VA Recommendations to the

# ASSET AND INFRASTRUCTURE REVIEW COMMISSION

March 2022

# Appendix H

## Cost Benefit Analysis – VISN 10

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# VISN 10 Central Ohio / Western Ohio

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 combined VISN 10 Central Ohio / Western Ohio Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (3.75) is 37.2% lower than the Status Quo COA (5.97) and 17.3% lower than the Modernization COA (4.53).

The VA Recommendation COA is $3.2 B (7.6%) more expensive than the Status Quo COA and $331.6 M (0.7%) 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 1 – CBI Scores by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| COA PV ($) | ($41,804,808,911) | ($45,332,321,479) | ($45,000,700,888) |
| Benefit Analysis Score | 7 | 10 | 12 |
| CBI (Normalized in $Billions) | 5.97 | 4.53 | 3.75 |
| CBI % Change vs. Status Quo | N/A | -24.1% | -37.2% |
| CBI % Change vs. Modernization | N/A | N/A | -17.3% |

***Table 2 – Cost Analysis Cost Variance by COA***

| Cost Variance | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Capital Cost Variance vs. Status Quo | N/A | ($3,527,512,568) | ($3,325,573,257) |
| Operational Cost Variance vs. Status Quo | N/A | $0 | $129,681,280 |
| Estimated Total Cost Variance vs. Status Quo | N/A | ($3,527,512,568) | ($3,195,891,977) |
| Estimated Total Cost Variance vs. Modernization | N/A | N/A | $331,620,591 |

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 | 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 10 Central Ohio / Western Ohio Market COA is detailed below.

- Modernize and realign the Chillicothe VAMC by:
  - Establishing a strategic collaboration to provide inpatient medical services and discontinuing those services at the Chillicothe VAMC. If unable to enter into a strategic collaboration, utilize community providers
  - Relocating inpatient mental health, RRTP, CLC, and outpatient services currently provided at the Chillicothe VAMC to current or future VA facilities and discontinuing those services at the Chillicothe VAMC
  - Closing the Chillicothe VAMC
- Modernize by establishing a new stand-alone CLC in the vicinity of Circleville, Ohio
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new MS CBOC in the vicinity of Chillicothe, Ohio
  - Establishing a new CBOC in the vicinity of Columbus, Ohio
  - Relocating all services to the Columbus HCC and closing the Columbus-Airport OOS
- Modernize patient rooms at the Cincinnati VAMC
- Modernize and realign the Dayton VAMC by:
  - Modernizing inpatient mental health services
  - Modernizing the RRTP
  - Modernizing the CLC
- Modernize by establishing a new stand-alone CLC in the vicinity of Cincinnati, Ohio
- Relocate RRTP services currently provided at the Fort Thomas RRTP to current or future VA facilities and closing the Fort Thomas RRTP
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new MS CBOC in the vicinity of northwest Cincinnati, Ohio
  - Establishing a new MS CBOC in the vicinity of northeast Cincinnati, Ohio
  - Establishing a new MS CBOC in the vicinity of Sidney, Ohio

- Relocating all services to the proposed Northwest and Northeast Cincinnati MS CBOCs and closing the Norwood OOS
- Relocating all services to the proposed Northwest and Northeast Cincinnati MS CBOCs and closing the Vine Street OOS
- Relocating all services to the proposed Northwest and Northeast Cincinnati MS CBOCs and closing the Highland Avenue OOS

## Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 10 Central Ohio / Western Ohio Market across a 30-year horizon. The cost of the VA Recommendation COA ($45.0 B) was higher than the Status Quo COA ($41.8 B) and lower than the Modernization COA ($45.3 B).

For the VISN 10 Central Ohio / Western Ohio Market, the VA Recommendation COA is $3.2 B (7.6%) more expensive than the Status Quo COA and $331.6 M (0.7%) 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 10 Central Ohio / Western Ohio: Capital and Operational Costs Detail.

***Table 4 – Total Cost Summary by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Total Costs (PV) | ($41,804,808,911) | ($45,332,321,479) | ($45,000,700,888) |
| Capital Cost Variance vs. Status Quo | N/A | ($3,527,512,568) | ($3,325,573,257) |
| Operational Cost Variance vs. Status Quo | N/A | $0 | $129,681,280 |
| Non-VA Care Operational Cost Variance | N/A | $0 | ($595,499,268) |
| VA Care Operational Cost Variance | N/A | $0 | $725,180,547 |
| Estimated Total Cost Variance vs. Status Quo | N/A | ($3,527,512,568) | ($3,195,891,977) |
| Estimated Total Cost Variance vs. Modernization | N/A | N/A | $331,620,591 |

# Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 10 Central Ohio / Western Ohio 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 | 1 | 2 | 2 |
| 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 10 Central Ohio / Western Ohio: 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 10 Central Ohio / Western Ohio 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 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 Cincinnati CLC to provide inpatient community living center services; 58,233 enrollees live within 60 minutes of the proposed facility
- Establishes a new Circleville CLC to provide inpatient community living center services; 48,978 enrollees live within 60 minutes of the proposed facility
- Establishes a new Chillicothe MS CBOC to provide primary care, specialty care, and outpatient mental health services; there are 5,344 enrollees for which the proposed facility is the closest VA point of care within 60 minutes
- Establishes a new Columbus CBOC to provide primary care and outpatient mental health services; there are 16,425 enrollees for which the proposed facility is the closest VA point of care within 30 minutes
- Establishes a new Sidney MS CBOC to provide primary care, specialty care, and outpatient mental health services; there are 5,007 enrollees for which the proposed facility is the closest VA point of care within 60 minutes
- Establishes a new Oakley Square MS CBOC to provide primary care, specialty care, and outpatient mental health services; there are 5,129 enrollees for which the proposed facility is the closest VA point of care within 60 minutes
- Establishes a new Northside-Cummins MS CBOC to provide primary care, specialty care, and outpatient mental health services; there are 4,802 enrollees for which the proposed facility is the closest VA point of care within 60 minutes
- Expands the Grove City CBOC to a MS CBOC, adding specialty care services
- Expands the Wright-Patterson OOS to a CBOC, adding primary care services

## 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 10 Central Ohio / Western Ohio 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 10 Central Ohio / Western Ohio for this domain.

***Table 8 – 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 10 Central Ohio / Western Ohio 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 10 Central Ohio / Western Ohio for this domain.

***Table 10 – Mission Scoring Summary***

| Subdomain | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Education | 2 | 2 | 1 |
| 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 1 because it impacts inpatient acute service lines and thus introduces risk to 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 10 Central Ohio / Western Ohio 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 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 | 5.97 | 4.53 | 3.75 | VA Recommendation |
| +1 | 5.23 | 4.12 | 3.75 | VA Recommendation |
| +2 | 4.64 | 3.78 | 3.75 | VA Recommendation |
| +3 | 4.18 | 3.49 | 3.75 | 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% | 5.97 | 4.53 | 3.75 | VA Recommendation |
| 50% | 6.09 | 4.79 | 3.96 | VA Recommendation |
| 100% | 6.20 | 5.05 | 4.16 | VA Recommendation |
| 150% | 6.32 | 5.30 | 4.37 | VA Recommendation |
| 200% | 6.43 | 5.56 | 4.57 | VA Recommendation |
| 250% | 6.55 | 5.82 | 4.78 | VA Recommendation |
| 300% | 6.66 | 6.08 | 4.99 | 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% | 5.97 | 4.53 | 3.75 | VA Recommendation |
| 50% | 7.96 | 5.92 | 4.88 | VA Recommendation |
| 100% | 9.95 | 7.31 | 6.01 | VA Recommendation |
| 150% | 11.93 | 8.70 | 7.14 | VA Recommendation |
| 200% | 13.92 | 10.10 | 8.26 | VA Recommendation |
| 250% | 15.90 | 11.49 | 9.39 | VA Recommendation |

| VA Operational Cost Increase % | Status Quo CBI | Modernization CBI | VA Recommendation CBI | Leader (lowest CBI) |
|---|---|---|---|---|
| 300% | 17.89 | 12.88 | 10.52 | 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% | 5.97 | 4.53 | 3.75 | VA Recommendation |
| 50% | 6.86 | 5.15 | 4.29 | VA Recommendation |
| 100% | 7.74 | 5.77 | 4.83 | VA Recommendation |
| 150% | 8.62 | 6.39 | 5.37 | VA Recommendation |
| 200% | 9.51 | 7.01 | 5.91 | VA Recommendation |
| 250% | 10.39 | 7.63 | 6.45 | VA Recommendation |
| 300% | 11.28 | 8.25 | 6.99 | VA Recommendation |

