Department of Health and Human Services

National Health Quality Roadmap

May 15, 2020

On June 24th, 2019, President Trump issued Executive Order 13877, *Improving Price and Quality Transparency in American Healthcare to Put Patients First*. The purpose of the executive order is to empower patients to make fully informed decisions about their healthcare, by facilitating the availability of appropriate and meaningful price and quality information. Section 4 of the executive order specifically directed the Secretaries of the Department of Health and Human Services (HHS), Department of Defense (DoD), and Department of Veterans Affairs (VA) to publish a Health Quality Roadmap detailing a strategy for establishing, adopting, and publishing common quality measurements; aligning inpatient and outpatient measures; and eliminating low-value[1] or counterproductive measures.

The purpose of this Roadmap is to improve patient[2] outcomes through enhanced effectiveness and efficiency of the healthcare quality system supported by federal investments. The federal government serves as a leader, and this Roadmap identifies policy and regulatory levers to drive change. True system advancement cannot occur without private sector stakeholders as equal partners in this endeavor, and the Roadmap implementation will be an opportunity for public-private partnership.

When implemented, this Roadmap will improve alignment of quality measures across federal programs and improve the value delivered by those measures. Improvements in the federal Quality Measurement Enterprise (QME)[3] will equip patients with more meaningful information and enable greater patient engagement in their treatment and care planning.

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Introduction

The United States government is the largest provider of healthcare and health-related services to the American people. HHS administers healthcare programs that directly affect over 175 million Americans through Medicaid, Medicare, the Children's Health Insurance Program (CHIP), and the Health Insurance Exchanges administered by the Centers for Medicare & Medicaid Services (CMS); the Indian Health Service (IHS) serving American Indians and Alaska Natives; and health services to people who are geographically isolated and/or economically or medically vulnerable, through the Health Resources and Services Administration (HRSA).[4] Similarly, the DoD provides medical benefits to 9.5 million active duty personnel, military retirees, and their families through the Military Health System, and the VA serves

[1] For purposes of the Roadmap, value is defined as the ratio of healthcare quality, safety, and patient experience to the cost of care.

[2] This Roadmap uses the term "patient" to align with language in the Executive Order and is meant to include all consumers of healthcare services and their caregivers.

[3] For purposes of this document, the quality measurement enterprise includes the broad array of organizations and individuals who develop and steward measures of health quality; collect and report data on those measures; and use quality measure information.

[4] This number reflects 145 million Americans served by CMS programs (https://www.cms.gov/About-CMS/Agency-Information/PerformanceBudget/FY2020-CJ-Final.pdf), 30 million by HRSA (https://data.hrsa.gov/data/fact-sheets), and 2.5 million by IHS (https://www.ihs.gov/newsroom/factsheets/ihsprofile/).

over 9 million veterans enrolled in the VA healthcare program.[5] The Federal Employees Health Benefits Program, administered through the Office of Personnel Management (OPM), provides healthcare benefits for approximately 8.2 million federal civilian employees, retirees, and their families.[6] Total expenditures for the U.S. healthcare system are projected to be over $3.8 trillion in 2019.[7] Given the large number of Americans served and the cost of these programs the federal government has a clear responsibility in assessing and promoting the quality[8] of the healthcare it oversees.

Over the past two decades, quality measurement programs have expanded dramatically, with thousands of measures now used in a variety of public and private programs for accountability, value-based payment, public reporting, and quality improvement across care settings and provider types. While there have been notable successes, meaning improved health outcomes, driven by the increased focus on quality measurement and improvement, healthcare providers and organizations, as well as patients, have experienced significant burdens as a result of proliferating measurement requirements. Providers are required to report duplicative, overlapping, or conflicting measures to multiple stakeholders, such as federal and state governments, private payers, and accreditation bodies.

