



February 2022

# VA HEALTH CARE

## Incomplete Information Hinders Usefulness of Market Assessments for VA Facility Realignment

Accessible Version

## Why GAO Did This Study

The VA MISSION Act of 2018 required VA to assess its capacity to deliver health care to veterans. This was done in response to challenges facing the department such as an aging veteran population, antiquated health care infrastructure, and limitations with VA's capital planning processes. VA officials said these market assessments—conducted at the VA health care market level—will inform the Secretary's planned recommendations on modernizing and realigning VA health care delivery that the VA MISSION Act requires VA to issue by January 31, 2022.

GAO was asked to review VA's market assessment methodology. This report (1) describes VA's approach to its market assessments; and (2) identifies limitations in that approach.

GAO reviewed VA documents and data used to inform the market assessments and interviewed VA officials responsible for conducting the market assessments.

## What GAO Recommends

GAO is making two recommendations for the VA Secretary: (1) to improve the completeness of VA community care data, and (2) to externally communicate to the Asset and Infrastructure Review Commission information about VA data reliability and any limitations of information used in the market assessments. VA concurred with the recommendations, and identified steps it will take to implement them. For example, VA noted that the department will provide the Commission information outlining the completeness and limitations of VA data used in the market assessments.

View [GAO-22-104604](#). For more information, contact Sharon Silas at (202) 512-7114 or [SilasS@gao.gov](mailto:SilasS@gao.gov).

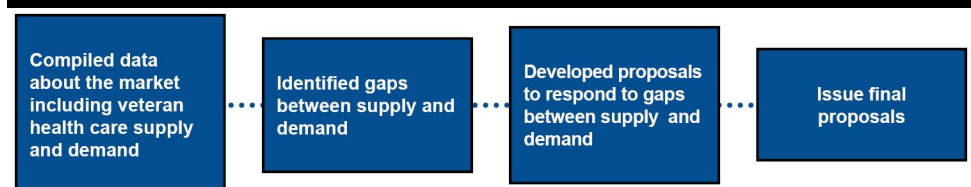
## VA HEALTH CARE

### Incomplete Information Hinders Usefulness of Market Assessments for VA Facility Realignment

## What GAO Found

The Department of Veterans Affairs (VA) conducted assessments of its capacity within 96 markets to deliver health care to veterans through VA providers and, when the Department cannot provide the care needed, through non-VA providers, known as community care. For these assessments, markets are designated geographic areas made up of a set of contiguous counties that contain one or more VA medical centers and associated clinics. For an overview of VA's approach, see the figure.

#### Overview of Department of Veterans Affairs' Approach to Its Market Assessments



Source: GAO analysis of Department of Veterans Affairs (VA) documents and interviews with VA officials. | GAO-22-104604

#### Text of Overview of Department of Veterans Affairs' Approach to Its Market Assessments

- Compiled data about the market including veteran health care supply and demand
- Identified gaps between supply and demand
- Developed proposals to respond to gaps between supply and demand
- Issue final proposals

Source: GAO analysis of Department of Veterans Affairs (VA) documents and interviews with VA officials. | GAO-22-104604

VA officials described the department's process of developing proposals as iterative in that VA continually reviewed and revised draft proposals throughout the market assessments process. The VA Secretary plans to transmit recommendations to the Asset and Infrastructure Review Commission by March 14, 2022—that is, no later than 6 weeks from the statutory deadline of January 31, 2022. The Commission will then review these recommendations, hold public hearings, and prepare and issue their own recommendations to the President.

GAO identified gaps in the data VA compiled and certified for the market assessments that were relevant to determining both the supply of and demand for non-VA care. For example, VA lacked complete data on the extent to which its contractors maintain an adequate number of non-VA providers to ensure veterans have timely access to community care. VA officials told GAO that they determined supply and demand based on the most recently available data at the time of data compilation—December 2018 to November 2020. In addition, while VA officials told GAO the end-of-assessment analyses included updated data on community care, these data did not address the gaps GAO identified. Without such information, VA lacks a full understanding of the extent to which community care is able to supplement VA facility care to meet veterans' current and future demand.

GAO also found that VA's approach to the market assessments did not include steps to collect information on the quality of VA data compiled from numerous VA data sources or other steps to understand any relevant data limitations. Instead, VA officials leading the market assessments said they relied on VA offices responsible for the databases to ensure the data quality. As a result, VA is unable to communicate to external stakeholders, such as the Asset and Infrastructure Review Commission, all relevant information on the quality of VA data used in market assessments, including any limitations affecting these data and the resulting proposals for realignment.

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**Abbreviations**

MISSION Act	VA MISSION Act of 2018
VA	Department of Veterans Affairs
VHA	Veterans Health Administration

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February 2, 2022

The Honorable Jon Tester  
Chairman  
Committee on Veterans' Affairs  
United States Senate

The Honorable Mark Takano  
Chairman  
Committee on Veterans' Affairs  
House of Representatives

The Department of Veterans Affairs (VA) administers one of the largest health care systems in the nation and offers health care services to about 9 million veterans enrolled in VA health care at 171 VA medical centers and more than 1,100 outpatient facilities organized into regional networks.<sup>1</sup> In addition, eligible veterans also may obtain services from non-VA providers, known as community care, when VA cannot provide the care needed.<sup>2</sup> While veterans still receive most of their care in VA medical facilities, according to VA, the number of veterans who received community care increased 64 percent from approximately 1.1 million in 2014 to 1.8 million in 2020.

VA provides health care services to various veteran populations, including an aging veteran population and a higher proportion of women veterans than in previous generations. These and other demographic shifts in the population served by VA are expected to drive changes in veterans' needs for care and in their preferences for how their care will be delivered. Such changes have implications for how VA addresses its

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<sup>1</sup>The number of medical centers and outpatient facilities is current as of September 2021.

<sup>2</sup>The Veterans Community Care Program—established by the VA MISSION Act of 2018 and implemented on June 6, 2019—is the most recent iteration of VA's long-standing practice of allowing veterans to receive care from community providers when they face challenges accessing care at VA medical facilities. VA purchases community care under the Veterans Community Care Program through regional contracts. See Pub. L. No. 115-182, tit. I, § 101, 132 Stat. 1393, 1395-1404 (2018), codified at 38 U.S.C. § 1703, and implementing regulations at 38 C.F.R. §§ 17.4000 - 17.4040. VA also has the option to use direct agreements, known as Veterans Care Agreements, with community providers for care not included in community care contracts, and the option to refer veterans to other federal health care facilities with whom VA has an agreement, such as Department of Defense military treatment facilities.

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aging infrastructure while ensuring veterans' needs are met with timely access to high-quality and cost-effective care.<sup>3</sup>

Since 1999, VA's efforts to modernize and realign its health care facilities have been the subject of several assessments.<sup>4</sup> However, in spite of these assessments and their findings, VA faces many of the same challenges with its facilities as it did more than 20 years ago.

The VA MISSION Act of 2018 (MISSION Act) required VA to conduct the latest system-wide assessment of its capacity to provide health care services to veterans to be used for making recommendations regarding modernizing and realigning the department's facilities.<sup>5</sup> In response to this and other requirements, VA began in December 2018 its Market Area Health System Optimization Assessments, hereafter referred to in this report as market assessments.<sup>6</sup> These market assessments are to examine the capacity of VA—defined as consisting of both VA facility and community care—to provide quality, accessible, and timely health care

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<sup>3</sup>GAO maintains a high-risk program to focus attention on government operations that it identifies as high risk due to their greater vulnerabilities to fraud, waste, abuse, and mismanagement or the need for transformation to address economy, efficiency, or effectiveness challenges. Aligning VA facilities to improve veteran access to services integrates two of GAO's high risk areas: veterans' health care and federal real property. In 2015, GAO placed veterans' health care on its High Risk List due to persistent weaknesses and systemic problems with timeliness, cost-effectiveness, quality, and safety of the care provided to veterans. GAO, *High-Risk Series: An Update*, [GAO-15-290](#) (Washington, D.C.: February 2015). In 2003, GAO placed federal real property management—including management of VA real property—on its High Risk List due to long-standing challenges, such as effectively disposing of excess and underutilized federal property. See GAO, *High-Risk Series: Federal Real Property*, [GAO-03-122](#) (Washington, D.C.: Jan. 1, 2003).

<sup>4</sup>For example, in 1999, VA initiated a process known as Capital Asset Realignment for Enhanced Services. This process was designed to assess VA's buildings and land ownership in light of expected demand for VA inpatient and outpatient health care services through fiscal year 2022. Through Capital Asset Realignment for Enhanced Services, VA sought to determine what health care services veterans would need in what locations.

<sup>5</sup>VA MISSION Act of 2018, Pub. L. No. 115-182, tit. II, § 203, 132 Stat. 1393-1446 (2018).

<sup>6</sup>VA officials stated that, during 2016 and 2017, the department conducted a pilot phase for its approach to the market assessments. VA planned to start the market assessments in late 2017 awarding a contract for support services. However, litigation delayed the execution of that contract until December 2018, according to VA officials.

services to veterans within 96 markets.<sup>7</sup> Accordingly, VA officials said the department's objectives for the market assessments included assessing VA and non-VA health care resources available (i.e., supply) to meet the current and future health care needs of veterans (i.e., demand), identifying gaps between supply and demand, and proposing actions to address those gaps, hereafter referred to as proposals.<sup>8</sup> The MISSION Act also required the Secretary of VA to submit, by January 31, 2022, recommendations for the modernization or realignment of VA facilities to the Asset and Infrastructure Review Commission—a presidentially appointed and Senate confirmed commission that will review and analyze the recommendations made by the Secretary.<sup>9</sup> As of November 2021, VA continued to review and revise proposals from the market assessment that will form the basis for the Secretary's recommendations.

You asked us to review VA's methodology for conducting its market assessments. In this report, we

1. describe what is known about VA's approach for the market assessments; and
2. identify limitations, if any, about the data and information used in the department's approach.

To describe what is known about VA's overall approach for the market assessments, we reviewed VA's documentation for its market assessment design (i.e., what the department planned to do). We also reviewed documentation of VA's implementation of the market assessments (i.e., what it actually did) that VA provided to us, which was limited in amount and detail. For example, we reviewed a list of data VA planned to compile in each market, as well as the data VA actually

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<sup>7</sup>For the purposes of these assessments, a "market" is a designated geographic area made up of a set of contiguous counties that usually contains at least one medical center, or in some markets multiple medical centers, and associated clinics. VA divided its regional networks into markets to effectively plan for the provision of services to meet the health care needs of the veteran population that resides within each market's boundaries. According to VA officials, VA has 98 markets as of January 2021, but excluded from the market assessments two markets that cover areas outside of the United States.

<sup>8</sup>VA also examined other aspects of supply and demand for VA health care including access, quality, and cost as part of the market assessments.

<sup>9</sup>Pub. L. No. 115-182, tit. II, §§ 202(c), 203(b), 132 Stat. at 1443-46. As of January 2022, the Commission members have not been nominated, according to a VA official.



compiled for five of the 96 markets.<sup>10</sup> For aspects of VA's approach where implementation was still ongoing during the period of our review, such as how VA developed proposals to respond to identified gaps in veteran health care supply and demand, we reviewed only design documentation. We did not obtain information about the proposals themselves—that is, the results of VA's assessments of supply and demand which offer plans that include modernizing and realigning VA facilities to meet veterans' needs.

To identify any limitations in the department's approach for the market assessments, we assessed what is known about VA's approach for the market assessments in the context of federal internal control standards for information and communication.<sup>11</sup> For both objectives, we obtained testimonial evidence by interviewing and obtaining written responses on VA's approach from officials in the Veterans Health Administration's (VHA) Chief Strategy Office—the office responsible for conducting the market assessments, according to VA officials. We also interviewed and received written responses from VA officials from other relevant offices who participated in an advisory group that VA officials said provided input to the VHA Chief Strategy Office during the market assessments. These offices included VA's Office of Construction and Facilities Management and Office of Asset Enterprise Management and VHA's VA/DOD Health Affairs. We also interviewed officials from four veteran service organizations—Veterans of Foreign Wars, Disabled American Veterans, Vietnam Veterans of America, and Paralyzed Veterans of America—regarding VA's consultation of such organizations and veterans during the market assessments.