# Appendix A – VISN 10 Central Ohio / Western Ohio: Capital and Operational Costs Detail

***Table 16 – Capital Costs by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| VAMC Ideal Square Footage | - | 4,501,760 | 4,198,912 |
| Build New GSF | - | 2,193,980 | 1,989,478 |
| Renovate In Place GSF | - | 923,558 | 828,093 |
| Matched Convert To GSF | - | 616,329 | 685,024 |
| Demolition GSF | - | 2,276,068 | 2,303,899 |
| Total Build New Cost | $0 | ($2,014,652,837) | ($1,825,437,652) |
| Total Renovate In Place Cost | $0 | ($234,837,077) | ($204,925,980) |
| Total Matched Convert To Cost | $0 | ($234,406,408) | ($259,746,658) |
| Total Demolition Cost | $0 | ($80,800,669) | ($62,531,698) |
| Total Lease Build-Out Cost | $0 | ($115,410,519) | ($160,442,074) |
| Total New Lease Cost | $0 | ($353,358,482) | ($494,902,984) |
| Total Existing Lease Cost | ($113,689,548) | ($113,689,548) | ($100,336,961) |
| NRM Costs for Owned Facilities | ($1,183,050,035) | ($525,547,219) | ($490,191,988) |
| FCA Correction Cost | ($277,238,379) | N/A | N/A |
| Estimated Base Modernization Cost | ($1,573,977,962) | ($3,672,702,758) | ($3,598,515,994) |
| Additional Common/Lobby Space Needed (GSF) | - | 767,893 | 696,317 |
| Cost of Additional Common/Lobby Space | $0 | ($602,241,771) | ($541,734,217) |
| Additional Parking Cost | $0 | ($227,166,637) | ($208,486,121) |

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Potential Land Acquisition Cost | $0 | ($2,444,829) | ($3,995,146) |
| Seismic Correction Cost | ($1,490,607) | ($369,481) | ($351,757) |
| Non-Building FCA Correction Cost | ($40,278,630) | ($40,278,630) | ($30,392,383) |
| Activation Costs | $0 | ($598,055,662) | ($557,844,836) |
| Estimated Additional Costs for Modernization | ($41,769,236) | ($1,470,557,008) | ($1,342,804,461) |
| Cost Adjustment: In-Progress Construction | N/A | N/A | $0 |
| Cost Adjustment: In-Progress Lease | N/A | N/A | $0 |
| Estimated Facilities Costs (PV) | ($1,615,747,199) | ($5,143,259,767) | ($4,941,320,455) |

***Table 17 – Operational Costs by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| VA Direct | ($15,027,398,669) | ($15,027,398,669) | ($14,654,633,630) |
| Fixed Direct | ($2,026,002,975) | ($2,026,002,975) | ($1,981,247,937) |
| VA Specific Direct | ($632,797,015) | ($632,797,015) | ($617,308,412) |
| Indirect | ($7,989,991,730) | ($7,989,991,730) | ($7,752,835,243) |
| VA Specific Indirect | ($768,494,849) | ($768,494,849) | ($749,784,561) |
| Research and Education | ($3,988,371) | ($3,988,371) | ($3,988,371) |
| VA Overhead | ($1,363,007,435) | ($1,363,007,435) | ($1,326,702,342) |
| VA Care Operational Cost Total (PV) | ($27,811,681,044) | ($27,811,681,044) | ($27,086,500,496) |
| CC Direct | ($9,108,191,291) | ($9,108,191,291) | ($9,633,599,092) |

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Delivery and Operations | ($364,566,164) | ($364,566,164) | ($391,001,239) |
| Care Coordination | ($362,327,648) | ($362,327,648) | ($392,250,077) |
| CC Overhead | ($477,720,567) | ($477,720,567) | ($504,827,134) |
| Admin PMPM | ($2,064,574,999) | ($2,064,574,999) | ($2,051,202,394) |
| Non-VA Care Operational Cost Total (PV) | ($12,377,380,669) | ($12,377,380,669) | ($12,972,879,936) |
| Estimated Operational Costs (PV) | ($40,189,061,712) | ($40,189,061,712) | ($40,059,380,433) |

# Appendix B – VISN 10 Central Ohio / Western Ohio: 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 | 298 | 357 | 363 | Over Supplied |
| IP Med/Surg | 121 | 146 | 192 | Over Supplied |
| IP MH | 48 | 58 | 73 | 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 | 10 | 37% |
| Under Supplied | 17 | 63% |

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 | 88.6% | 88.6% | Maintained within 1% |

| COA | Measure | Current | Future | Result |
|---|---|---|---|---|
| Status Quo | % of enrollees within 30 minutes of VA-provided OP Primary Care | 88.7% | 88.7% | Maintained within 1% |
| Status Quo | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 98.8% | 98.8% | Maintained within 1% |
| 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 | 88.6% | 88.6% | Maintained within 1% |
| Modernization | % of enrollees within 30 minutes of VA-provided OP Primary Care | 88.7% | 88.7% | Maintained within 1% |
| Modernization | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 98.8% | 98.8% | 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% |

| COA | Measure | Current | Future | Result |
|---|---|---|---|---|
| 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 | 88.6% | 89.8% | Increased 1% or more |
| VA Recommendation | % of enrollees within 30 minutes of VA-provided OP Primary Care | 88.7% | 89.8% | Increased 1% or more |
| VA Recommendation | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 98.8% | 99.6% | 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? |
|---|---|---|
| (V10) (538) Chillicothe-Ohio | 1938 | Yes |
| (V10) (757) Columbus-Ohio | 2008 | No |
| (V10) (539) Cincinnati-Ohio | 1951 | Yes |
| (V10) (552) Dayton | 1991 | No |

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 |
|---|---|---|---|---|
| (V10) (538) Chillicothe | IP Med | 20 ADC | No | Partner (DoD) |
| (V10) (538) Chillicothe | IP Surg | 1,600 Cases | No Service | N/A |
| (V10) (538) Chillicothe | IP MH | 8 ADC | Yes | Relocate |
| (V10) (539) Cincinnati | IP Med | 20 ADC | Yes | Maintain |
| (V10) (539) Cincinnati | IP Surg | 1,600 Cases | Yes | Maintain |
| (V10) (539) Cincinnati | IP MH | 8 ADC | Yes | Maintain |
| (V10) (552) Dayton | IP Med | 20 ADC | No | Maintain |
| (V10) (552) Dayton | IP Surg | 1,600 Cases | Yes | Maintain |
| (V10) (552) Dayton | 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 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? |
|---|---|---|---|
| (V10) (538) Chillicothe-Ohio | 1938 | 2012 | Yes |
| (V10) (757) Columbus-Ohio | 2008 | N/A | No |
| (V10) (539) Cincinnati-Ohio | 1951 | 1982 | Yes |
| (V10) (552) Dayton | 1991 | 1991 | No |

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 |
|---|---|---|---|---|
| (V10) (538) Chillicothe | Deactivates IP Acute Service with training | No Research Program | No PRC Designation | Increases Research Opportunities |

| Facility | Training Impact | Research Impact | 4th Mission Impact | Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities |
|---|---|---|---|---|
| (V10) (539) Cincinnati | No impact on training | Maintains or Has Plan to Transition | No PRC Designation | Increases Research Opportunities |
| (V10) (552) Dayton | No impact on training | Maintains or Has Plan to Transition | No PRC Designation | Increases Research Opportunities |

# VISN 10 Northeast Ohio

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 10 Northeast Ohio Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (2.49) is 23.8% lower than the Status Quo COA (3.26) and 8.1% lower than the Modernization COA (2.71).

