98.1%	98.3%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.8%	99.8%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table below shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 100 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V12) (585) Iron Mountain	1948	Yes
(V12) (676) Tomah-Wisconsin	1946	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 101 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V12) (585) Iron Mountain	IP Med	20 ADC	No	Partner (VA Delivered)
(V12) (585) Iron Mountain	IP Surg	1,600 Cases	No Service	Partner (VA Delivered)
(V12) (585) Iron Mountain	IP MH	8 ADC	No Service	N/A
(V12) (676) Tomah	IP Med	20 ADC	No	Partner (VA Delivered)
(V12) (676) Tomah	IP Surg	1,600 Cases	No Service	N/A
(V12) (676) Tomah	IP MH	8 ADC	No	Maintain

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled “VA Recommendation”. To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 102 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V12) (585) Iron Mountain	1948	2019	Yes
(V12) (676) Tomah-Wisconsin	1946	2014	Yes

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 103 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
(V12) Iron Mountain IP Partnership	Yes
(V12) Tomah, WI IP Partnership	Yes

Mission

Table 104 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V12) (585) Iron Mountain	No impact on training	No Research Program	No PRC Designation	Increases Research Opportunities
(V12) (676) Tomah	No impact on training	No Research Program	No PRC Designation	Increases Research Opportunities