We conducted this performance audit from October 2020 to February 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe

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<sup>10</sup>We reviewed VA's slide presentations compilation of data for each of five markets; we selected the markets for variation in number of veterans in the market, rurality, and geographic location.

<sup>11</sup>Internal control is a process effected by an entity's oversight body, management, and other personnel that provides reasonable assurance that the objectives of an entity will be achieved. In this review, we relied specifically on internal control Principle 13, which states, "Management should use quality information to achieve entity's objectives," and Principle 15, which states, "Management should externally communicate the necessary quality information to achieve the entity's objectives." GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 2014).

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that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## Background

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### VA's Health Care System

VA reported as of September 2021, that it provides direct health care services to enrolled veterans through its

- 171 medical centers that offer inpatient care, such as surgery, critical care, and other advanced care requiring an overnight stay, in addition to outpatient services, such as diagnostic tests and minor surgeries like mole removal, among other services.
- 134 nursing homes, known as community living centers, which provide skilled nursing care to veterans with chronic stable conditions, such as dementia; those who require rehabilitation services; and those needing care and comfort at the end of life.<sup>12</sup>
- 1,115 outpatient facilities, which generally provide clinic-based services and include primary care, specialty care, and mental health services.

In order to meet the needs of the veterans it serves, VA is also authorized to pay for veteran health care services from certain non-VA providers in veterans' communities (i.e., community care). As required by the MISSION Act, VA implemented the Veterans Community Care Program in June 2019, consolidating many of VA's existing community care programs into a permanent program.<sup>13</sup> To implement the Veterans Community Care Program, VA issued regulations and defined certain eligibility criteria for the new program.<sup>14</sup> For example, veterans may be eligible to receive care under the program when services are not available at a VA facility or when veterans face wait times or drive times to VA

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<sup>12</sup>The number of nursing homes is current as of June 2021.

<sup>13</sup>Pub. L. No. 115-182, tit. I, § 101, 132 Stat. 1393, 1395 (2018) (codified as amended at 38 U.S.C. § 1703).

<sup>14</sup>See 38 C.F.R. §§ 17.4000 - 17.4040 (2020).

facilities longer than certain VA standards.<sup>15</sup> VA purchases community care under this program through regional contracts with two third-party administrators, which are responsible for recruiting and building networks of licensed health care community providers and for paying community provider claims.<sup>16</sup> VA also has the option to use direct agreements with community providers for care not included in those network contracts, and also may refer veterans to other federal health care facilities with whom VA has an agreement, such as Department of Defense treatment facilities.

VA organizes its health care system into 18 regional networks that are each responsible for coordination and oversight of all administrative and clinical activities of the VA medical centers, outpatient clinics, and other health care facilities within its geographic region. For planning purposes, its regional networks are further divided into markets—usually along county lines—in consideration of veteran travel and referral patterns, geographic dispersion of veteran enrollees in VA health care, and locations of medical facilities within the market.<sup>17</sup> Each market may have differing numbers of VA medical centers and other VA health care facilities. See appendix I for a map that shows the geographic boundaries of the 96 markets included in VA’s market assessments and a table that reports certain demographic information (e.g., the number of veterans

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<sup>15</sup>See 38 C.F.R. § 17.4010 (2020) (veteran’s eligibility). VA’s designated access standards include when the veteran’s average drive time to a VA provider is more than 30 minutes for primary care or more than 60 minutes for specialty care, or the next available appointment with a VA provider is not within 20 days for primary care or 28 days for specialty care of the date of request of care unless a later date has been agreed upon. 38 C.F.R. § 17.4040 (2020) (designated access standards). See also VA, Veterans Health Administration *Office of Community Care Field Guidebook* (May 21, 2020); Veterans Health Administration: *Referral Coordination Initiative Implementation Guidebook* (Jan. 10, 2020); and *Fact Sheet: Veteran Community Care Eligibility* (Aug. 30, 2019).

<sup>16</sup>VA’s third-party administrators that develop and administer Community Care Networks include Optum Public Sector Solutions and TriWest Healthcare Alliance.

<sup>17</sup>VA first designated its markets during an earlier VA assessment of its health care capital-asset priorities that began in 1999. VA also uses these markets in its annual capital planning process. According to VA officials, the department has periodically reviewed and reconsidered the market geographic boundaries over time. According to VA officials, there are currently 98 markets as of January 2021, two of which cover regions located outside of the United States and its territories.

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eligible for and the number of veterans enrolled in VA health care) for each market.<sup>18</sup>

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## VA's Health Care Capital Infrastructure

Part of the stated goals for the market assessments was to ensure VA modernization efforts helped align veterans' health care demand and needs. Much of VA's health care infrastructure—including more than 5,600 buildings as of October 2021—were built decades ago and designed for an inpatient-driven health care system. Similar to trends in the health care industry overall, VA's model of care has shifted away from providing care in an inpatient setting, to that of an outpatient setting, which VA largely houses in converted inpatient facilities, or in a growing number of outpatient clinics.

VA has used the Strategic Capital Investment Planning process annually since 2010, in partnership with VHA's 18 regional networks to manage certain capital assets, such as medical centers and other buildings.<sup>19</sup>

There are similarities and some key differences between VA's approach to its market assessments and the Strategic Capital Investment Planning process—VA's main mechanism for planning and prioritizing capital planning:

- Like the market assessments, one of the goals of the Strategic Capital Investment Planning process is to identify the full capital need to address VA's service and infrastructure gaps.
- Both the VA market assessments approach and the Strategic Capital Investment Planning process use one of VA's models—VA's Enrollee Healthcare Projection Model—to project veteran enrollment, utilization of VA health care, and the associated expenditures VA needs to meet the expected demand for most of the health care services it provides.
- One key distinction is that, in general, VA designed the market assessment process to look at its health care system as a whole, while the Strategic Capital Investment Planning process focuses only on capital needs, according to VA officials.

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<sup>18</sup>VA excluded from the market assessments the two markets that cover regions outside of the United States and its territories, according to VA officials.

<sup>19</sup>Capital assets are generally land, structures, equipment, intellectual property, and information technology used by the federal government that have an estimated useful life of 2 years or more.

- Another key distinction is that VA's market assessment approach considers additional sources of data and information about the supply of non-VA health care resources available in a market, whereas the Strategic Capital Investment Planning process does not.

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## VA Market Assessments and Independent Asset and Infrastructure Review Commission

In response to MISSION Act and other requirements, VA conducted market assessments of 96 markets between December 2018 and January 2022. VA officials said the objectives of the market assessments are to help VA

- understand the supply of VA and non-VA health care resources available to meet the current and future veteran demand for VA health care services, and
- identify and respond to any gaps between supply and demand.<sup>20</sup>

VA officials said if they identified gaps for a market in any direction—for example, not enough resources to meet higher demand for health care, or outsized resources compared to lower demand—they would then develop a proposal (referred to as an “opportunity” within VA) to align resources with demand for that market or regionally for multiple markets. VA documentation indicated that proposals could include actions such as adding, discontinuing, or relocating services at VA or non-VA sites of care; closing or relocating VA sites of care; or constructing and leasing new sites of care, including the following examples:

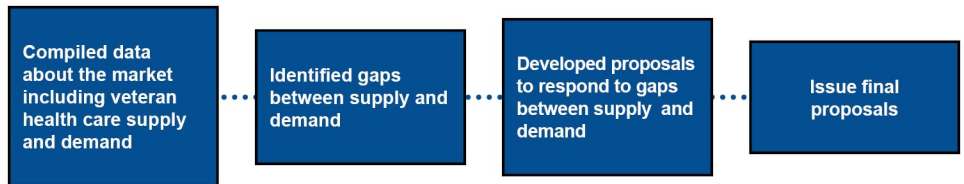
- In a market that is projected to grow in population and enrollees in VA health care, VA leases new space for a VA outpatient clinic in a certain city to increase access to primary care services for veterans.
- In a market where utilization of VA inpatient services is low and projected to decline further, VA stops providing inpatient medical services at a VA medical center. VA relies on community care facilities to provide the inpatient services to veterans as those facilities have enough availability to cover the needs of veterans affected by the change.

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<sup>20</sup>To help achieve these objectives, VA established 10 system-wide principles for the market assessments such as, ensure veterans are provided the opportunity to choose care they trust throughout their lifetime. See appendix II for the full list of system-wide principles.

If a proposal identified the same need as VA’s annual planning processes, VA officials said the proposal was removed from the market assessments. For example, VA officials explained how one market assessment proposal for establishing a new outpatient clinic was removed, because the need for the clinic had been determined during the market assessments through VA’s Strategic Capital Investment Planning process. (See Figure 1 for an overview of VA’s market assessment process.)

**Figure 1: Overview of the Department of Veterans Affairs’ Approach to Health Care Market Assessments**



Source: GAO analysis of Department of Veterans Affairs (VA) documents and interviews with VA officials. | GAO-22-104604

**Text of Figure 1: Overview of the Department of Veterans Affairs’ Approach to Health Care Market Assessments**

- Compiled data about the market including veteran health care supply and demand
- Identified gaps between supply and demand
- Developed proposals to respond to gaps between supply and demand
- Issue final proposals

Source: GAO analysis of Department of Veterans Affairs (VA) documents and interviews with VA officials. | GAO-22-104604

According to VA officials, the Secretary will use the proposals developed through the market assessments that meet both the MISSION Act definitions of modernization or realignment and the Secretary’s approval as recommendations.<sup>21</sup> The MISSION Act also established the independent Asset and Infrastructure Review Commission to assess these recommendations from the VA Secretary, and to issue its own

<sup>21</sup>According to the MISSION Act, “modernization” and “realignment” include, among other things, actions such as closures, construction, purchasing, leasing, and sharing of VHA facilities, and actions that change the numbers of or relocate VHA services, functions, and personnel positions. See Pub. L. No. 115-182, tit. II, § 209, 132 Stat. 1393, 1460 (2018).

recommendations.<sup>22</sup> The MISSION Act requires the VA Secretary to transmit the recommendations to the Commission by January 31, 2022.<sup>23</sup> The Commission must then hold public hearings and review the Secretary's recommendations to prepare and issue their own recommendations to the President by January 31, 2023.<sup>24</sup> Figure 2 depicts the timelines for reviews that involve the Commission, President, and Congress, as established in the MISSION Act.