The VA Recommendation COA is $3.7 B (14.2%) more expensive than the Status Quo COA and $60.8 M (0.2%) 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 12-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 27 – CBI Scores by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| COA PV ($) | ($26,119,901,668) | ($29,775,506,574) | ($29,836,263,142) |
| Benefit Analysis Score | 8 | 11 | 12 |
| CBI (Normalized in $Billions) | 3.26 | 2.71 | 2.49 |
| CBI % Change vs. Status Quo | N/A | -17.1% | -23.8% |
| CBI % Change vs. Modernization | N/A | N/A | -8.1% |

***Table 28 – Cost Analysis Cost Variance by COA***

| Cost Variance | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Capital Cost Variance vs. Status Quo | N/A | ($3,655,604,906) | ($3,716,361,474) |
| Operational Cost Variance vs. Status Quo | N/A | $0 | $0 |
| Estimated Total Cost Variance vs. Status Quo | N/A | ($3,655,604,906) | ($3,716,361,474) |
| Estimated Total Cost Variance vs. Modernization | N/A | N/A | ($60,756,569) |

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 | 1 |
| Quality | 2 | 3 | 3 |
| Facilities and Sustainability | 1 | 2 | 2 |
| Mission | 2 | 2 | 3 |
| **Total Benefit Score** | **8** | **11** | **12** |

## VA Recommendation

The VA Recommendation for the VISN 10 Northeast Ohio Market COA is detailed below.

- Modernize the primary care clinic at the Cleveland VAMC
- Modernize and realign outpatient facilities in the market by:
  - Relocating the Akron MS CBOC to a new HCC site in the vicinity of Akron, Ohio and closing the existing Akron MS CBOC
  - Relocating all services to the Cleveland VAMC and the proposed Akron HCC closing the Cleveland VAMC satellite ambulatory surgical center
  - Relocating all services to the proposed Akron HCC and closing the Summit County OOS

## Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 10 Northeast Ohio Market across a 30-year horizon. The cost of the VA Recommendation COA ($29.84 B) was higher than the Status Quo COA ($26.1 B) and the Modernization COA ($29.78 B).

For the VISN 10 Northeast Ohio Market, the VA Recommendation COA is $3.7 B (14.2%) more expensive than the Status Quo COA and $60.8 M (0.2%) 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 10 Northeast Ohio: Capital and Operational Costs Detail.

***Table 30 – Total Cost Summary by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Total Costs (PV) | ($26,119,901,668) | ($29,775,506,574) | ($29,836,263,142) |
| Capital Cost Variance vs Status Quo | N/A | ($3,655,604,906) | ($3,716,361,474) |
| 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 | ($3,655,604,906) | ($3,716,361,474) |
| Estimated Total Cost Variance vs. Modernization | N/A | N/A | ($60,756,569) |

## Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 10 Northeast Ohio 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 | 1 |
| Quality | 2 | 3 | 3 |
| Facilities and Sustainability | 1 | 2 | 2 |
| Mission | 2 | 2 | 3 |

| Key Benefit Domain | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| **Total Benefit Score** | **8** | **11** | **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 10 Northeast Ohio: 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 10 Northeast Ohio 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 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 Akron HCC to provide primary care, outpatient mental health, outpatient specialty care, and outpatient surgery services; 98,513 enrollees live within 60 minutes of the proposed facility

## 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 10 Northeast Ohio for this domain.

***Table 33 – Access Scoring Summary***

| Key Benefit Domain | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Access | 2 | 2 | 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 (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 1 because access to VA-provided primary care decreased 1% or more, specialty care was maintained within 1%, and outpatient mental health care decreased 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 10 Northeast Ohio for this domain.

***Table 34 – 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 10 Northeast Ohio for this domain.

***Table 35 – 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 10 Northeast Ohio 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 10 Northeast Ohio Market, three scenarios changed the outcome of the CBA:

- Increasing the Modernization benefits score by one point
- Increasing the Modernization benefits score by two points
- Increasing the Modernization benefits score by three points
- Increasing the VA Capital Cost by 300%; Status Quo becomes the preferred COA

### 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 | 3.26 | 2.71 | 2.49 | VA Recommendation |

| Status Quo and Modernization Benefit Score Change | Status Quo CBI | Modernization CBI | VA Recommendation CBI | Leader (lowest CBI) |
|---|---|---|---|---|
| +1 | 2.90 | 2.48 | 2.49 | Modernization |
| +2 | 2.61 | 2.29 | 2.49 | Modernization |
| +3 | 2.37 | 2.13 | 2.49 | Modernization |

***Table 39 – Sensitivity Analyses – VA Capital Cost Increase***

| VA Capital Cost Increase % | Status Quo CBI | Modernization CBI | VA Recommendation CBI | Leader (lowest CBI) |
|---|---|---|---|---|
| 0% | 3.26 | 2.71 | 2.49 | VA Recommendation |
| 50% | 3.30 | 2.90 | 2.67 | VA Recommendation |
| 100% | 3.34 | 3.09 | 2.85 | VA Recommendation |
| 150% | 3.38 | 3.29 | 3.03 | VA Recommendation |
| 200% | 3.41 | 3.48 | 3.21 | VA Recommendation |
| 250% | 3.45 | 3.67 | 3.39 | VA Recommendation |
| 300% | 3.49 | 3.87 | 3.57 | Status Quo |

***Table 40 – Sensitivity Analyses – VA Operational Cost Increase***

| VA Operational Cost Increase % | Status Quo CBI | Modernization CBI | VA Recommendation CBI | Leader (lowest CBI) |
|---|---|---|---|---|
| 0% | 3.26 | 2.71 | 2.49 | VA Recommendation |
| 50% | 4.44 | 3.56 | 3.27 | VA Recommendation |

| VA Operational Cost Increase % | Status Quo CBI | Modernization CBI | VA Recommendation CBI | Leader (lowest CBI) |
|---|---|---|---|---|
| 100% | 5.62 | 4.42 | 4.05 | VA Recommendation |
| 150% | 6.79 | 5.27 | 4.84 | VA Recommendation |
| 200% | 7.97 | 6.13 | 5.62 | VA Recommendation |
| 250% | 9.15 | 6.98 | 6.41 | VA Recommendation |
| 300% | 10.32 | 7.84 | 7.19 | 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% | 3.26 | 2.71 | 2.49 | VA Recommendation |
| 50% | 3.68 | 3.01 | 2.77 | VA Recommendation |
| 100% | 4.10 | 3.32 | 3.04 | VA Recommendation |
| 150% | 4.52 | 3.62 | 3.32 | VA Recommendation |
| 200% | 4.94 | 3.93 | 3.60 | VA Recommendation |
| 250% | 5.36 | 4.23 | 3.88 | VA Recommendation |
| 300% | 5.78 | 4.53 | 4.16 | VA Recommendation |