Because the current measurement landscape is an outgrowth of multiple legislative and regulatory acts, the current state reflects a variety of uncoordinated initiatives, with little alignment across settings or payers or around common goals. The current QME lacks a coordinated governance structure for assessing the benefit of these measurement initiatives against their imposed cost. Further, the information gleaned from the QME is often not shared with providers or the public in a manner that is timely or meaningful enough to inform quality improvement efforts and decision-making. Over the past several years, key medical, consumer, and business stakeholders and government leaders have voiced the need to evaluate and improve the existing QME.[9] HHS, DoD, and VA have made concerted efforts in recent years to improve federal health quality programs in response to these concerns. This Health Quality Roadmap builds on those efforts and provides a unified approach to aligning quality measurement across federal programs that support and enhance patient health outcomes.

Principles for Reform

The policies outlined in this Roadmap support the Administration's goals of improving transparency, reducing provider burden, allowing informed consumer and purchaser decision-making, and ultimately improving health outcomes. The federal government intends to provide leadership to accelerate improvement across the QME, with the understanding that direct stakeholder engagement and equal partnership with the private sector will be necessary to drive meaningful change nationally.

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[5] https://health.mil/I-Am-A/Media/Media-Center/Patient-Population-Statistics/Patients-by-Beneficiary-Category and https://www.va.gov/health/.

[6] https://www.opm.gov/healthcare-insurance/healthcare/reference-materials/2019-open-season.pdf.

[7] Sisko AM et al. National Health Expenditure Projections, 2018–27: Economic And Demographic Trends Drive Spending And Enrollment Growth. *Health Affairs* 2019 38:3, 491-501

[8] For purposes of this Roadmap, quality includes the domains of safety, timeliness, efficiency, effectiveness, equitability, and patient-centeredness.

[9] For example, U.S Government Accountability Office. Health Care Quality: HHS Should Set Priorities and Comprehensively Plan Its Efforts to Better Align Health Quality Measures. GAO-17-5: October 2016; U.S. GAO. Health Care Quality: CMS Could More Effectively Ensure Its Quality Measurement Activities Promote Its Objectives GAO-19-628: Sep 19, 2019.

The following principles—identified collaboratively with input from a wide array of government, academic, and industry stakeholders—will underpin the solutions identified in this Roadmap:

Quality Information is Available and Meaningful. The QME should produce accurate, timely, and actionable information with sufficient clinical detail on healthcare quality for:

- **patients** selecting providers and making choices about their healthcare
- **providers** identifying opportunities for improvement in providing care
- **payers and policymakers** seeking to align financial incentives with health quality goals

Balance Administrative Burden with the Goal of Obtaining Meaningful Information. Collecting and reporting data for quality metrics requires time and resources. The need for such data should be evaluated in light of the administrative burden incurred in collecting it and the benefits derived from reporting it. For example, data collected to support the QME should be drawn to the extent feasible from information produced as part of typical clinical workflows and should be collected electronically. Measures that are reported should result in improved patient outcomes.

Alignment of Measurement Priorities. HHS, in collaboration with DoD, VA, and the private sector, should align measurement priorities and create a parsimonious set of metrics targeting concrete, realistically achievable healthcare quality goals. For the purposes of this Roadmap, a parsimonious measure set is one that employs the least number of measures necessary to provide sufficient information to the intended audience. This effort will focus on alignment within and across federal programs, recognizing that the direction set by the federal government may shape the direction of the national QME more broadly, including the QME used by private sector actors. Given the impact of federal programs on the broader national QME, state and private sector actors will be engaged as equal partners in informing federal alignment efforts, while retaining their full autonomy to manage their own quality programs.

Cohesive Measurement Stewardship. A transparent multi-stakeholder mechanism should govern the measure development and stewardship process. This process should ensure transparent contracting for measure development, using input from multiple stakeholders (patients, providers, and payers); should ensure measures are scientifically and statistically sound; should include a mechanism for pilot-testing measures prior to broad use in quality programs; and should include ongoing impact assessment and cost-benefit analysis to regularly validate each measure's continued use. This process should consider both clinical and patient-reported outcome measures.

***Reward Innovation and Improvement*.** Measures—particularly those tied to incentives—should motivate quality improvement (or reduce costs while maintaining quality), should be tied to concrete behaviors that providers can change, should support innovators, should be based on meaningful differences in performance, should be constructed to minimize gaming, and should avoid unintended consequences.