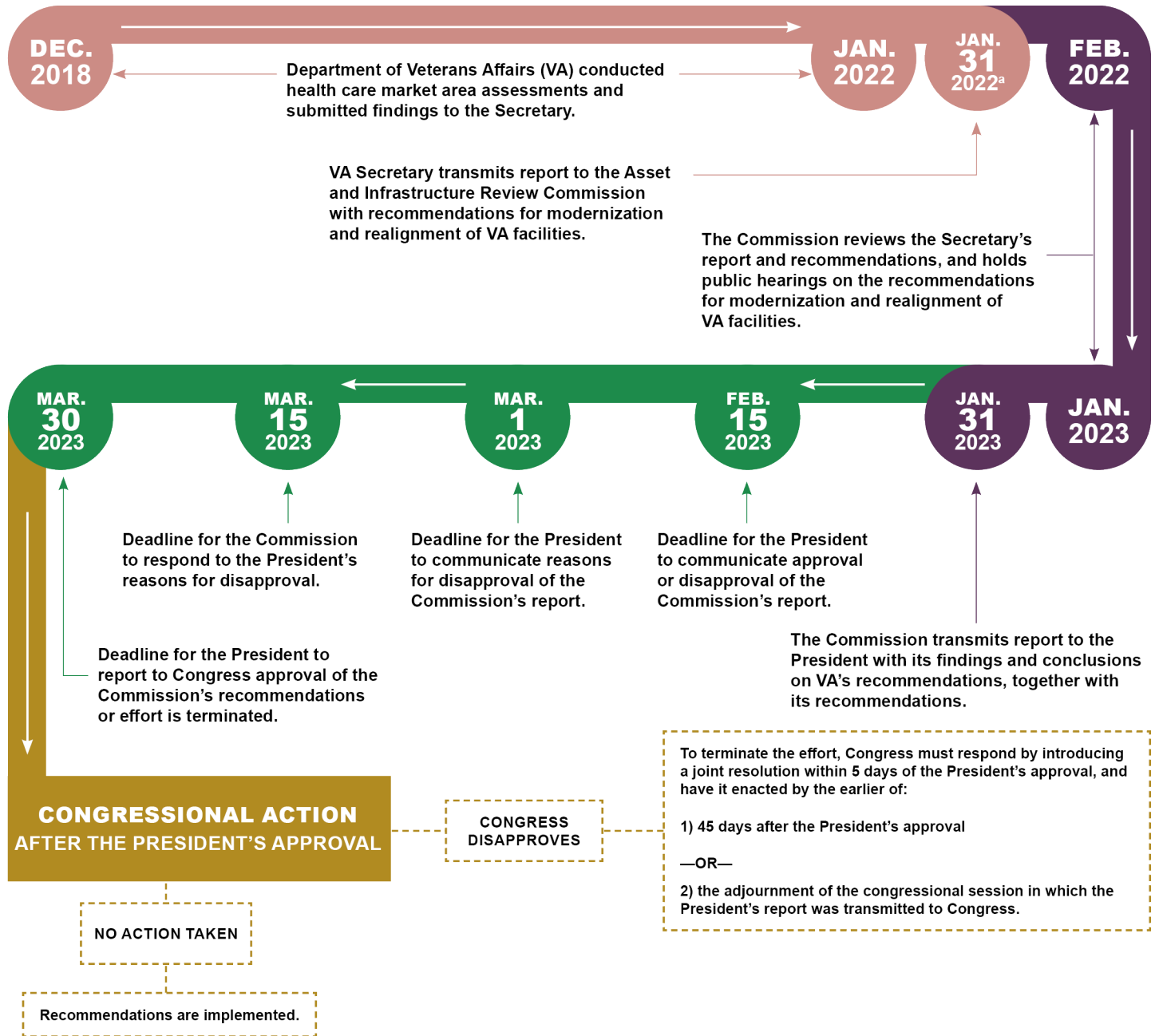
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<sup>22</sup>The President was to transmit to the Senate his nominations for appointments to the Commission by May 31, 2021. Pub. L. No. 115-182, tit. II, § 202(c)(1)(B), 132 Stat. 1393, 1443 (2018). As of January 2022, the Commission members have not been nominated, according to a VA official.

<sup>23</sup>In January 2022, the VA Secretary announced that the Department would delay the transmission of the recommendations to the Commission to no later than March 14, 2022—that is, no later than 6 weeks from the statutory deadline of January 31, 2022.

<sup>24</sup>VA officials noted that the department would not implement those proposals that move forward as recommendations by the Secretary until after the Commission's and other external reviews conclude.

**Figure 2: Timeline for VA MISSION Act of 2018 Requirements for the Department of Veterans Affairs (VA) Market Assessments and the Asset and Infrastructure Review Commission’s Review**



Source: VA MISSION Act of 2018 and GAO interviews with Department of Veterans Affairs officials. | GAO-22-104604



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**Text of Figure 2: Timeline for VA MISSION Act of 2018 Requirements for the Department of Veterans Affairs (VA) Market Assessments and the Asset and Infrastructure Review Commission's Review**

- Dec. 18 to Jan. 2022: Department of Veterans Affairs (VA) conducted health care market area assessments and submitted findings to the Secretary.
- Feb. 2022 to Jan. 2023: The Commission reviews the Secretary's report and recommendations, and holds public hearings on the recommendations for modernization and realignment of VA facilities.
- Jan. 31, 2023 to Feb. 15, 2023: The Commission transmits report to the President with its findings and conclusions on VA's recommendations, together with its recommendations.
- Feb. 15, 2023: Deadline for the President to communicate approval or disapproval of the Commission's report.
- March 1 to March 15, 2023: Deadline for the President to communicate reasons for disapproval of the Commission's report.
- March 15, 2023: Deadline for the Commission to respond to the President's reasons for disapproval.
- March 30, 2023: Deadline for the President to report to Congress approval of the Commission's recommendations or effort is terminated.
  - Congressional action after The President's approval
    - No action taken / Recommendations are implemented.
    - Congress disapproves / To terminate the effort, Congress must respond by introducing a joint resolution within 5 days of the President's approval, and have it enacted by the earlier of: 1) 45 days after the President's approval —OR— 2) the adjournment of the congressional session in which the President's report was transmitted to Congress.

Note: According to the VA MISSION Act of 2018, "modernization" and "realignment" include, among other things, actions such as closures, construction, purchasing, leasing, and sharing of VHA facilities, and actions that change the numbers of or relocate VHA services, functions, and personnel positions. See Pub. L. No. 115-182, tit. II, § 209, 132 Stat. 1393, 1460 (2018).

<sup>a</sup>In January 2022, the VA Secretary announced that the department would delay the transmission of the recommendations to the Commission to no later than March 14, 2022—that is, no later than 6 weeks from the statutory deadline of January 31, 2022.

Source: VA MISSION Act of 2018 and GAO interviews with Department of Veterans Affairs officials. | GAO-22-104604

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## VA's Approach to Its Market Assessments Included Compiling and Certifying Data, Conducting Site Visits, and Developing Proposals Iteratively

According to VA officials and documents, the department's approach to the market assessments included the following:

- Compiling data on supply of and demand for veteran health care, among other things, in each of the 96 markets;
- Certifying the data compiled from VA databases and public sources through reviews by regional network and medical center officials;
- Conducting site visits to collect supplemental information in each market; and
- Developing proposals iteratively to respond to gaps identified between veteran health care supply and demand, based on analyses of the data.

**Data compilation.** VA officials told us that from December 2018 to November 2020, the department compiled data from VA and other sources for each market. VA design documentation indicated the compiled data included, among other things, veteran and non-veteran demographics, the current and future veteran demand for VA health care services, and the supply of VA, community care, and other non-VA health care resources available to meet the current and future veteran demand.<sup>25</sup> VA documentation indicated these data included the most current data at the time, as well as 10-year projections for certain data.

According to VA design documentation and VA officials, data that the department planned to compile included the following:

- Demand for VA health care services: the numbers of outpatient encounters, completed appointments, inpatient discharges, and surgical procedures.

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<sup>25</sup>Compiling both veteran and non-veteran data provided information about the market's total population health care needs, according to VA officials.

- Demand for community care and other non-VA health care services: the number of community and other non-VA care authorizations and amounts disbursed for community and other non-VA care.
- Supply of VA health care resources: lists of VA-owned sites and leases and clinical staffing levels by specialty and facility.
- Supply of non-VA health care resources: information on commercial hospitals, including the number of operating beds, merger and acquisition activity, key projects for improving capacity or enhancing services, closures or reductions of service in the market, awards and recognitions, patient satisfaction; and locations of facilities run by other federal agencies, such as the Department of Defense.
- Cost of providing care: cost analysis for inpatient services comparing cost to provide care in VA facilities to the potential cost to acquire the same care in the market.

VA compiled these data from more than 60 sources, most of which were VA enterprise databases, according to VA's documentation of its data definitions.<sup>26</sup> VA also compiled data from VA medical centers and affiliated clinics, other federal agencies, and commercial and proprietary sources such as IBM Watson Market Expert.<sup>27</sup> VA compiled data for fiscal years 2018 and earlier from the department's databases, according to VA's design documentation.<sup>28</sup> However, this documentation did not include dates for data VA compiled from non-VA data sources.

**Data certification.** From March 2019 to December 2020, VA completed reviews of its compiled demand, supply, and other data through a certification process that involved duplicating samples of the compiled data, and finding and fixing some discrepancies, according to VA documents. Specifically, once VA compiled data for its market assessments, VA documentation indicated the department directed VA medical center and regional network officials to replicate the data compilation that VA conducted by applying the same search parameters

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<sup>26</sup>VA centrally maintains its enterprise databases used in the management of VA's health care system. The databases include system-wide data on historical actual workload for VA health care services, physician productivity, the physical condition of VA health care buildings, and other administrative data.

<sup>27</sup>IBM Watson Market Expert is a commercial dataset that combines public and proprietary data to assess demand for health services in a market area, among other things.

<sup>28</sup>The number of vacant positions that VA documentation indicated the department compiled included fiscal year 2019.

to the same VA-wide databases and public sources.<sup>29</sup> From this certification process, VA officials said regional network and VA medical center officials identified 1,132 data discrepancies and other issues across the 96 markets—475 of the issues resulted in changes to the data to make needed fixes. According to VA documentation from some of the markets, examples of data discrepancies included the following:<sup>30</sup>

- Reviewers identified potentially missing workload data (e.g., data on primary care and telehealth encounters) in at least eight markets. As a result, VA updated data for three of these markets but instructed the other five markets to submit their concerns separately as a supplement to the compiled data, instead of changing these data directly.
- Reviewers from at least three different markets disagreed with certain demand projections made for particular markets. In these cases, reviewers thought the original market projections were inaccurate, as they did not account for demand from outside each market's boundaries. VA did not change the compiled data in these cases but asked two of the markets to submit the information on demand outside the market's boundaries separately as a supplement to the compiled data (rather than part of it).

Network directors signed certifications after VA resolved all the issues, either by making changes to the data or by VA providing an explanation for not making a change, according to VA officials. All 18 VA regional network directors signed these certifications indicating their agreement that these compiled data could be used for further market assessment analysis for markets in their regions.

**Site visits.** VA officials said the department also supplemented its data compilation by conducting site visits to VA medical centers and other health care facilities in each of the 96 markets from March 2019 through

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<sup>29</sup>Public sources included, for example, public Health Resources and Services Administration data about its health centers. The data that were not included in this review included the data provided to VHA's Chief Strategy Office by VA medical centers and data from proprietary commercial sources, according to VA documents. VA officials said the data provided by VA medical centers included the number of operating beds, facility site plans, and descriptions of architectural and engineering challenges.

<sup>30</sup>Other issues reviewers raised included suggested formatting edits and corrections to rounding errors.

November 2020.<sup>31</sup> These site visits aimed to provide additional information about local health care environments in each market, according to VA officials. VA officials said for site visits that occurred prior to the start of the COVID-19 pandemic in 2020, they conducted in-person tours of VA medical centers and some outpatient clinics that were either the parent facility in the market or particularly critical to the functioning of the market. According to VA officials, the department conducted the site visits that occurred after the pandemic started—for about one third of the markets—virtually and did not include in-person tours.

VA officials estimated that the site visits included more than 1,800 interviews with VA medical center and regional network officials.<sup>32</sup> Based on our review of VA documentation, the discussion topics during site visit interviews ranged from overarching themes and future vision for the market; demographics and veteran demand; VA supply, access, patient satisfaction and quality of care; and conditions of buildings. According to VA officials, the site visit interviews also provided insight into the potential to increase the supply of community care within each market.

VA documentation indicated that the department planned to summarize what it learned about these topics during each market's interviews, which were to be used in later analyses. VA officials said that while they developed a site visit guide with suggested questions, the guide was not intended to be prescriptive for each interview. Rather, VA officials said they preferred each discussion to be relevant to the interviewee's position and reviews of the compiled data specific to that market or facility, allowing discussion to diverge from the suggested questions.

**Proposal development.** VA officials told us that market teams, comprised of VA and contractor staff responsible for managing each market's assessment, began developing proposals to respond to any identified gaps in supply and demand based on their analysis of the compiled data before the market's site visits. According to VA officials, in making their proposals, which aimed to realign resources and demand,

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<sup>31</sup>VA officials said that site visit teams included representatives from VHA's Chief Strategy Office, VA's capital planning, construction and facility management, and a representative from the Department of Defense in markets where there was a significant Department of Defense presence.