# Appendix A – VISN 10 Northeast Ohio: Capital and Operational Costs Detail

***Table 42 – Capital Costs by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| VAMC Ideal Square Footage | - | 2,298,076 | 2,353,796 |
| Build New GSF | - | 1,241,075 | 1,282,349 |
| Renovate In Place GSF | - | 264,506 | 264,506 |
| Matched Convert To GSF | - | 358,119 | 358,119 |
| Demolition GSF | - | 911,705 | 911,705 |
| Total Build New Cost | $0 | ($1,219,842,039) | ($1,268,953,894) |
| Total Renovate In Place Cost | $0 | $0 | $0 |
| Total Matched Convert To Cost | $0 | ($152,440,773) | ($152,440,774) |
| Total Demolition Cost | $0 | ($34,343,188) | ($34,343,188) |
| Total Lease Build-Out Cost | $0 | ($161,119,549) | ($171,774,815) |
| Total New Lease Cost | $0 | ($1,139,668,529) | ($1,146,157,449) |
| Total Existing Lease Cost | ($344,583,164) | ($344,582,979) | ($288,321,587) |
| NRM Costs for Owned Facilities | ($203,250,202) | ($268,283,423) | ($274,788,310) |
| FCA Correction Cost | ($47,218,328) | N/A | N/A |
| Estimated Base Modernization Cost | ($595,051,694) | ($3,320,280,480) | ($3,336,780,017) |
| Additional Common/Lobby Space Needed (GSF) | - | 434,376 | 448,822 |
| Cost of Additional Common/Lobby Space | $0 | ($360,703,481) | ($372,699,272) |
| Additional Parking Cost | $0 | ($243,748,101) | ($257,970,955) |

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Potential Land Acquisition Cost | $0 | ($33,871) | ($31,814) |
| Seismic Correction Cost | $0 | $0 | $0 |
| Non-Building FCA Correction Cost | ($4,017,711) | ($4,017,710) | ($4,017,711) |
| Activation Costs | $0 | ($325,890,667) | ($343,931,110) |
| Estimated Additional Costs for Modernization | ($4,017,711) | ($934,393,830) | ($978,650,862) |
| Cost Adjustment: In-Progress Construction | N/A | N/A | $0 |
| Cost Adjustment: In-Progress Lease | N/A | N/A | $0 |
| Estimated Facilities Costs (PV) | ($599,069,404) | ($4,254,674,310) | ($4,315,430,879) |

***Table 43 – Operational Costs by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| VA Direct | ($10,311,895,032) | ($10,311,895,032) | ($10,311,895,032) |
| Fixed Direct | ($1,138,659,454) | ($1,138,659,454) | ($1,138,659,454) |
| VA Specific Direct | ($521,906,611) | ($521,906,611) | ($521,906,611) |
| Indirect | ($5,418,377,453) | ($5,418,377,453) | ($5,418,377,453) |
| VA Specific Indirect | ($501,870,198) | ($501,870,198) | ($501,870,198) |
| Research and Education | ($18,821,377) | ($18,821,377) | ($18,821,377) |
| VA Overhead | ($908,254,768) | ($908,254,768) | ($908,254,768) |
| VA Care Operational Cost Total (PV) | ($18,819,784,895) | ($18,819,784,895) | ($18,819,784,895) |
| CC Direct | ($4,415,264,764) | ($4,415,264,764) | ($4,415,264,764) |
| Delivery and Operations | ($178,767,605) | ($178,767,605) | ($178,767,605) |

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Care Coordination | ($151,262,072) | ($151,262,072) | ($151,262,072) |
| CC Overhead | ($234,566,321) | ($234,566,321) | ($234,566,321) |
| Admin PMPM | ($1,721,186,607) | ($1,721,186,607) | ($1,721,186,607) |
| Non-VA Care Operational Cost Total (PV) | ($6,701,047,369) | ($6,701,047,369) | ($6,701,047,369) |
| Estimated Operational Costs (PV) | ($25,520,832,264) | ($25,520,832,264) | ($25,520,832,264) |

# Appendix B – VISN 10 Northeast Ohio: 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 | 118 | 141 | 137 | Adequately Supplied |
| IP Med/Surg | 114 | 137 | 169 | Over Supplied |
| IP MH | 28 | 34 | 30 | Adequately 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 | 17 | 63% |

| Physician Supply Adequacy | Count of Specialties | Percentage |
|---|---|---|
| Under Supplied | 10 | 37% |

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 | 93.9% | 93.9% | Maintained within 1% |

| COA | Measure | Current | Future | Result |
|---|---|---|---|---|
| Status Quo | % of enrollees within 30 minutes of VA-provided OP Primary Care | 93.9% | 93.9% | Maintained within 1% |
| Status Quo | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 100.0% | 100.0% | 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 | 93.9% | 93.9% | Maintained within 1% |
| Modernization | % of enrollees within 30 minutes of VA-provided OP Primary Care | 93.9% | 93.9% | Maintained within 1% |
| Modernization | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 100.0% | 100.0% | 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% |

| COA | Measure | Current | Future | Result |
|---|---|---|---|---|
| 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 | 93.9% | 92.9% | Decreased 1% or more |
| VA Recommendation | % of enrollees within 30 minutes of VA-provided OP Primary Care | 93.9% | 92.9% | Decreased 1% or more |
| VA Recommendation | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 100.0% | 100.0% | 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 48 – Quality Key Data Points for Scoring – Age***

| Facility | Main Patient Care Facility Construction Date | Built Pre-1970? |
|---|---|---|
| (V10) (541) Cleveland-Ohio | 1964 | 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 |
|---|---|---|---|---|
| (V10) (541) Cleveland | IP Med | 20 ADC | Yes | Maintain |
| (V10) (541) Cleveland | IP Surg | 1,600 Cases | Yes | Maintain |
| (V10) (541) Cleveland | 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? |
|---|---|---|---|
| (V10) (541) Cleveland-Ohio | 1964 | 1989 | 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? |
|---|---|
| N/A | N/A |

## 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 |
|---|---|---|---|---|
| (V10) (541) Cleveland | No impact on training | Maintains or Has Plan to Transition | Maintains PRC-designation | Increases Research Opportunities, Increases Training Opportunities |

# VISN 10 Indiana

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 10 Indiana Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (2.11) is 46.8% lower than the Status Quo COA (3.96) and 29.2% lower than the Modernization COA (2.98).

The VA Recommendation COA is $1.8 B (6.5%) more expensive than the Status Quo COA and $252.6 M (0.8%) less expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo and decreases cost compared to the Modernization COA, it also increases benefits as seen by a 14-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 ($) | ($27,704,027,230) | ($29,751,033,748) | ($29,498,416,822) |
| Benefit Analysis Score | 7 | 10 | 14 |
| CBI (Normalized in $Billions) | 3.96 | 2.98 | 2.11 |
| CBI % Change vs. Status Quo | N/A | -24.8% | -46.8% |
| CBI % Change vs. Modernization | N/A | N/A | -29.2% |

***Table 54 – Cost Analysis Cost Variance by COA***

| Cost Variance | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Capital Cost Variance vs. Status Quo | N/A | ($2,047,006,518) | ($2,130,786,745) |
| Operational Cost Variance vs. Status Quo | N/A | $0 | $336,397,152 |
| Estimated Total Cost Variance vs. Status Quo | N/A | ($2,047,006,518) | ($1,794,389,592) |
| Estimated Total Cost Variance vs. Modernization | N/A | N/A | $252,616,926 |

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 | 3 |
| Facilities and Sustainability | 1 | 2 | 2 |
| Mission | 2 | 2 | 3 |
| **Total Benefit Score** | **7** | **10** | **14** |

## VA Recommendation

The VA Recommendation for the VISN 10 Indiana Market COA is detailed below.