***Leverage What Works and Reform the Rest*.** Whereas wide-scale reform is needed to actualize an enhanced QME, well-established healthcare quality frameworks and effective initiatives with proven results should be leveraged to ensure a robust and evidence-based process. Similarly, initiatives that have not demonstrated meaningful improvement in the QME should be reformed or retired.

The Opportunity for Change

This Roadmap contains three mechanisms to improve the federal QME:

1. **Establishment of coordinated governance and oversight**
2. **Modernize approach to data collection, reporting, and sharing**
3. **Reform how measures are used in federal quality programs**

Governance and Oversight

Existing federal measurement initiatives are siloed within independent healthcare programs and agencies. No governance structure exists to ensure alignment of quality efforts, to assess effectiveness of programs and measures in achieving their stated objectives, to assess utility and duplication of effort across programs, or to assess overall value in light of the burden programs impose on providers and patients. A new governance structure is required to achieve the goals of the executive order.

HHS, DoD, and VA will, in conjunction with private sector stakeholders, establish an enduring, integrated, and transparent governance and oversight structure to oversee the administration of government healthcare quality programs, quality measures and standards, core data sets, and quality data collection, while respecting the legislative mandate of each program. While agencies will continue to have the statutory responsibility to issue their own regulations, this governance body will be empowered with the authority to establish processes to (1) coordinate quality and payment programs and associated quality measures; (2) comprehensively assess the impacts, positive and negative, of the federal QME; (3) align data collection, storage, and access approaches in support of health quality decision-making; and (4) implement processes for the development, validation and retirement of quality measurements. In addition, the governance structure will engage private sector stakeholders—particularly patients and providers—as equal partners with an equal voice in the management and oversight of the federal QME.

Data Collection and Reporting

The systems for data collection, data availability, analysis, and reporting supporting the federal QME, much like the approach to governance, have developed over the past two decades in response to various legislative and regulatory mandates. As a result, federal data are housed in isolated datasets on systems limited in their ability to share and receive information. There is typically an 18-month lag between the time that patients receive care and the time providers and the public receive information on the quality of that care. Many of these systems have been modified to perform expanded functions and have been stretched beyond the capacities of their intended use.

Leveraging the governance body described above, the federal government will reevaluate its approach to data collection and reporting, with the goal of empowering the intended users of the data—patients, providers, policymakers, and payers—with access to timely and transparent information about the quality of care and with appropriate safeguards for privacy and security. This will include expanding accessibility and availability of federal datasets to a larger audience of public and private stakeholders. This also means ensuring that data are available at a level of analysis meaningful for decision-making by patients, providers, policymakers, and payers.

The governing body will also identify opportunities to leverage newer technologies to minimize the burden on those who collect or report data. It will also identify opportunities to ensure timely and rapid

feedback to stakeholders to support decision-making and continuous improvement of care and processes. Better data will allow for better and more meaningful measures in the future and will allow for a system agile enough to respond to shifts in the nation's health needs and health care delivery.

Quality Measures in Federal Programs

Over the past decade, the federal government has implemented numerous quality reporting and value-based payment programs, spanning the continuum of ambulatory, inpatient, and post-acute care. These programs are intended to provide information about the quality of healthcare providers so that patients may make informed decisions. The programs have used public reporting and payment incentives to incentivize healthcare providers to engage in continuous quality improvement. The programs have also facilitated a transition to value-based healthcare purchasing, which continues to be a top priority for the HHS Secretary.[10] Patients are often unaware of, or do not fully understand, these programs, and the proliferation and increasing scope of quality measurements has resulted in burden and confusion for providers. Recent agency reform programs, such as CMS's Meaningful Measures Initiative, have been effective in addressing these issues and improving the QME. However, the potential of agency-specific reform efforts is limited by agency resources and authorities. A broader reform effort that incorporates and supports existing efforts is necessary. In partnership with state and private sector programs, measure programs can be coordinated, combined, and simplified, reducing burden on those who provide care and freeing resources to focus on improving care rather than reporting care.