<sup>32</sup>Officials said that participants in the site visit interviews included, among others, each VA medical center Director and Assistant Director, and the regional Network Director, Deputy Network Director, and network's Chief Medical Officer. Interviews did not include officials from community care providers.

the market teams were expected to apply 10 system-wide principles that VA established for the market assessments. For example, one principle was to “optimize health care services for veterans in each market using a mix of VA care first, supplemented by the Department of Defense, academic affiliates, federally qualified health centers, and community providers.” To assist market teams in the application of these principles, VA officials said the department developed guidance that included questions for discussion and key data elements to consider in applying the 10 principles. See appendix II for a complete list of the system-wide principles, questions, and key data elements.

VA officials described the process of developing proposals as iterative—that is, VA continually reviewed and revised draft proposals throughout the market assessments; the process was continuing as of November 2021. For example, according to VA officials, various combinations of VA leadership and staff reviewed draft proposals in a series of meetings between May 2019 and March 2021. These individuals included market teams’ peer reviews, senior officials within VHA’s Chief Strategy Office, regional network directors, the Assistant Under Secretary for Health for Clinical Services, Assistant Deputy Under Secretary for Health for Community Care, and the Under Secretary of Health. VA officials told us that during these reviews, participants were to challenge draft proposals and provide other feedback for market teams to revise their proposals.

VA officials told us that in late 2020, VA also began applying a series of five analyses to the more than 1,700 draft proposals that had cleared the prior reviews. VA officials described these analyses as ensuring the proposals had taken into consideration the following:

- veteran feedback on VA health care;
- VA’s emergency response to the COVID-19 pandemic;
- consistency of VA’s management of 10 health care service lines and outpatient facilities;
- weighing the financial costs and non-financial benefits of each market’s group of proposals; and

- consistency with criteria developed for determining the Secretary's recommendations on modernization and realignment to the Asset and Infrastructure Review Commission.<sup>33</sup>

During 2021, VA officials said they updated certain data that they considered critical to use in these analyses to fiscal years 2019 and 2020. Updated data included measures of demand, such as the numbers of veterans enrolled in VA health care and community care outpatient authorizations as of fiscal year 2019. Officials told us that the updated data also included measures of supply, such as VA and commercial hospital capacity, as of fiscal year 2019 and June 2019, respectively. As a result, some of the data projections in future years changed, according to VA officials.

In November 2021, VA officials told us the analyses are applied simultaneously and any potential changes to proposals are reviewed again by applying the other analyses before the proposal is revised. VA officials said these analyses of proposals will be ongoing until the Secretary makes his recommendations. On January 12, 2022, the VA Secretary announced that the department would delay the transmission of the recommendations to the Asset and Infrastructure Review Commission to no later than March 14, 2022—that is, no later than 6 weeks after the statutory deadline of January 31, 2022.

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## Incomplete Information on Non-VA Care and Data Reliability Limit the Quality of the

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<sup>33</sup>According to VA, service lines help organize health care delivery around broad categories of care to develop consistent care standards and enhance quality of care. Examples of VA health care service lines include inpatient surgery and rehabilitation services for blind patients. The MISSION Act required VA to develop criteria for the Secretary to make recommendations for the modernization and realignment of VA facilities to the Asset and Infrastructure Review Commission. Pub. L. No. 115-182, tit. II, § 203(a), 132 Stat. at 1446. VA published these criteria in May 2021. See 86 Fed. Reg. 28,932 (May 28, 2021).

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## Information VA Used in Its Approach to the Market Assessments

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### VA Lacks Complete Data on the Supply of and Demand for Community Care

Although the data the department compiled and certified included some data on community care and other non-VA providers, we identified gaps in the data relevant to determining the supply of, and veteran demand for, such non-VA care.<sup>34</sup> Based on our review of VA documentation, the department planned to compile data on the supply of non-VA resources potentially available to meet the veteran demand for community care such as the number of specialty care physicians in each market. The department also planned to compile data on veteran demand for VA community care, such as the number of times that VA authorized veterans to use such care during fiscal years 2016, 2017, and 2018, and overall (veteran and non-veteran) demand for health care services for each market.<sup>35</sup>

VA's planned approach also called for the department to collect additional information on the supply of non-VA care. Specifically, VA documentation indicated that the department planned to supplement the supply data compiled by collecting publically available information on commercial hospitals, including merger and acquisition activity, key projects for improving capacity or enhancing services, closures or reductions of service in the market, awards and recognitions, and patient satisfaction. According to VA officials, the site visit interviews with officials from VA medical centers and regional networks provided key insights into community care within each market. For example, VA medical center and regional network officials may be familiar with new partnership opportunities with non-VA providers, because they interact regularly with community care partners and, in some cases, have worked for local non-VA health care facilities in the past. In addition, VA officials noted that VA

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<sup>34</sup>Total supply could include community care providers' ability to care for additional veterans or the extent to which other non-VA providers could begin providing care, for example.

<sup>35</sup>Except for certain emergency, limited non-emergent, Civilian Health and Medical Program of the Department of Veteran Affairs (CHAMPVA), and pharmacy care, VA must authorize all community care services for veterans before veterans access the care in order for claims to be paid. Based on VA documentation, the overall health care demand reflected 2018 or 2019 depending on when VA compiled data for the market.



considered the capacity of the community care networks in the end-of-assessment analysis that reviewed the proposals in the context of criteria developed for determining the Secretary's recommendations on modernization and realignment to the Asset and Infrastructure Review Commission.

However, we found gaps in the data on community care and other non-VA providers that VA compiled and obtained from site visits.

**Data on projections of demand for VA health care did not fully account for expanded eligibility to community care.** VA implemented its Veterans Community Care Program in June 2019, which expanded certain veterans' eligibility for community care. VA officials told us one of the end-of-assessment analyses included projections of veteran demand for community care based on fiscal year 2019 utilization of community care; these data included the initial 4 months of VA's implementation of expanded eligibility under the Veterans Community Care Program.<sup>36</sup> Given that VA developed these projections of veteran demand using 4 months of experience under the Veterans Community Care Program, it is likely these projections provide VA with incomplete information on the effects of the expanded eligibility.

VA could have supplemented these projections based on limited experience with the Veterans Community Care Program by, for example, developing and incorporating adjustments to the projections of demand based on estimates of the cost of expanded access to veterans under the MISSION Act. Estimates could have been based on the Congressional Budget Office examination in December 2018 of VA's past growth in spending and projected VA's spending through 2028 under three scenarios—two of which assumed larger appropriations for VA medical care by incorporating the projected spending required to implement the

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<sup>36</sup>According to VA officials, the department considered such data beginning in September 2021 as part of the end-of-assessment analyses applying the criteria to be used for the Secretary's recommendations on modernization and realignment. Specifically, VA used projections produced by the Enrollee Healthcare Projection Model, its actuarial model that informs approximately 90 percent of the department's health care budget estimate as well as its annual capital planning process. VA officials noted that the projections also reflected adjustments to the fiscal year 2019 utilization data intended to estimate the effects of expanded eligibility under the Veterans Community Care Program. VA developed these adjustments based on VA's historical community care experience under the Choice program, a temporary community care program in place prior to the Veterans Community Care Program, as well as on 4 months of experience under the VA MISSION Act.

MISSION Act above VA's past policies.<sup>37</sup> Without using estimates of demand for community care to reflect expansion of eligibility under the Veterans Community Care Program, VA may not be fully accounting for the effects that anticipated increases in veterans' use of community care may have on such care as well as VA facility care.<sup>38</sup>

**Incomplete data on community care network adequacy—that is, the extent to which VA's contractors maintain an adequate network of providers to ensure veterans have timely access to community care.**<sup>39</sup> According to VA officials, the department took steps to consider community care network adequacy, such as compiling survey information regarding veteran experiences under community care networks, which included aspects of access. VA officials also noted that they identified the location of current community care network providers to determine their proximity to veterans. However, these steps did not provide VA complete information about community care network adequacy.<sup>40</sup>

VA could have further supplemented the data the department compiled by, for example, conducting a survey or talking with a sample of community care providers directly about their capacity to provide care to veterans. VA also established standards for monitoring community care network adequacy under its community care program, but it is unknown at this time whether the department is collecting complete information to

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<sup>37</sup>See Congressional Budget Office, *Possible Higher Spending Paths for Veterans Benefits*, (Washington, D.C., Dec. 2018).

<sup>38</sup>A Congressional Budget Office report noted that increasing access to community care under the Veterans Community Care Program may reduce utilization of VA facilities that had sufficient capacity, which could lead to higher costs per veteran for VA facility care. See, Congressional Budget Office, *The Veterans Community Care Program: Background and Early Effects*, (Washington, D.C., Oct. 2021).

<sup>39</sup>Network adequacy refers to having a sufficient number and variety of providers available to veterans that meet geographic accessibility standards based on drive times and appointment availability within pre-determined time frames. For more information on community care network adequacy see GAO, *Veterans Community Care Program: Immediate Actions Needed to Ensure Health Providers Associated with Poor Quality Care Are Excluded*, [GAO-21-71](#) (Washington, D.C., Feb. 1, 2021).

<sup>40</sup>A recent study concluded that challenges reported in a survey of 90 VA medical center directors on their experiences with community care providers raised questions about community care network adequacy, particularly for veterans in rural areas. See K. M. Mattocks, et al., "Understanding VA's Use of and Relationships with Community Care Providers under the MISSION Act," *Medical Care*, vol. 59, no. 6 (June 2021).

monitor these standards.<sup>41</sup> Without complete information on network adequacy, VA lacks a full understanding of the extent to which community care is able to supplement VA facility care in meeting veterans' current or projected demand.

**Lack of data that would allow VA to compare costs of providing care to veterans at VA facilities compared with community care.** While VA documentation on its approach for the market assessments indicated that the department planned to compile data on the cost per inpatient service for VA and for community care network providers, the documentation was insufficient to determine the extent to which these data provided an accurate comparison of costs. In addition, VA documentation did not include compiling data on cost per outpatient services.<sup>42</sup>

VA could have compiled, for example, unit cost data (i.e., the costs to VA of providing a unit of service, such as a 30-day supply of a prescription or a day of care at a medical facility) for both VA facility and community care developed by the department's Enrollee Health Care Projection Model.<sup>43</sup> Although these readily available unit cost data have their limitations, they would at least provide VA data for comparing costs of delivering health care services in VA facilities compared to delivering care through community care providers. The lack of such data hinders VA's ability to consider cost in determining whether to rely on community care providers in meeting the health care needs of veterans.

According to VA officials, they determined the supply and demand for non-VA care based on the most recently available data at the time of data compilation—that is, December 2018 to November 2020. In addition, while VA officials told us the end-of-assessment analyses included

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<sup>41</sup>GAO currently has ongoing work examining VA's monitoring of community care network adequacy.

<sup>42</sup>VA health care researchers have discussed the need for data that measures cost of care in a way that allows for comparisons of VA facility and community care. For example, see: A. Rosen, M. Vanneman, T. Wagner, "Assessing Cost and Outcomes among Veterans Receiving Community Care," *Health Economics Seminar*, June 19, 2019, accessed November 10, 2021, [https://www.hsrd.research.va.gov/for\\_researchers/cyber\\_seminars/archives/video\\_archive.cfm?SessionID=3645](https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID=3645).

<sup>43</sup>VA's Enrollee Healthcare Projection Model is department's actuarial model that projects: (1) the expected number of veterans who will be enrolled in VA health care, (2) the expected quantity of health care services enrollees will use, and (3) the expected cost of providing one unit of those services, that is, unit costs.

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updated data on community care these data did not address the gaps we identified.

Relying on incomplete information on non-VA care is inconsistent with federal internal controls, which state that agencies should use quality information and communicate quality information externally to achieve its objectives; an aspect of quality information includes completeness.<sup>44</sup> Further, one of VA's stated system-wide principles of the market assessments was to optimize care for veterans in each market using a mix of "VA care first" supplemented by community care or other non-VA providers that do not currently participate in VA's community care networks of providers. This principle would indicate the need for VA to compile information relevant to determining when to rely on community care and other non-VA providers as a cost-effective, accessible, high-quality supplement to VA facility care. As a result, VA did not have complete information about the projected veteran demand, community care network adequacy and comparable costs of community care to use in its market assessments used to develop proposals to inform the Secretary's recommendations for modernization and realignment of VA medical facilities.