- Modernize and realign the Indianapolis VAMC by:
  - Constructing a replacement VAMC with inpatient medical and surgical care, inpatient mental health, and outpatient services in the vicinity of Indianapolis, Indiana
  - Closing the Indianapolis VAMC
- Modernize the Marion VAMC by:
  - Modernizing the CLC
  - Modernizing the RRTP
- Realign the Fort Wayne VAMC by:
  - Relocating inpatient services from the Fort Wayne VAMC to community providers and discontinuing those services at the Fort Wayne VAMC
  - Establishing a new MS CBOC at the Fort Wayne VAMC site and relocating all outpatient services from the existing Fort Wayne VAMC to the new MS CBOC
  - Closing the Fort Wayne VAMC
- Modernize by establishing a new stand-alone CLC in the vicinity of Indianapolis, Indiana
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new MS CBOC in the vicinity of Noblesville, Indiana
  - Relocating all services to the Bloomington CBOC and closing the Monroe County OOS
  - Relocating all services to the St. Joseph MS CBOC and closing the Columbia Place OOS
  - Relocating all services to the proposed Fort Wayne MS CBOC and closing the Fort Wayne-East State Boulevard OOS

## Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 10 Indiana Market across a 30-year horizon. The cost of the VA Recommendation COA ($29.5 B) was higher than the Status Quo COA ($27.7 B) and lower than the Modernization COA ($29.8 B).

For the VISN 10 Indiana Market, the VA Recommendation COA is $1.8 B (6.5%) more expensive than the Status Quo COA and $252.6 M (0.8%) 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 10 Indiana: Capital and Operational Costs Detail.

***Table 56 – Total Cost Summary by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Total Costs (PV) | ($27,704,027,230) | ($29,751,033,748) | ($29,498,416,822) |
| Capital Cost Variance vs. Status Quo | N/A | ($2,047,006,518) | ($2,130,786,745) |
| Operational Cost Variance vs. Status Quo | N/A | $0 | $336,397,152 |
| Non-VA Care Operational Cost Variance | N/A | $0 | ($319,723,357) |
| VA Care Operational Cost Variance | N/A | $0 | $656,120,510 |
| Estimated Total Cost Variance vs. Status Quo | N/A | ($2,047,006,518) | ($1,794,389,592) |
| Estimated Total Cost Variance vs. Modernization | N/A | N/A | $252,616,926 |

## Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 10 Indiana 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 | 3 |
| Facilities and Sustainability | 1 | 2 | 2 |
| Mission | 2 | 2 | 3 |
| **Total Benefit Score** | **7** | **10** | **14** |

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 10 Indiana: 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 10 Indiana 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 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 a new Indianapolis CLC to provide inpatient community living center services; 57,757 enrollees live within 60 minutes of the proposed facility
- Establishes a new Noblesville MS CBOC to provide primary care, specialty care, and outpatient mental health services; there are 6,660 enrollees for which the proposed facility is the closest VA point of care within 60 minutes
- Establishes a new Fort Wayne MS CBOC to provide primary care services, specialty care, and outpatient mental health services; there are 14,008 enrollees for which the proposed facility is the closest VA point of care within 60 minutes
- Expands the Hoosier CBOC to a MS CBOC, adding specialty care services
- Expands the Martinsville CBOC to a MS CBOC, adding specialty care services
- Expands the Lafayette CBOC to a MS CBOC, adding specialty care services

## 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 10 Indiana 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 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 10 Indiana for this domain.

***Table 60 – 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 Fort Wayne's low census inpatient medicine program to community providers

## 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 10 Indiana 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 10 Indiana for this domain.

***Table 62 – Mission Scoring Summary***

| Subdomain | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Education | 2 | 2 | 3 |

| Subdomain | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| 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 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 10 Indiana 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 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 | 3.96 | 2.98 | 2.11 | VA Recommendation |
| +1 | 3.46 | 2.70 | 2.11 | VA Recommendation |
| +2 | 3.08 | 2.48 | 2.11 | VA Recommendation |
| +3 | 2.77 | 2.29 | 2.11 | VA Recommendation |

***Table 65 – Sensitivity Analyses – VA Capital Cost Increase***

| VA Capital Cost Increase % | Status Quo CBI | Modernization CBI | VA Recommendation CBI | Leader (lowest CBI) |
|---|---|---|---|---|
| 0% | 3.96 | 2.98 | 2.11 | VA Recommendation |

| VA Capital Cost Increase % | Status Quo CBI | Modernization CBI | VA Recommendation CBI | Leader (lowest CBI) |
|---|---|---|---|---|
| 50% | 4.08 | 3.17 | 2.25 | VA Recommendation |
| 100% | 4.21 | 3.36 | 2.39 | VA Recommendation |
| 150% | 4.34 | 3.55 | 2.52 | VA Recommendation |
| 200% | 4.46 | 3.74 | 2.66 | VA Recommendation |
| 250% | 4.59 | 3.93 | 2.80 | VA Recommendation |
| 300% | 4.72 | 4.12 | 2.94 | 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% | 3.96 | 2.98 | 2.11 | VA Recommendation |
| 50% | 5.30 | 3.91 | 2.75 | VA Recommendation |
| 100% | 6.63 | 4.85 | 3.40 | VA Recommendation |
| 150% | 7.97 | 5.79 | 4.04 | VA Recommendation |
| 200% | 9.31 | 6.72 | 4.69 | VA Recommendation |
| 250% | 10.65 | 7.66 | 5.34 | VA Recommendation |
| 300% | 11.99 | 8.60 | 5.98 | 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% | 3.96 | 2.98 | 2.11 | VA Recommendation |
| 50% | 4.47 | 3.33 | 2.38 | VA Recommendation |
| 100% | 4.99 | 3.69 | 2.64 | VA Recommendation |
| 150% | 5.50 | 4.05 | 2.91 | VA Recommendation |
| 200% | 6.01 | 4.41 | 3.18 | VA Recommendation |
| 250% | 6.53 | 4.77 | 3.45 | VA Recommendation |
| 300% | 7.04 | 5.13 | 3.72 | VA Recommendation |

# Appendix A – VISN 10 Indiana: Capital and Operational Costs Detail

***Table 68 – Capital Costs by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| VAMC Ideal Square Footage | - | 2,795,383 | 2,624,655 |
| Build New GSF | - | 1,711,184 | 1,622,649 |
| Renovate In Place GSF | - | 337,415 | 315,240 |
| Matched Convert To GSF | - | 147,870 | 118,839 |
| Demolition GSF | - | 1,725,643 | 1,786,749 |
| Total Build New Cost | $0 | ($1,564,360,509) | ($1,433,187,679) |
| Total Renovate In Place Cost | $0 | ($123,698,340) | ($114,918,540) |
| Total Matched Convert To Cost | $0 | ($56,983,559) | ($46,091,925) |
| Total Demolition Cost | $0 | ($61,281,590) | ($41,101,845) |
| Total Lease Build-Out Cost | $0 | ($56,500,142) | ($109,311,407) |
| Total New Lease Cost | $0 | ($283,077,928) | ($462,902,215) |
| Total Existing Lease Cost | ($161,082,210) | ($161,082,063) | ($131,469,458) |
| NRM Costs for Owned Facilities | ($1,325,098,467) | ($326,340,359) | ($306,409,097) |
| FCA Correction Cost | ($261,022,942) | N/A | N/A |
| Estimated Base Modernization Cost | ($1,747,203,620) | ($2,633,324,489) | ($2,645,392,167) |
| Additional Common/Lobby Space Needed (GSF) | - | 598,914 | 567,927 |
| Cost of Additional Common/Lobby Space | $0 | ($471,090,504) | ($450,669,737) |
| Additional Parking Cost | $0 | ($210,752,557) | ($461,393,275) |