Leveraging the governance body described above, the federal government will undertake a systematic review of its quality reporting and value-based payment programs, to identify opportunities to reduce burden, promote efficiency and effectiveness, and accelerate the shift to value, in alignment with the principles outlined in this Roadmap. This assessment will include actionable recommendations for (1) aligning and streamlining the use of measures in federal programs, (2) ensuring programs improve health outcomes by supporting patient and provider decision-making, and (3) reforming or retiring the measures or incentives for which the costs outweigh the benefits.

[10] https://www.hhs.gov/about/leadership/secretary/priorities/index.html#value-based-healthcare

Call to Action

Governance and Oversight

Actions Planned for 2020

1. Establish a transition leadership team responsible for developing a sustainable strategy for governance and oversight of the federal QME and for executing the activities of this Roadmap in parallel with the establishment of the long-term governance structure.
    a. This transition leadership team will be led by the Secretary of HHS or their designee and include representatives from CMS, the Agency for Healthcare Research and Quality (AHRQ), the Centers for Disease Control and Prevention (CDC), IHS, HRSA, DoD, VA and OPM. The transition leadership team will have a formal role for private sector stakeholders in the management of the QME, consistent with statutory and legal requirements. The transition leadership team should strive for transparency by making its proceedings publicly available.
        i. Each participating agency will dedicate appropriate staff resources to support this transition leadership team and its activities and develop a budgeting plan for both the transition and permanent governance structure.
    b. By July 1, 2020, the transition leadership team will develop a plan for establishing a long-term quality measurement governance structure. They will develop this by the following:
        i. Inventory functions and tasks needed to support the federal QME and evaluate whether the entities performing various functions are best suited for those tasks in the future state.
        ii. Develop recommendations for authorities and funding that would be required to support the future governance structure in effectively performing oversight. This will include exploring different mechanisms for engaging the private sector and patients suggested by subject matter experts and in the literature (e.g. Financial Accounting Standards Board [FASB]-type entity; use of a Federal Advisory Committee Act [FACA]; or others).
        iii. Develop a charter for the permanent governance structure. This charter will specify that the governance structure is accountable to the Secretary of HHS and that the Secretary shall periodically evaluate the utility of the governance structure and decide on whether to renew or terminate the body.
        iv. Develop an implementation plan to stand up the long-term governance structure and execute upon the actions outlined in this Roadmap. This implementation plan should appropriately represent the interests of patients, providers, and payers.
    c. The transition leadership team will execute short-term actions outlined in this Roadmap until the permanent governance structure is operational, at which time the permanent governing body will be charged and empowered to implement this Roadmap. Those responsibilities include the following actions:
        i. By April 1, 2020, assess the scope of the federal QME by inventorying federal programs that collect, store, and use quality data. The inventory will include statements of goals and objectives for each program, as well as estimates of federal resources supporting each program, relevant statutory mandates, and the burden imposed by each program on healthcare providers and patients.
        ii. By October 1, 2020, develop a strategy for ongoing evaluation of program effectiveness in achieving their stated goals and monitoring for unintended consequences. This

strategy should prioritize programs in the initial inventory of relevant federal programs to determine the timeline for evaluation as well as establish clear criteria for evaluation.

iii. Until the permanent governance structure is in place, execute on the actions listed under the *Data Reporting and Collection* and *Quality Measures in Federal Programs* sections.