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### VA's Approach to the Market Assessments Did Not Include Steps to Determine the Reliability of Data Used and It Is Unclear What Information on Reliability Will Be Reported

Documentation on VA's approach to the market assessments indicated that the department relied mostly on data compiled from its own databases; however, VA's approach to market assessments did not include steps to determine the reliability of the department's data for the purposes of the market assessments other than having the Network Directors provide certifications, nor did VA's approach include plans to report externally on what is known regarding the reliability of these data. Specifically, VA officials told us that they did not analyze the reliability of VA data sources as part of the data certification. VA also did not plan to include any information related to data reliability when documenting its proposals for review by internal stakeholders.

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<sup>44</sup>[GAO-14-704G](#). Federal internal control standards define quality information as information that is appropriate, current, complete, accurate, accessible, and provided on a timely basis.

When asked what steps were performed to evaluate the quality of the data being used in the market assessments, the VA officials leading the market assessments explained, they relied on data “owners”—that is, the other VA offices that compiled and certified the data for use throughout the department—to ensure the quality of the data.<sup>45</sup> According to these officials, they considered themselves data “users.” Including steps for determining data reliability, for example, obtaining information from the various data owners with VA regarding reliability of data, including any limitations, could have helped VA to determine the extent to which compiled data were accurate and complete—consistent with federal internal control standards’ definition of quality information—and enabled VA to address the limitations.

Without such steps, VA is unable to collect and communicate to external stakeholders, such as Congress and the Asset and Infrastructure Review Commission, all relevant information on the quality of VA data used in market assessments, including any limitations affecting these data. For example, such limitations could include VA’s inability to evaluate the accuracy and reliability of the department’s data on how long veterans wait to receive care at VA facilities—integral to understanding the supply of care in a market.<sup>46</sup> Not communicating information on data quality, especially any limitations on the data, is contrary to federal internal control standards, which require agencies to externally communicate the necessary quality information to achieve their objectives.

In the case of the market assessments, VA’s objective is the modernization and realignment of VA health care facilities.<sup>47</sup> If VA does not take steps to disclose such limitations, before any decisions about modernization or realignment of facilities, external stakeholders (including the Asset Infrastructure Review Commission, Congress, and veterans) will not have quality information needed to understand the department’s approach to the market assessments and the development of proposals to inform the Secretary’s recommendations for modernization and realignment of VA medical facilities.

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<sup>45</sup>VA officials noted that these data are from the same sources VHA relies on for operational analyses and by internal and external researchers for health care research.

<sup>46</sup>From November 2017 through August 2018, VHA’s Office of Internal Audit conducted its first performance audit, which assessed the accuracy and reliability of the wait times published on the VA Access and Quality website. VHA issued an internal audit report that is not publically available in February 2019.

<sup>47</sup>See [GAO-14-704G](#).

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## Conclusions

VA's market assessment process is a key step in VA's efforts to modernize and realign its facilities. It is important that VA's approach is comprehensive and that it is clear to all stakeholders—including the Asset and Infrastructure Review Commission and Congress—how VA has arrived at the proposals the department plans to move forward to the Commission. For example, in 2019, VA implemented the Veterans Community Care Program with the intent to improve the timeliness of care by providing veterans expanded access to care in their community.

We found that VA's approach includes incomplete information on the demand for and supply of non-VA care, including community care, which is critical to understanding how best to meet veterans' future demand for care. The lack of data on such a key element to VA's delivery of care may erode confidence in any proposals that are ultimately forwarded to the Commission, scheduled to be sent no later than March 14, 2022. Further, information about the quality of data used in the market assessments and about how VA used that information to inform proposals is important to communicate to external stakeholders. Without such information, it may be unclear how VA arrived at its recommendations to the Commission for facility modernization and realignment and increases the risk that the recommendations may not be appropriate.

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## Recommendations

To improve the quality of information used in VA's market assessments, we are making the following two recommendations to VA, to be implemented as soon as possible but no later than January 31, 2023, or before the Commission submits its report to Congress:

The Secretary of Veterans Affairs should review the data on community care to identify any gaps and take steps to address data completeness. (Recommendation 1)

The Secretary of Veterans Affairs should externally communicate to the Commission information about the completeness and reliability of VA data used to inform the assessments and about how VA considered any data limitations in developing proposals for the modernization and realignment of VA facilities. (Recommendation 2)

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## Agency Comments

We provided a draft of this report to VA for review and comment. In its written comments, reproduced in appendix III, VA concurred with our recommendations and identified steps the department will take to implement them. For example, VA noted that VHA's Chief Strategy Office would provide the Asset and Infrastructure Review Commission with information that specifically outlines the completeness and reliability limitations of VA data used to develop VA's recommendations. VA also provided technical comments, which we incorporated as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the appropriate congressional committees, the Secretary of Veterans Affairs, and other interested parties. In addition, the report will be available at no charge on GAO's website at <http://www.gao.gov/>.

If you or your staff have any questions about this report, please contact Sharon M. Silas at (202) 512-7114 or [silass@gao.gov](mailto:silass@gao.gov). Contact points for our Office of Congressional Relations and Office of Public Affairs can be found on the last page of this report. Other major contributors to this report are listed in appendix IV.



Sharon M. Silas  
Director, Health Care

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# Appendix I: Map of Department of Veterans Affairs (VA) Regional Networks and Markets and Numbers of Veterans in Each Market

VA organizes its health care system into 18 regional networks that are each responsible for coordination and oversight of all administrative and clinical activities of the VA medical centers, outpatient clinics, and other health care facilities within its geographic region. For planning purposes, VA further divides its regional networks into markets, usually along county lines.<sup>1</sup> Each market may have differing numbers of VA medical centers and other VA health care facilities.

Figure 3 depicts the geographic boundaries as of January 2021 of the regional networks and the markets included in VA's market assessments, and the location of VA medical centers as of February 2020. According to VA officials, VA excluded two of its 98 markets from the market assessments that cover areas outside of the United States.

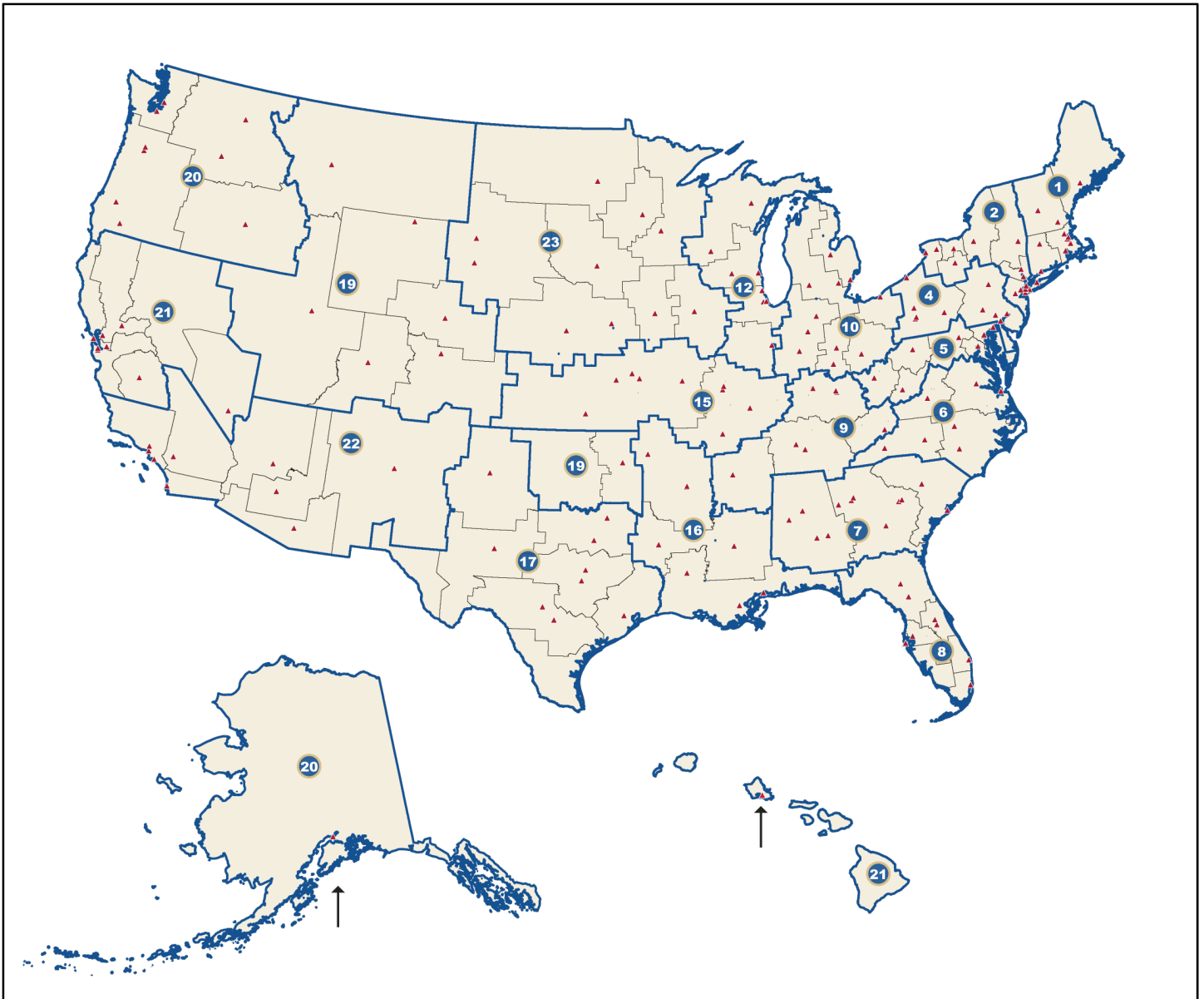
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<sup>1</sup>According to VA officials, there are 98 markets as of January 2021, two of which cover regions located outside of the United States and its territories.



Appendix I: Map of Department of Veterans Affairs (VA) Regional Networks and Markets and Numbers of Veterans in Each Market

Figure 3: Map of Department of Veterans Affairs' (VA) Regional Networks, Markets, and VA Medical Centers in 50 States and Washington, D.C.



▲ VA medical centers    ■ VA health care markets    □ Regional networks

Source: GAO Analysis of Department of Veterans Affairs (VA) data. | GAO-22-104604

Note: Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa are part of network 21, in a pacific islands market that includes Hawaii. Puerto Rico and the US Virgin Islands are in network 8 and comprise their own market. There is one VA medical center in Puerto Rico.

**Appendix I: Map of Department of Veterans Affairs (VA) Regional Networks and Markets and Numbers of Veterans in Each Market**

For each market included in VA's market assessments, Table 1 contains the numbers of veterans enrolled in and eligible for VA health care as of fiscal year 2017 and projected for fiscal year 2027.