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Potential Land Acquisition Cost | $0 | ($1,233,373) | ($111,747) |
| Seismic Correction Cost | ($1,217,249) | ($837,823) | ($831,773) |
| Non-Building FCA Correction Cost | ($19,695,534) | ($19,695,532) | ($5,251,420) |
| Activation Costs | $0 | ($478,188,643) | ($363,585,785) |
| Estimated Additional Costs for Modernization | ($20,912,784) | ($1,181,798,432) | ($1,281,843,737) |
| Cost Adjustment: In-Progress Construction | N/A | N/A | $0 |
| Cost Adjustment: In-Progress Lease | N/A | N/A | $28,332,756 |
| Estimated Facilities Costs (PV) | ($1,768,116,403) | ($3,815,122,921) | ($3,898,903,148) |

***Table 69 – Operational Costs by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| VA Direct | ($10,264,903,956) | ($10,264,903,956) | ($9,938,517,183) |
| Fixed Direct | ($1,143,341,368) | ($1,143,341,368) | ($1,099,866,371) |
| VA Specific Direct | ($406,675,388) | ($406,675,388) | ($402,192,187) |
| Indirect | ($5,281,255,123) | ($5,281,255,123) | ($5,069,355,744) |
| VA Specific Indirect | ($680,753,981) | ($680,753,981) | ($653,648,656) |
| Research and Education | ($9,802,840) | ($9,802,840) | ($7,956,745) |
| VA Overhead | ($951,809,620) | ($951,809,620) | ($910,884,880) |
| VA Care Operational Cost Total (PV) | ($18,738,542,275) | ($18,738,542,275) | ($18,082,421,766) |
| CC Direct | ($5,107,429,691) | ($5,107,429,691) | ($5,406,819,376) |
| Delivery and Operations | ($213,757,117) | ($213,757,117) | ($224,985,043) |

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Care Coordination | ($207,078,687) | ($207,078,687) | ($219,383,053) |
| CC Overhead | ($281,521,373) | ($281,521,373) | ($296,543,665) |
| Admin PMPM | ($1,387,581,684) | ($1,387,581,684) | ($1,369,360,770) |
| Non-VA Care Operational Cost Total (PV) | ($7,197,368,551) | ($7,197,368,551) | ($7,517,091,908) |
| Estimated Operational Costs (PV) | ($25,935,910,826) | ($25,935,910,826) | ($25,599,513,674) |

# Appendix B – VISN 10 Indiana: 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 | 138 | 165 | 104 | Under Supplied |
| IP Med/Surg | 117 | 141 | 143 | Over Supplied |
| IP MH | 42 | 51 | 44 | Adequately 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 | 7 | 26% |
| Under Supplied | 20 | 74% |

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 | 74.9% | 74.9% | Maintained within 1% |
| Status Quo | % of enrollees within 30 minutes of VA-provided OP Primary Care | 77.7% | 77.7% | Maintained within 1% |
| Status Quo | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 94.5% | 94.5% | Maintained within 1% |

| COA | Measure | Current | Future | Result |
|---|---|---|---|---|
| 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 | 74.9% | 74.9% | Maintained within 1% |
| Modernization | % of enrollees within 30 minutes of VA-provided OP Primary Care | 77.7% | 77.7% | Maintained within 1% |
| Modernization | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 94.5% | 94.5% | 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% |
| VA Recommendation | % of enrollees within 30 minutes of VA-provided OP Mental Health | 74.9% | 80.8% | Increased 1% or more |

| COA | Measure | Current | Future | Result |
|---|---|---|---|---|
| VA Recommendation | % of enrollees within 30 minutes of VA-provided OP Primary Care | 77.7% | 81.4% | Increased 1% or more |
| VA Recommendation | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 94.5% | 99.4% | Increased 1% or more |
| 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? |
|---|---|---|
| (V10) (583) Indianapolis-Indiana | 1952 | Yes |
| (V10) (610) Marion-Indiana | 1995 | No |
| (V10) (610A4) Fort Wayne-Indiana | 1949 | 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 |
|---|---|---|---|---|
| (V10) (610) Marion-Indiana | IP Med | 20 ADC | No Service | N/A |
| (V10) (610) Marion-Indiana | IP Surg | 1,600 Cases | No Service | N/A |
| (V10) (610) Marion-Indiana | IP MH | 8 ADC | Yes | Maintain |
| (V10) (583) Indianapolis | IP Med | 20 ADC | Yes | Replace/Relocate |
| (V10) (583) Indianapolis | IP Surg | 1,600 Cases | Yes | Replace/Relocate |
| (V10) (583) Indianapolis | IP MH | 8 ADC | Yes | Replace/Relocate |
| (V10) (610A4) Fort Wayne | IP Med | 20 ADC | No | Partner (CCN) |
| (V10) (610A4) Fort Wayne | IP Surg | 1,600 Cases | Yes | N/A |
| (V10) (610A4) Fort Wayne | IP MH | 8 ADC | No Service | N/A |

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? |
|---|---|---|---|
| (V10) (583) Indianapolis-Indiana | 1952 | 1993 | Yes |
| (V10) (610) Marion-Indiana | 1995 | N/A | No |
| (V10) (610A4) Fort Wayne-Indiana | 1949 | 1998 | 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 |
|---|---|---|---|---|
| (V10) (610) Marion-Indiana | No impact on training | No Research Program | No PRC Designation | Increases Research Opportunities, Increases Training Opportunities |

| Facility | Training Impact | Research Impact | 4th Mission Impact | Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities |
|---|---|---|---|---|
| (V10) (583) Indianapolis | No impact on training | Maintains or Has Plan to Transition | Maintains PRC-designation | Increases Research Opportunities, Increases Training Opportunities |
| (V10) (610A4) Fort Wayne | No impact despite deactivation of IP Acute Services | No Research Program | No PRC Designation | Increases Research Opportunities, Increases Training Opportunities |

# VISN 10 Eastern Michigan / MichErie

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 combined VISN 10 Eastern Michigan / MichErie Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (3.01) is 46.7% lower than the Status Quo COA (5.65) and 29.0% lower than the Modernization COA (4.24).

The VA Recommendation COA is $2.6 B (6.6%) more expensive than the Status Quo COA and $268.8 M (0.6%) 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 14-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 ($) | ($39,569,031,496) | ($42,444,537,277) | ($42,175,746,521) |
| Benefit Analysis Score | 7 | 10 | 14 |
| CBI (Normalized in $Billions) | 5.65 | 4.24 | 3.01 |
| CBI % Change vs. Status Quo | N/A | -24.9% | -46.7% |
| CBI % Change vs. Modernization | N/A | N/A | -29.0% |

***Table 80 – Cost Analysis Cost Variance by COA***

| Cost Variance | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Capital Cost Variance vs. Status Quo | N/A | ($2,875,505,780) | ($2,866,645,177) |
| Operational Cost Variance vs. Status Quo | N/A | $0 | $259,930,152 |
| Estimated Total Cost Variance vs. Status Quo | N/A | ($2,875,505,780) | ($2,606,715,025) |
| Estimated Total Cost Variance vs. Modernization | N/A | N/A | $268,790,756 |

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 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 | 3 |
| Facilities and Sustainability | 1 | 2 | 3 |
| Mission | 2 | 2 | 2 |
| **Total Benefit Score** | **7** | **10** | **14** |

## VA Recommendation

The VA Recommendation for the VISN 10 Eastern Michigan / MichErie Market COA is detailed below.