**Table 1: Numbers of Veterans Enrolled in and Eligible for VA Health Care in VA's 96 Health Care Markets Included in Its Market Assessments**

	<b>Network and market</b>	<b>Fiscal Year 2017 (actual) Number of enrolled veterans</b>	<b>Fiscal Year 2017 (actual) Number of eligible veterans</b>	<b>Fiscal Year 2017 (actual) Percent of eligible veterans who are enrolled</b>	<b>Fiscal Year 2027 (projected) Number of enrolled veterans</b>	<b>Fiscal Year 2027 (projected) Number of eligible veterans</b>	<b>Fiscal Year 2027 (projected) Percent of eligible veterans who are enrolled</b>
<b>VA New England Healthcare System (01)</b>	East	133,809	244,104	54.8	121,617	167,258	72.7
	Far North	54,361	85,987	63.2	51,648	70,577	73.2
	North	63,139	107,357	58.8	61,492	83,949	73.3
	West	92,741	167,076	55.5	81,824	113,978	71.8
<b>New York/New Jersey VA Health Care Network (02)</b>	Central	53,348	86,758	61.5	49,807	72,225	69.0
	Eastern	49,026	83,322	58.8	42,902	61,044	70.3
	Finger Lakes	26,883	43,640	61.6	23,603	31,782	74.3
	Southern Tier	14,899	21,786	68.4	12,971	17,135	75.7
	VA Long Island	53,496	85,362	62.7	38,541	44,695	86.2
	VA Metro New York	119,736	192,565	62.2	95,017	117,768	80.7
	VA New Jersey	93,651	173,132	54.1	76,741	103,279	74.3
<b>VA Healthcare - VISN 4 (04)</b>	Western	41,896	65,073	64.4	36,807	48,012	76.7
	Eastern	258,934	489,226	52.9	242,925	365,745	66.4
<b>VA Healthcare - VISN 4 (04)</b>	Western	150,309	257,065	58.5	136,119	188,212	72.3
	Eastern	258,934	489,226	52.9	242,925	365,745	66.4
<b>VA Capitol Health Care Network (05)</b>	Baltimore	80,328	144,083	55.8	79,752	115,560	69.0
	Beckley	15,825	22,094	71.6	13,950	18,298	76.2
	Clarksburg	22,858	34,588	66.1	20,656	28,820	71.7
	Huntington	33,644	49,528	67.9	29,540	39,676	74.5
	Martinsburg	43,014	73,356	58.6	43,292	64,606	67.0
	Washington	118,318	203,492	58.1	134,047	189,419	70.8
<b>VA Mid-Atlantic Health Care Network (06)</b>	Northeast	160,277	294,307	54.5	189,261	308,767	61.3
	Northwest	44,019	68,901	63.9	40,798	56,191	72.6
	Southeast	178,475	288,546	61.9	222,542	325,599	68.3
	Southwest	142,806	221,055	64.6	148,197	196,620	75.4
	Alabama	164,509	255,236	64.5	182,963	253,918	72.1

**Appendix I: Map of Department of Veterans Affairs (VA) Regional Networks and Markets and Numbers of Veterans in Each Market**

	<b>Network and market</b>	<b>Fiscal Year 2017 (actual) Number of enrolled veterans</b>	<b>Fiscal Year 2017 (actual) Number of eligible veterans</b>	<b>Fiscal Year 2017 (actual) Percent of eligible veterans who are enrolled</b>	<b>Fiscal Year 2027 (projected) Number of enrolled veterans</b>	<b>Fiscal Year 2027 (projected) Number of eligible veterans</b>	<b>Fiscal Year 2027 (projected) Percent of eligible veterans who are enrolled</b>
<b>VA Southeast Network (07)</b>	Georgia	248,084	393,576	63.0	280,055	382,703	73.2
	South Carolina	200,552	313,946	63.9	234,515	330,395	71.0
<b>VA Sunshine Healthcare Network (08)</b>	Atlantic	65,979	102,356	64.5	53,431	64,504	82.8
	Central	108,111	159,189	67.9	113,739	143,498	79.3
	Gulf	120,781	199,025	60.7	113,974	144,399	78.9
	Miami	68,816	110,450	62.3	59,533	76,622	77.7
	North	170,160	265,365	64.1	189,747	268,296	70.7
	Orlando	133,552	198,263	67.4	137,778	171,568	80.3
	Puerto Rico Virgin Islands	69,262	73,630	94.1	45,921	51,965	88.4
<b>VA MidSouth Healthcare Network (09)</b>	Central	131,345	218,041	60.2	152,120	218,943	69.5
	Eastern	66,353	103,989	63.8	67,962	93,269	72.9
	Northern	100,404	157,699	63.7	102,005	143,456	71.1
	Western	70,376	113,575	62.0	69,299	99,916	69.4
<b>VA Healthcare System (10)</b>	Central Ohio	79,480	129,860	61.2	79,279	107,433	73.8
	Eastern Michigan	112,552	203,642	55.3	107,717	144,877	74.4
	Indiana	137,967	226,148	61.0	138,002	187,490	73.6
	MichErie	108,199	198,888	54.4	110,496	155,564	71.0
	Northeast Ohio	126,173	201,956	62.5	122,555	150,152	81.6
	Western Ohio	104,133	175,107	59.5	104,607	139,452	75.0
<b>VA Great Lakes Health Care System (12)</b>	Central	106,932	182,512	58.6	102,008	135,882	75.1
	Central Illinois	39,070	71,378	54.7	36,807	55,245	66.6
	Northern	53,022	80,399	65.9	48,261	63,783	75.7
	Southern	175,546	293,924	59.7	157,376	206,403	76.2
<b>VA Heartland Network (15)</b>	East	151,389	255,006	59.4	144,010	208,498	69.1
	West	178,197	294,626	60.5	178,685	260,744	68.5
<b>VA Midwest Health Care Network (23)</b>	Iowa Central	39,022	61,597	63.4	36,661	48,333	75.9
	Iowa East	58,919	97,799	60.2	55,328	76,166	72.6
	Minnesota Central	39,154	54,571	71.7	38,608	45,196	85.4
	Minnesota East	119,435	197,651	60.4	116,842	149,083	78.4
	Nebraska	70,755	106,781	66.3	70,381	89,973	78.2

**Appendix I: Map of Department of Veterans Affairs (VA) Regional Networks and Markets and Numbers of Veterans in Each Market**

	<b>Network and market</b>	<b>Fiscal Year 2017 (actual) Number of enrolled veterans</b>	<b>Fiscal Year 2017 (actual) Number of eligible veterans</b>	<b>Fiscal Year 2017 (actual) Percent of eligible veterans who are enrolled</b>	<b>Fiscal Year 2027 (projected) Number of enrolled veterans</b>	<b>Fiscal Year 2027 (projected) Number of eligible veterans</b>	<b>Fiscal Year 2027 (projected) Percent of eligible veterans who are enrolled</b>
	North Dakota	40,268	60,421	66.6	36,967	52,946	69.8
	South Dakota East	34,148	51,819	65.9	31,103	42,431	73.3
	South Dakota West	21,574	28,491	75.7	20,757	26,813	77.4
<b>South Central VA Health Care Network (16)</b>	Central	98,031	154,934	63.3	91,708	136,575	67.1
	Northern	122,585	191,455	64.0	119,718	173,885	68.8
	Southern	203,508	336,687	60.4	222,601	326,909	68.1
	Central	124,995	187,715	66.6	150,927	205,777	73.3
<b>VA Heart of Texas Health Care Network (17)</b>	East Texas	149,919	245,402	61.1	164,269	221,927	74.0
	North Texas	184,147	299,440	61.5	205,110	282,558	72.6
	Northwest Texas	26,849	40,530	66.2	24,992	35,140	71.1
	Southern	123,967	184,568	67.2	158,090	209,092	75.6
	Southwest Texas	39,861	56,521	70.5	46,608	65,636	71.0
	Valley Coastal Bend	45,262	66,393	68.2	47,505	61,149	77.7
	West Texas	22,802	38,605	59.1	24,711	38,349	64.4
<b>Rocky Mountain Network (19)</b>	Cheyenne	28,667	46,441	61.7	30,937	45,706	67.7
	Denver	128,311	222,675	57.6	144,432	208,288	69.3
	Eastern Oklahoma	51,391	82,195	62.5	52,548	73,527	71.5
	Grand Junction	15,395	21,948	70.1	15,005	18,385	81.6
	Montana	46,942	68,456	68.6	46,181	62,263	74.2
	Oklahoma City	84,018	141,062	59.6	96,554	145,868	66.2
	Salt Lake City	67,400	111,239	60.6	70,532	101,792	69.3
	Sheridan	14,631	22,533	64.9	13,562	19,387	70.0
<b>Northwest Network (20)</b>	Alaska	33,298	49,445	67.3	37,185	52,493	70.8
	Inland North	69,722	109,379	63.7	73,555	99,093	74.2
	Inland South Idaho	37,501	55,625	67.4	40,316	54,123	74.5
	South Cascades	153,905	244,665	62.9	153,807	206,088	74.6

**Appendix I: Map of Department of Veterans Affairs (VA) Regional Networks and Markets and Numbers of Veterans in Each Market**

	<b>Network and market</b>	<b>Fiscal Year 2017 (actual) Number of enrolled veterans</b>	<b>Fiscal Year 2017 (actual) Number of eligible veterans</b>	<b>Fiscal Year 2017 (actual) Percent of eligible veterans who are enrolled</b>	<b>Fiscal Year 2027 (projected) Number of enrolled veterans</b>	<b>Fiscal Year 2027 (projected) Number of eligible veterans</b>	<b>Fiscal Year 2027 (projected) Percent of eligible veterans who are enrolled</b>
	Western Washington	143,543	264,049	54.4	163,600	245,242	66.7
<b>Sierra Pacific Network (21)</b>	North Coast	58,093	96,980	59.9	50,373	61,717	81.6
	North Valley	108,170	174,934	61.8	105,883	136,919	77.3
	Pacific Islands	52,842	103,763	50.9	58,403	100,374	58.2
	Sierra Nevada	47,470	72,467	65.5	47,063	61,008	77.1
	South Coast	75,451	120,843	62.4	64,899	80,848	80.3
	South Valley	41,968	62,236	67.4	42,126	53,671	78.5
	Southern Nevada	75,563	113,772	66.4	82,104	103,030	79.7
<b>Desert Pacific Healthcare Network (22)</b>	Albuquerque	68,387	102,758	66.6	67,121	92,641	72.5
	Greater Los Angeles	213,609	363,327	58.8	192,447	243,691	79.0
	Loma Linda	102,553	163,180	62.8	105,106	146,690	71.7
	Phoenix	128,453	208,176	61.7	137,326	186,246	73.7
	Prescott	32,027	45,400	70.5	33,098	39,373	84.1
	San Diego	117,341	183,285	64.0	124,598	175,836	70.9
	Tucson	64,807	92,962	69.7	68,081	89,432	76.1

Source: VA's Enrollee Healthcare Projection Model Data Provided to GAO. | GAO-22-104604

## Appendix II: System-Wide Principles and Other Guidance for Department of Veterans Affairs (VA) Market Assessments

According to VA officials, the department developed system-wide principles and other general guidance to assist its market assessment teams, comprised of VA and contractor staff, in analyzing market data, identifying gaps in supply for and demand of VA health care, and developing proposals to respond to the gaps.

The 10 system-wide principles VA established for the market assessments were:

1. Design high-performing networks to better meet the health care needs of veterans in terms of access, quality, outcomes, and satisfaction, in accordance with the requirements outlined in the VA MISSION Act of 2018, and the Market Area Health Systems Optimization (market assessments) initiative.
2. Retain or improve health care services for veterans in all high-performing networks.
3. Ensure VA offers an optimal level of primary services on-site and that VA will be the coordinator of all health care whether provided in VA or in the community.
4. Apply comparative data for performance, quality, patient satisfaction, and health outcomes, where available.
5. Utilize data from the market assessments, adjacent markets and regional Networks, and across the national marketplace to facilitate the enhancement of high-performing networks.
6. Ensure veterans are provided the opportunity to choose care they trust throughout their lifetime.
7. Optimize health care services for Veterans in each market using a mix of VA care first, supplemented by the Department of Defense, academic affiliates, Federally Qualified Health Centers, and community providers. Options should include consideration of

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innovative alternatives such as “Hospital within a Hospital” ventures and public-private partnerships.

8. Allow veterans to choose long-term care they trust, in the setting most appropriate for their needs, to the greatest extent possible, and when eligible.
9. Maximize productivity, strategically prioritize investments, and leverage virtual care modalities and partnerships rather than build facilities, when possible.
10. Complete market assessments in partnership with local VA healthcare market leaders and a team of consultants who will collectively assess Veterans Health Administration capabilities, community resources, and provide objectivity and external validation in collaborative application of the standardized, data-driven, principles-based methodology.

VA officials said the department developed guidance that included general questions and key data elements to consider in applying these principles. Table 2 lists the general questions, and Table 3 lists key data elements for certain service lines and outpatient facilities.

**Table 2: General Questions Considered in the Department of Veterans Affairs (VA) Market Assessments to Analyze Market Data and Identify Gaps Between Supply and Demand of Veteran Health Care, According to VA Officials**

Type of data	Question
Geography and demographics	Where do veterans live now and in the future?
Demand	What services do veterans need currently and in the future? Can the current medical programs be sustained in the future?
Capacity	What is the current and potential future supply at VA and other federal and commercial facilities?
Access	Do veterans have convenient access to high quality care? Are there access gaps?
Quality and satisfaction	Do internal and external providers meet VA care standards?
Staffing	Can VA appropriately staff its clinical programs?
Facilities	Are the current facility conditions and infrastructure capable of providing a safe environment of care that meets current design standards?
Mission	Would opportunities impact the VA’s education, research, or emergency preparedness missions?

Source: Department of Veterans Affairs | GAO-22-104604

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**Table 3: Data Elements Considered in Department of Veterans Affairs (VA) Market Assessments to Analyze Market Data and Identify Gaps Between Supply and Demand, According to VA Officials**

<b>Inpatient (IP) Medicine/Surgery</b>	
<b>Demographics</b>	<ul style="list-style-type: none"> <li>• Number of enrollees (FY18) and projected growth in market and/or area (FY17-FY27)</li> <li>• Market reliance on VA and community IP medicine/surgery (med/surg)</li> </ul>
<b>Demand</b>	<ul style="list-style-type: none"> <li>• Number of med/surg beds; average daily census (ADC);<sup>a</sup> any relevant shift(s) between fiscal years; case mix index (CMI)<sup>b</sup></li> <li>• Med/surg projections (FY27)</li> <li>• Care purchased in community</li> <li>• Case volume and trends</li> </ul>
<b>Supply</b>	<ul style="list-style-type: none"> <li>• Number of commercial hospital beds; occupancy rate; CMI</li> <li>• Local VA medical center (VAMC) / partnerships</li> <li>• Future inpatient projections / conceptual excess</li> </ul>
<b>Access</b>	<ul style="list-style-type: none"> <li>• Number and percentage of enrollees within a 60-minute drive time of med/surg point of care (POC)<sup>c</sup></li> <li>• Proximity to enrollee population density centers / proximity relative to hospital referral region (HRR)<sup>d</sup></li> <li>• Physical access to proposed site / access to major highway(s)</li> </ul>
<b>Quality and satisfaction</b>	<ul style="list-style-type: none"> <li>• Quality of Community, partner, and/or VAMC</li> <li>• VA Strategic Analytics for Improving and Learning (SAIL) data (readmissions; mortality; admission, continued stay)<sup>e</sup></li> </ul>
<b>Staffing</b>	<ul style="list-style-type: none"> <li>• Ability to recruit and retain providers and nurses</li> </ul>
<b>Facility</b>	<ul style="list-style-type: none"> <li>• Condition of facility and infrastructure</li> <li>• Facilities Condition Assessment (FCA),<sup>f</sup> modernization cost, IP med/surg or main facility related engineering challenges</li> </ul>
<b>Mission</b>	<ul style="list-style-type: none"> <li>• Number of residents and advanced fellows</li> <li>• Veterans Equitable Resource Allocation (VERA) total funding<sup>g</sup></li> <li>• Emergency preparedness designation</li> </ul>
<b>Cost effectiveness</b>	<ul style="list-style-type: none"> <li>• Distance to potential commercial partner or VAMC</li> <li>• Cost per IP case / total cost of care for selected services</li> </ul>

**Inpatient Mental Health (MH)**

<b>Demographics</b>	<ul style="list-style-type: none"> <li>• Number of enrollees (FY18) and projected growth in market and/or area (FY17-FY27)</li> <li>• Market reliance on VA and community IP MH</li> </ul>
<b>Demand</b>	<ul style="list-style-type: none"> <li>• Number of MH beds; average daily census (ADC); occupancy rate; any relevant shift(s) between FY; CMI</li> <li>• IP MH projections (FY27)</li> <li>• Care purchased in community</li> </ul>
<b>Supply</b>	<ul style="list-style-type: none"> <li>• Number of Commercial Hospital beds; occupancy rate; CMI</li> <li>• Local VAMC / partnerships</li> <li>• Future inpatient projections / conceptual excess</li> </ul>



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<b>Access</b>	<ul style="list-style-type: none"> <li>• Number and percentage of enrollees within a 60-minute drive time of current facility and/or proposed facility</li> <li>• Proximity to enrollee population density centers / proximity relative to HRR</li> <li>• Distance to potential commercial partner or VAMC</li> </ul>
<b>Quality and satisfaction</b>	<ul style="list-style-type: none"> <li>• Quality of community, partner, and/or VAMC where MH beds currently are or are proposed to go</li> </ul>
<b>Staffing</b>	<ul style="list-style-type: none"> <li>• Ability to recruit and retain providers</li> <li>• Number of dually/multiple appointed providers</li> </ul>
<b>Facility</b>	<ul style="list-style-type: none"> <li>• Condition of facility and infrastructure</li> <li>• FCA, modernization cost, IP MH related engineering challenges</li> </ul>
<b>Mission</b>	<ul style="list-style-type: none"> <li>• Number of residents and advanced fellows</li> <li>• VERA research allocation total funding</li> <li>• Emergency preparedness designation</li> </ul>
<b>Cost effectiveness</b>	<ul style="list-style-type: none"> <li>• Distance to potential commercial partner or VAMC</li> <li>• Cost per IP case / total cost of care</li> </ul>

**Community Living Centers (CLC)**

<b>Demographics</b>	<ul style="list-style-type: none"> <li>• Number of enrollees (FY18) and projected growth in market and/or area (FY17-FY27)</li> <li>• Market age breakdown/average age/growth rates by age group/priority group</li> </ul>
<b>Demand</b>	<ul style="list-style-type: none"> <li>• Number of CLC beds at current and/or proposed VA facility</li> <li>• Current ADC (FY18), historic shifts (FY15-FY18), and future projections (FY17-27)</li> <li>• Care purchased (fee-basis long-term care) in community</li> <li>• Market projections for CLC/nursing home need</li> <li>• Short stay versus long stay bed and demand breakdown</li> </ul>
<b>Supply</b>	<ul style="list-style-type: none"> <li>• Other VA CLCs and partnerships in the area</li> <li>• State veteran homes in the area</li> <li>• Commercial ADC, number of beds, occupancy rate / number excess beds (FY18)</li> <li>• Availability (surplus/deficit) of community providers</li> </ul>
<b>Access</b>	<ul style="list-style-type: none"> <li>• Number and percentage of enrollees within a 60-minute drive time of current facility and/or proposed facility</li> <li>• Proximity to nearest VA staffed CLC and potential partners</li> <li>• Physical access to proposed site / Access to major highway(s)</li> <li>• Proximity to enrollee population density centers / proximity relative to HRR</li> </ul>
<b>Quality and satisfaction</b>	<ul style="list-style-type: none"> <li>• CLC overall quality score</li> <li>• VA SAIL data</li> </ul>
<b>Staffing</b>	<ul style="list-style-type: none"> <li>• Ability to recruit and retain VA physicians and nurses</li> </ul>
<b>Facility</b>	<ul style="list-style-type: none"> <li>• Condition of facility and infrastructure (age, expansion capabilities, appropriateness of small house model)</li> <li>• Semiprivate and multi-bed patient rooms</li> <li>• Square footage - departmental gross square feet (DGSF)</li> <li>• FCA (overall, by user, per square feet)</li> </ul>
<b>Mission</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>

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<b>Cost effectiveness</b>	• N/A
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**Residential Rehabilitation Treatment Programs (RRTP)**

<b>Demographics</b>	• Number of enrollees (FY18) and projected growth in market and/or area (FY17-FY27)
<b>Demand</b>	<ul style="list-style-type: none"> <li>• Number of RRTP beds at current and/or proposed VA facility</li> <li>• VA facility current ADC (FY18), historic shifts (FY15-FY18), and future projections (FY17-27)</li> <li>• Program specificity of RRTP beds in VA facility</li> </ul>
<b>Supply</b>	<ul style="list-style-type: none"> <li>• Availability of RRTP or like services in the community</li> <li>• Availability (surplus/deficit) of community providers</li> </ul>
<b>Access</b>	<ul style="list-style-type: none"> <li>• Number and percentage of enrollees within a 60-minute drive time of current facility and/or proposed facility</li> <li>• Proximity to nearest VA staffed RRTP</li> <li>• Physical access to proposed site / access to major highway(s) / proximity to enrollee population density centers / proximity relative to HRR</li> </ul>
<b>Quality and satisfaction</b>	• VA SAIL data
<b>Staffing</b>	• Ability to recruit and retain VA physicians and nurses
<b>Facility</b>	<ul style="list-style-type: none"> <li>• Condition of facility and infrastructure (age, expansion capabilities)</li> <li>• Square footage (DGSF)</li> <li>• FCA (overall, by user, per square feet)</li> <li>• Modernization cost</li> </ul>
<b>National strategies</b>	• RRTP/MRRTP Market Analysis conducted by VA

**Emergency Departments (ED) and Urgent Care Clinics**

<b>Demographics</b>	• Number of enrollees (FY18) and projected growth in market and/or area (FY17-FY27)
<b>Demand</b>	<ul style="list-style-type: none"> <li>• Number of ED Encounters; percentage change FY15-18</li> <li>• Percentage transfers, percentage admitted</li> <li>• Acuity<sup>h</sup></li> <li>• Number or percentage of encounters between 8am-8pm or on weekdays vs. weekends</li> <li>• Outpatient Utilization Projections (RVUs) for emergency medicine<sup>i</sup></li> <li>• Historical demand purchased in the community (NVCC)</li> </ul>
<b>Supply</b>	• Local VAMC / Partnerships
<b>Access</b>	<ul style="list-style-type: none"> <li>• Number and percentage of enrollees within a 30-minute drive time of current facility and/or proposed facility</li> <li>• Diversion hours<sup>l</sup></li> <li>• Drive time to nearest VA staffed site/partner/community hospitals providing services</li> </ul>
<b>Quality and satisfaction</b>	<ul style="list-style-type: none"> <li>• Quality of community/partner (ED volume and throughput)</li> <li>• Number Volume of ED at community provider(s)</li> <li>• ED capabilities at community provider(s) (e.g. trauma center level)</li> </ul>
<b>Staffing</b>	• Ability to recruit and retain providers and nurses

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<b>Facility</b>	<ul style="list-style-type: none"> <li>• Square footage allocation</li> <li>• Condition, flow, and environment of care of facility and infrastructure</li> <li>• FCA</li> </ul>
<b>Mission</b>	<ul style="list-style-type: none"> <li>• Emergency preparedness designation</li> </ul>
<b>Cost effectiveness</b>	<ul style="list-style-type: none"> <li>• Distance to potential commercial partner or VAMC</li> <li>• Cost per IP case / total cost of care</li> </ul>

**Outpatient (OP) Surgery**

<b>Demographics</b>	<ul style="list-style-type: none"> <li>• Number of enrollees (FY18) and projected growth in market and/or area (FY17-FY27)</li> </ul>
<b>Demand</b>	<ul style="list-style-type: none"> <li>• Number of OP surgical cases</li> <li>• Historical growth of OP Surgical Cases, by specialty (FY15-18)</li> <li>• Projected RVU growth by for surgical services (FY17-FY27)</li> <li>• Care purchased in community</li> </ul>
<b>Supply</b>	<ul style="list-style-type: none"> <li>• Local VAMC / Partnerships</li> <li>• Commercial hospital ADC, number of beds; occupancy rate / number excess beds; current CMI (FY18)</li> <li>• Availability (surplus/deficit) of community providers by specialty</li> </ul>
<b>Access</b>	<ul style="list-style-type: none"> <li>• Number and percentage of enrollees within a 60-minute drive time of current facility and/or proposed facility</li> <li>• Drive time to nearest VA staffed site/partner/community hospitals providing services</li> <li>• Proximity to enrollee population density centers</li> </ul>
<b>Quality and satisfaction</b>	<ul style="list-style-type: none"> <li>• Mortality rate, avoidable adverse events, in-hospital complication rate, infection rate</li> </ul>
<b>Staffing</b>	<ul style="list-style-type: none"> <li>• Availability to recruit and retain VA physicians and nurses</li> </ul>
<b>Facility</b>	<ul style="list-style-type: none"> <li>• Condition, flow, and environment of care of facility and infrastructure</li> <li>• FCA</li> </ul>
<b>Mission</b>	<ul style="list-style-type: none"> <li>• Number of residents and advanced fellows</li> </ul>
<b>Cost effectiveness</b>	<ul style="list-style-type: none"> <li>• Cost per case / total cost of care</li> </ul>