- Modernize and realign the Battle Creek VAMC by:
  - Constructing a new VAMC with inpatient mental health, CLC, and RRTP in the vicinity of Wyoming, Michigan
  - Relocating all inpatient and outpatient services currently provided at the Battle Creek VAMC to current or future VA facilities or community providers and discontinuing those services at the existing Battle Creek VAMC
  - Establishing a strategic collaboration with a community provider to deliver outpatient surgical services
  - Closing the Battle Creek VAMC
- Modernize by establishing a new stand-alone RRTP in the vicinity of Toledo, Ohio
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new MS CBOC in the vicinity of Kalamazoo, Michigan
  - Establishing a new CBOC in the vicinity of Fremont, Ohio
  - Relocating all services to a new site in the vicinity of the Flint, Michigan and closing the existing Flint CBOC
  - Relocating all services to a new site in the vicinity of Toledo, Ohio and closing the existing Toledo MS CBOC
  - Relocating all services to the proposed Canton MS CBOC and closing the Packard Road OOS
- Modernize the existing inpatient mental health patient rooms at the Detroit VAMC
- Modernize and realign the Saginaw VAMC by:
  - Establishing a new outpatient facility
  - Establishing a new RRTP
  - Modernizing the CLC
  - Establishing a strategic collaboration for outpatient surgical services in the vicinity of Saginaw, Michigan
- Modernize and realign outpatient facilities in the market by:

- Relocating all services to a new site in the vicinity of Port Huron, Michigan and closing the Yale CBOC
- Relocating all services to the Gaylord MS CBOC and closing the Grayling CBOC
- Relocating all services to the proposed outpatient building at the Saginaw VAMC and closing the Barnard Road OOS

## Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 10 Eastern Michigan / MichErie Market across a 30-year horizon. The cost of the VA Recommendation COA ($42.2 B) was higher than the Status Quo COA ($39.6 B) and lower than the Modernization COA ($42.4 B).

For the VISN 10 Eastern Michigan / MichErie Market, the VA Recommendation COA is $2.6 B (6.6%) more expensive than the Status Quo COA and $268.8 M (0.6%) 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 10 Eastern Michigan / MichErie: Capital and Operational Costs Detail.

***Table 82 – Total Cost Summary by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Total Costs (PV) | ($39,569,031,496) | ($42,444,537,277) | ($42,175,746,521) |
| Capital Cost Variance vs. Status Quo | N/A | ($2,875,505,780) | ($2,866,645,177) |
| Operational Cost Variance vs. Status Quo | N/A | $0 | $259,930,152 |
| Non-VA Care Operational Cost Variance | N/A | $0 | ($158,001,128) |
| VA Care Operational Cost Variance | N/A | $0 | $417,931,280 |
| Estimated Total Cost Variance vs. Status Quo | N/A | ($2,875,505,780) | ($2,606,715,025) |
| Estimated Total Cost Variance vs. Modernization | N/A | N/A | $268,790,756 |

# Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 10 Eastern Michigan / MichErie 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 | 3 |
| Facilities and Sustainability | 1 | 2 | 3 |
| Mission | 2 | 2 | 2 |
| **Total Benefit Score** | **7** | **10** | **14** |

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 10 Eastern Michigan / MichErie: 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 10 Eastern Michigan / MichErie 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 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 Wyoming VAMC to provide inpatient community living center and inpatient residential rehab treatment program services; 32,696 enrollees live within 60 minutes of the proposed facility
- Establishes a new Kalamazoo MS CBOC to provide primary care, specialty care, and outpatient mental health services; there are 12,169 enrollees for which the proposed facility is the closest VA point of care within 60 minutes
- Establishes a new Port Huron MS CBOC to provide primary care, specialty care, and outpatient mental health services; there are 6,292 enrollees for which the proposed facility is the closest VA point of care within 60 minutes
- Establishes a new Fremont CBOC to provide primary care and outpatient mental health services; there are 3,342 enrollees for which the proposed facility is the closest VA point of care within 30 minutes
- Establishes a new Toledo HCC to provide primary care, specialty care, outpatient mental health, and outpatient surgery services; 40,108 enrollees live within 60 minutes of the proposed facility
- Establishes a new Toledo RRTP to provide inpatient residential rehabilitative services; 55,699 enrollees live within 60 minutes of the proposed facility
- Expands the Lansing CBOC to a MS CBOC, adding specialty care services
- Expands the Canton CBOC to a MS CBOC, adding specialty care services
- Establishes the new Wyoming outpatient surgery partnership
- Establishes the new Saginaw 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 10 Eastern Michigan / MichErie 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 10 Eastern Michigan / MichErie for this domain.

***Table 86 – 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 actions to ensure adequate demand across inpatient acute service lines throughout the market:

- Transition Battle Creek's low census inpatient medicine program to the Western Michigan University/Michigan State University; Community Care Network

## 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 10 Eastern Michigan / MichErie 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 Wyoming outpatient surgery partnership
- Establishes the new Saginaw 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 10 Eastern Michigan / MichErie for this domain.

***Table 88 – Mission Scoring Summary***

| Subdomain | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Education | 2 | 2 | 1 |
| 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 1 because it impacts inpatient acute service lines and thus introduces risk to 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 10 Eastern Michigan / MichErie 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 | 5.65 | 4.24 | 3.01 | VA Recommendation |
| +1 | 4.95 | 3.86 | 3.01 | VA Recommendation |
| +2 | 4.40 | 3.54 | 3.01 | VA Recommendation |
| +3 | 3.96 | 3.26 | 3.01 | 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% | 5.65 | 4.24 | 3.01 | VA Recommendation |
| 50% | 5.81 | 4.50 | 3.19 | VA Recommendation |
| 100% | 5.97 | 4.75 | 3.38 | VA Recommendation |
| 150% | 6.13 | 5.01 | 3.56 | VA Recommendation |
| 200% | 6.29 | 5.26 | 3.74 | VA Recommendation |
| 250% | 6.45 | 5.52 | 3.92 | VA Recommendation |
| 300% | 6.61 | 5.78 | 4.10 | 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% | 5.65 | 4.24 | 3.01 | VA Recommendation |
| 50% | 7.57 | 5.58 | 3.95 | VA Recommendation |
| 100% | 9.48 | 6.92 | 4.90 | VA Recommendation |
| 150% | 11.40 | 8.27 | 5.84 | VA Recommendation |
| 200% | 13.31 | 9.61 | 6.78 | VA Recommendation |
| 250% | 15.23 | 10.95 | 7.72 | VA Recommendation |

| VA Operational Cost Increase % | Status Quo CBI | Modernization CBI | VA Recommendation CBI | Leader (lowest CBI) |
|---|---|---|---|---|
| 300% | 17.14 | 12.29 | 8.67 | 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% | 5.65 | 4.24 | 3.01 | VA Recommendation |
| 50% | 6.41 | 4.77 | 3.39 | VA Recommendation |
| 100% | 7.16 | 5.30 | 3.78 | VA Recommendation |
| 150% | 7.91 | 5.83 | 4.16 | VA Recommendation |
| 200% | 8.66 | 6.35 | 4.54 | VA Recommendation |
| 250% | 9.42 | 6.88 | 4.92 | VA Recommendation |
| 300% | 10.17 | 7.41 | 5.30 | VA Recommendation |