**Community-based Outpatient Clinics, Multi-specialty Community-based Outpatient Clinics, Health Care Clinics, and Other Outpatient Services**

<b>Demographics</b>	<ul style="list-style-type: none"> <li>• Number of enrollees (FY18); projected growth of current and/or proposed county (FY17-FY27)</li> <li>• Percentage rural</li> </ul>
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<b>Demand</b>	<ul style="list-style-type: none"> <li>• Number of core unique patients; number of primary care (PC) unique patients; number of non-overlapping enrollees within 30/60-minutes of current and/or proposed location (FY18)</li> <li>• Historic growth of core unique patients by service line and PC unique patients (FY15-FY18)</li> <li>• Projected RVU growth by service line (FY17-FY27)</li> <li>• Referral patterns</li> <li>• NVCC FY18 - outpatient CPT authorizations by county</li> </ul>
<b>Supply</b>	<ul style="list-style-type: none"> <li>• Availability of high-quality community providers and hospitals</li> <li>• Federally qualified health centers (FQHCs), Department of Defense (DOD), and Indian Health Service (IHS) facilities in the area that could help meet demand</li> </ul>
<b>Access</b>	<ul style="list-style-type: none"> <li>• Number of enrollees within a 30/60-minute drive time of current facility and/or proposed facility</li> <li>• Proximity to nearest VA-staffed site providing these services</li> <li>• Proximity to enrollee population density centers/proximity relative to HRR</li> <li>• Physical access to proposed site/access to major highway(s)</li> </ul>
<b>Quality and satisfaction</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Staffing</b>	<ul style="list-style-type: none"> <li>• Ability to recruit and retain primary care, mental health, or specialty providers</li> <li>• If decompressing campus: Number of patient-aligned care teams (PACTs) and providers at the current location and the number of PACTs and providers relocating to the new VA site<sup>k</sup></li> </ul>
<b>Facility</b>	<ul style="list-style-type: none"> <li>• Lease expiration date (only if pertinent to opportunity)</li> <li>• Condition of facility and infrastructure (only if pertinent to opportunity)</li> <li>• Space to absorb additional volume</li> <li>• Square footage</li> </ul>
<b>Mission</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Cost effectiveness</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>

Source: Department of Veterans Affairs | GAO-22-104604

<sup>a</sup>Average daily census (ADC) is the average number of inpatients per day.

<sup>b</sup>Case mix index (CMI) is a measure of the relative cost of the patients treated in each hospital or group of hospitals. According to Definitive Healthcare, CMI reflects the diversity, complexity, and severity of patient illnesses treated at a given hospital.

<sup>c</sup>Point of care (POC) is a site where medical care is received, such as doctors' offices and hospitals.

<sup>d</sup>Hospital referral regions (HRR) represent regional health care markets for tertiary medical care, according to Dartmouth Atlas Project. Each HRR contains at least one hospital that performs major cardiovascular procedures and neurosurgery.

<sup>e</sup>VA Strategic Analysis for Improving and Learning (SAIL) helps Veterans Health Administration officials assess VA medical center performance and includes 27 quality measures in areas such as acute care mortality and access to care.

<sup>f</sup>Facility Condition Assessment (FCA) is a multi-disciplinary VA effort that includes architects and engineers to evaluate the condition of each VA medical center.

<sup>g</sup>Veterans Equitable Resource Allocation (VERA) is a model the Veterans Health Administration uses to allocate general purpose funds to its 18 regional networks.

<sup>h</sup>Acuity indicates the severity of illness or condition among patients.

<sup>i</sup>Relative value units (RVUs) are a consistent measurement basis that can be used for understanding utilization projections in terms of professional staffing requirements.

<sup>j</sup>Diversion refers to a situation in which all patients or a selected group of patients who would normally be treated by the VA medical facility cannot be accepted for admission and evaluation because the

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**Appendix II: System-Wide Principles and Other  
Guidance for Department of Veterans Affairs  
(VA) Market Assessments**

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appropriate beds are not available, needed services cannot be provided, staffing is inadequate, acceptance of another patient would jeopardize the ability to properly care for those already at the facility, or disaster has disrupted normal operations.

<sup>k</sup>Patient-aligned care teams (PACT) refers to a team-based model of care in which a team of health professionals, led by a provider, works collaboratively with the patient to provide for all of the patient's healthcare needs—or appropriately coordinates care with other qualified professionals.

## Appendix III: Comments from the Department of Veterans Affairs



DEPARTMENT OF VETERANS AFFAIRS  
WASHINGTON

January 10, 2022

Ms. Sharon M. Silas  
Director  
Health Care  
U.S. Government Accountability Office  
441 G Street, NW  
Washington, DC 20548

Dear Ms. Silas:

The Department of Veterans Affairs (VA) has reviewed the Government Accountability Office (GAO) draft report: ***VA HEALTH CARE: Incomplete Information Hinders Usefulness of Market Assessments for VA Facility Realignment*** (GAO-22-104604).

The enclosure contains general and technical comments and the actions to be taken to address the draft report recommendations. VA appreciates the opportunity to comment on your draft report.

Sincerely,

A handwritten signature in blue ink that reads "Tanya J. Bradsher".

Tanya J. Bradsher  
Chief of Staff

Enclosure

**Appendix III: Comments from the Department  
of Veterans Affairs**

Enclosure

Department of Veterans Affairs (VA) Comments to  
Government Accountability Office (GAO) Draft Report  
***VA HEALTH CARE: Incomplete Information Hinders Usefulness  
of Market Assessments for VA Facility Realignment***  
(GAO-22-104604)

**Recommendation 1: For the VA Secretary to improve the quality of information used in VA's market assessments by reviewing the data on community care to identify any gaps and take steps to address data completeness.**

**VA Response:** Concur. The Veterans Health Administration (VHA) is committed to continuous quality improvement across all decision support and business intelligence systems.

VHA is aware of the existing limitations within the Veterans Community Care Program's (VCCP) data systems. Beginning with the Veterans Choice Program and continuing with the subsequent creation of VCCP in the VA MISSION Act of 2018 (MISSION Act), VA has engaged in an enterprise-wide, multi-phase improvement process that fundamentally re-imagines and re-defines VA's interactions with community providers. During this process, VA specifically triaged critical data systems within VCCP to ensure Veteran access to care; timely payment to providers; high-quality care by community providers; and enhanced decision support.

Under the oversight of the VA Data Governance Council (DGC) (Co-Chaired by the Office of Enterprise Integration (OEI) and the Office of Information and Technology), VHA's Office of Community Care (OCC) engaged in a data architecture pilot, in collaboration with the Chief Data Officer, which led to process redesign of business architecture and data architecture efforts. OCC is currently identifying data stewards for the data within its purview; assigning responsibilities; and standing up a VHA Data Governance Office to oversee these stewards and the overall management of their data. OCC's data improvements will be briefed regularly to the enterprise VA DGC.

As VHA reviews the data on community care to identify any gaps and take steps to address data completeness, VHA's Chief Strategy Office will collaborate with OCC in coordination with the governance processes described above.

Target Completion Date: September 2022

**Recommendation 2: For the VA Secretary to externally communicate to the Commission about the completeness and reliability of VA data used to inform the assessments and how VA considered any data limitations in developing proposals for the modernization and realignment of VA facilities.**

**VA Response:** Concur. VHA is committed to the collection and use of quality information for developing recommendations for the modernization and realignment of VA facilities. While GAO's report is accurate that the Market Assessment process did not include a direct audit of VHA data used within the assessments, proper internal

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controls relating to audit and validation for the data used where followed by VHA prior to the Market Assessment process.

To enhance clarity of ownership of VHA's data completeness and reliability, VHA has engaged in development of a DGC within VHA's Governing Board structure. Concurrently, OEI's Office of Data Governance and Analytics (DGA) is engaged in the collaborative development of policy and execution of data governance for the enterprise, helping to improve data completeness and reliability across the Agency.

Following the issuance of the VA Enterprise Data Strategy in January 2021, VA developed an implementation plan and a roadmap that highlights the Agency's top priority efforts under direction of the VA DGC. Priorities include improving data quality for community care and access data; developing enterprise-wide trusted data objects within a common operating platform that integrates quality, authoritative data across VA; and setting forth guidelines/standards for quality assessments and documentation to accompany all highly influential information, including those used in the market assessment work.

VHA's Chief Strategy Office will provide the Asset and Infrastructure Review (AIR) Commission with information that specifically outlines the completeness and reliability limitations of VA data used to develop VA's recommendations.

Target Completion Date: July 2022



**Appendix III: Comments from the Department  
of Veterans Affairs**

Enclosure

Department of Veterans Affairs (VA) Comments to  
Government Accountability Office (GAO) Draft Report  
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**General Comments:** VA appreciates GAO's recommendations, and we are committed to delivering health care for Veterans when and where they need it based on the highest quality information possible. We are focused on using data that complies with Federal internal control standards relating to information that is appropriate, current, complete, accurate and provided timely.

While VA concurs with GAO's recommendations, VA does not believe that what is outlined by GAO "hinders usefulness" of market assessments for VA facility realignment, as stated in the title of the report.

The first set of quadrennial market assessments are based on extensive data; interviews with more than 1,800 Veterans Integrated Service Networks (VISN) and VA Medical Center (VAMC) leaders; input from 50 listening sessions conducted with Veterans and other stakeholders across the country; quality assurance analyses; and reviews by senior leaders at the VISN, VHA and Department levels. While all data has its limitations, the market assessments reflect the highest quality set of VA data sources available to date. The VA data used to develop the market assessments came from data sources that are subject to a rigorous testing, evaluation and auditing process conducted by the data owners. These data sources are the same that are relied upon by VHA for operational analyses and health care research. As noted by GAO, the market assessments also included a data validation process by which VISN planners, VAMC planners and subject matter experts (SME) in the data domains were asked to review and validate data. Based on the reviews by their teams, all network directors certified the data as an "acceptable foundation for Market Assessment analysis."

The documentation within the market assessments have outlined the data sources for information used for developing facility realignment plans and recommendations. VHA will continue to improve the quality of the data within the market assessment process as VHA data systems continue to evolve. As a learning organization, VHA is constantly improving the data used in decision-making. The data will change and improve over time as VA conducts more detailed planning for recommendations approved by the AIR Commission and as it prepares for subsequent quadrennial assessments.

The VA MISSION Act of 2018 established the market assessment process to inform and support the AIR Commission, which will help VA modernize its infrastructure to increase Veteran access to care and improve Veteran outcomes well into the future. The market assessments will design high-performing integrated health care networks to provide coordinated, lifelong, world-class health care and services to Veterans across the country.

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## Text of Appendix III: Comments from the Department of Veterans Affairs

January 10, 2022

Ms. Sharon M. Silas Director

Health Care

U.S. Government Accountability Office

441 G Street, NW Washington, DC 20548

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Sincerely,

Tanya J. Bradsher Chief of Staff

Enclosure

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**Appendix III: Comments from the Department  
of Veterans Affairs**

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## Appendix IV: GAO Contacts and Staff Acknowledgements

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### GAO Contacts

Sharon M. Silas, (202) 512-7114 or [silass@gao.gov](mailto:silass@gao.gov)

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### Staff Acknowledgements

In addition to the contacts named above, Ann Tynan (Assistant Director), Aaron Holling (Analyst-in-Charge), Topher Hoffmann, and Jennie F. Apter made key contributions to this report. Also contributing were Jacquelyn Hamilton, Vikki Porter, Ravi Sharma, and Valeria Robayo.



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