# Appendix A – VISN 10 Eastern Michigan / MichErie: Capital and Operational Costs Detail

***Table 94 – Capital Costs by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| VAMC Ideal Square Footage | - | 4,056,929 | 3,677,442 |
| Build New GSF | - | 1,520,925 | 1,294,833 |
| Renovate In Place GSF | - | 1,488,482 | 1,448,729 |
| Matched Convert To GSF | - | 515,198 | 480,688 |
| Demolition GSF | - | 1,598,952 | 1,666,244 |
| Total Build New Cost | $0 | ($1,426,358,230) | ($1,227,700,888) |
| Total Renovate In Place Cost | $0 | ($640,226,329) | ($637,608,789) |
| Total Matched Convert To Cost | $0 | ($230,296,538) | ($215,444,350) |
| Total Demolition Cost | $0 | ($57,551,416) | ($43,596,177) |
| Total Lease Build-Out Cost | $0 | ($181,883,111) | ($277,421,333) |
| Total New Lease Cost | $0 | ($739,809,318) | ($1,175,243,374) |
| Total Existing Lease Cost | ($293,446,237) | ($293,446,237) | ($195,476,158) |
| NRM Costs for Owned Facilities | ($1,541,500,816) | ($473,616,457) | ($429,314,131) |
| FCA Correction Cost | ($323,746,200) | N/A | N/A |
| Estimated Base Modernization Cost | ($2,158,693,253) | ($4,043,187,636) | ($4,201,805,200) |
| Additional Common/Lobby Space Needed (GSF) | - | 532,324 | 453,192 |
| Cost of Additional Common/Lobby Space | $0 | ($431,096,207) | ($373,029,338) |
| Additional Parking Cost | $0 | ($166,617,364) | ($168,354,498) |

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Potential Land Acquisition Cost | $0 | ($2,738,408) | ($7,217,474) |
| Seismic Correction Cost | ($1,243,595) | ($945,470) | ($938,986) |
| Non-Building FCA Correction Cost | ($66,814,813) | ($66,814,813) | ($29,581,715) |
| Activation Costs | $0 | ($390,857,544) | ($323,335,780) |
| Estimated Additional Costs for Modernization | ($68,058,408) | ($1,059,069,806) | ($902,457,791) |
| Cost Adjustment: In-Progress Construction | N/A | N/A | $0 |
| Cost Adjustment: In-Progress Lease | N/A | N/A | $10,866,153 |
| Estimated Facilities Costs (PV) | ($2,226,751,661) | ($5,102,257,442) | ($5,093,396,838) |

***Table 95 – Operational Costs by COA***

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| VA Direct | ($14,662,376,008) | ($14,662,376,008) | ($14,433,352,665) |
| Fixed Direct | ($1,771,293,863) | ($1,771,293,863) | ($1,754,659,317) |
| VA Specific Direct | ($333,242,218) | ($333,242,218) | ($331,118,272) |
| Indirect | ($7,826,769,211) | ($7,826,769,211) | ($7,692,972,421) |
| VA Specific Indirect | ($843,218,548) | ($843,218,548) | ($827,514,035) |
| Research and Education | ($36,455,658) | ($36,455,658) | ($36,455,658) |
| VA Overhead | ($1,330,831,344) | ($1,330,831,344) | ($1,310,183,202) |
| VA Care Operational Cost Total (PV) | ($26,804,186,849) | ($26,804,186,849) | ($26,386,255,570) |
| CC Direct | ($7,428,196,941) | ($7,428,196,941) | ($7,574,066,390) |
| Delivery and Operations | ($310,041,930) | ($310,041,930) | ($315,379,523) |

| | Status Quo | Modernization | VA Recommendation |
|---|---|---|---|
| Care Coordination | ($298,104,140) | ($298,104,140) | ($303,874,453) |
| CC Overhead | ($400,955,885) | ($400,955,885) | ($408,086,609) |
| Admin PMPM | ($2,100,794,089) | ($2,100,794,089) | ($2,094,687,139) |
| Non-VA Care Operational Cost Total (PV) | ($10,538,092,986) | ($10,538,092,986) | ($10,696,094,114) |
| Estimated Operational Costs (PV) | ($37,342,279,835) | ($37,342,279,835) | ($37,082,349,683) |

# Appendix B – VISN 10 Eastern Michigan / MichErie: 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 | 262 | 315 | 256 | Under Supplied |
| IP Med/Surg | 109 | 131 | 201* | Over Supplied |
| IP MH | 74 | 89 | 101 | Over Supplied |

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

*The Saginaw VAMC (655) beds are not included, the VAMC was closed October, 2019.

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 | 10 | 37% |
| Under Supplied | 17 | 63% |

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 | 78.2% | 78.2% | Maintained within 1% |

| COA | Measure | Current | Future | Result |
|---|---|---|---|---|
| Status Quo | % of enrollees within 30 minutes of VA-provided OP Primary Care | 78.7% | 78.7% | Maintained within 1% |
| Status Quo | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 94.1% | 94.1% | Maintained within 1% |
| 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 | 99.9% | 99.9% | 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 | 78.2% | 78.2% | Maintained within 1% |
| Modernization | % of enrollees within 30 minutes of VA-provided OP Primary Care | 78.7% | 78.7% | Maintained within 1% |
| Modernization | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 94.1% | 94.1% | 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 | 99.9% | 99.9% | Maintained within 1% |

| COA | Measure | Current | Future | Result |
|---|---|---|---|---|
| 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 | 78.2% | 78.2% | Maintained within 1% |
| VA Recommendation | % of enrollees within 30 minutes of VA-provided OP Primary Care | 78.7% | 78.7% | Maintained within 1% |
| VA Recommendation | % of enrollees within 60 minutes of VA-provided OP Specialty Care | 94.1% | 96.6% | Increased 1% or more |
| 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 | 99.9% | 99.9% | 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 100 – Quality Key Data Points for Scoring – Age***

| Facility | Main Patient Care Facility Construction Date | Built Pre-1970? |
|---|---|---|
| (V10) (506) Ann Arbor-Michigan | 1950 | Yes |
| (V10) (515) Battle Creek | 1931 | Yes |
| (V10) (553) Detroit-Michigan | 1996 | No |
| (V10) (655) Saginaw-Michigan | 1950 | 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 |
|---|---|---|---|---|
| (V10) (506) Ann Arbor | IP Med | 20 ADC | Yes | Maintain |
| (V10) (506) Ann Arbor | IP Surg | 1,600 Cases | Yes | Maintain |
| (V10) (506) Ann Arbor | IP MH | 8 ADC | Yes | Maintain |
| (V10) (515) Battle Creek | IP Med | 20 ADC | No | Partner (CCN) |
| (V10) (515) Battle Creek | IP Surg | 1,600 Cases | No Service | N/A |
| (V10) (515) Battle Creek | IP MH | 8 ADC | Yes | Relocate |
| (V10) (553) Detroit | IP Med | 20 ADC | Yes | Maintain |
| (V10) (553) Detroit | IP Surg | 1,600 Cases | Yes | Maintain |
| (V10) (553) Detroit | 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 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? |
|---|---|---|---|
| (V10) (506) Ann Arbor-Michigan | 1950 | 2002 | Yes |
| (V10) (515) Battle Creek | 1931 | 1997 | Yes |
| (V10) (553) Detroit-Michigan | 1996 | N/A | No |
| (V10) (655) Saginaw-Michigan | 1950 | 1987 | 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? |
|---|---|
| (V10) Wyoming OP Surg Partnership | Yes |
| (V10) Saginaw OP Surg 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 |
|---|---|---|---|---|
| (V10) (506) Ann Arbor | No impact on training | Maintains or Has Plan to Transition | No PRC Designation | Increases Research Opportunities |
| (V10) (515) Battle Creek | Deactivates IP Acute Service with training | No Research Program | No PRC Designation | Increases Research Opportunities |
| (V10) (553) Detroit | No impact on training | Maintains or Has Plan to Transition | No PRC Designation | Increases Research Opportunities |