2. By December 31, 2020, establish a long-term governance structure for all government quality management and measurement programs. Key functions of the long-term governance structure will be informed by the findings of the transition leadership team described above and in addition should include the following actions:
    a. Develop priority areas for quality measurement reflecting national healthcare goals identified by federal, state, and private sector stakeholders.
    b. Establish and implement a transparent process to make quality data publicly available, as discussed below.
    c. Establish and implement a transparent, evidence-based process by which quality measures used in federal programs are developed, maintained, evaluated, modified, and retired. This will include specifications for: contracting for measure creation, including engagement with specialty societies; measure validation, including cost-benefit analysis and scientific validity; measure pilot-testing; and ongoing stewardship and maintenance of measures, including timely updating of measures in response to evolving evidence and guidelines.
    d. Ensure the federal government applies acceptable technical standards and impact analysis for all quality measurement activities, to identify those that demonstrably improve health outcomes, address healthcare costs, and meet the measurement needs of patients, providers, and payers.
    e. Develop and implement a plan for incorporating patient and provider input into both the federal QME and the assessment of provider healthcare quality.
    f. Execute the evaluation strategy defined by the transition leadership team. Share insights and recommendations for federal programs that collect, store, and use quality data to better align with the federal QME. In addition, identify programs in need of significant reform or retirement and develop recommendations for operational, regulatory, or legislative changes for review with White House (WH) and Congressional leaders. The process for developing these recommendations should consider public feedback and the impact of the proposed changes on patients.
    g. Oversee the implementation of all other activities defined in this Roadmap.

Data Collection and Reporting

Actions Planned for 2020

1. Improve accessibility and availability of HHS, DoD, and VA datasets related to healthcare quality to a broader audience of stakeholders, while maintaining and safeguarding the public interest.
    a. By Spring 2020, solicit public input on what additional datasets should be released and what other data collection activities would be of interest to stakeholders. Develop recommendations and an implementation plan for review with WH and Congressional leaders.
    b. By July 1, 2020, publish a plan for publicly releasing HHS datasets containing information relevant to assessing quality in healthcare delivery, within the parameters of what the government can legally release.

2. By July 1, 2020, perform a review of CMS processes for ensuring data integrity as part of the survey and certification process for providers, and develop revised standards for auditing data that can be applied across all federal programs to ensure data validity.
3. By December 31, 2020, establish agreements within the federal government to share data across federal programs in order to facilitate quality measurement.
4. By December 31, 2020, gather inputs on infrastructure changes that would reduce provider burden of federal reporting requirements, such as a "report once" structure that reduces the need for providers to submit redundant data via multiple different avenues. This can be conducted in conjunction with RFI activity and responses to be performed by the transition team.

Further Actions under Consideration

- Make needed data infrastructure changes to support further dissemination of quality-related information to the public.
- Build an infrastructure that allows providers to "report the data once" in a standard format, permitting federal partners to repurpose that data for multiple programmatic purposes.
- Develop a blueprint to rapidly accelerate the use of measures derived from entirely electronic data sources, with the goal of 80 percent of quality measures based on electronic data sources by 2025. This blueprint will develop a strategy for information exchange, connectivity of data, and leveraging standards such as Fast Healthcare Interoperability Resources (FHIR)-based application programming interfaces (APIs).
- Develop a blueprint to define data standards and datasets to streamline data abstraction, collection, and reporting activities, to ensure the provision of meaningful and timely quality data.
- Support existing public-private partnerships for building the data infrastructure, such as the Virtual Research Data Center, making code and analysis public and linking datasets to provide more robust information on care quality across the continuum of care.

Quality Measures in Federal Programs

Actions Planned for 2020

1. Develop recommendations for streamlining existing quality reporting and value-based purchasing programs, consistent with proposals in the President's Budget for Fiscal Year (FY) 2020.[11]
    a. By Spring 2020, solicit input on a program that tests the consolidation of hospital inpatient quality reporting programs, consistent with the proposal included in the President's Budget.
    b. By Summer 2020, move forward with the Merit-based Incentive Payment System (MIPS) Value Pathways announced in the Calendar Year 2020 Quality Payment Program Final Rule.[12]
2. By July 1, 2020, identify specific goals for achieving even more parsimony and alignment of quality measures used in federal programs, including the following actions:
    a. In conjunction with private sector stakeholders, select a limited number of areas of focus for quality improvement across all government agencies, informed by a public convening and RFI.

[11] Please see the HHS FY 2020 Budget in Brief: https://www.hhs.gov/sites/default/files/fy-2020-budget-in-brief.pdf.

[12] See CY 2020 Physician Fee Schedule Final Rule (84 FR 62568).

   b. Develop a unified measures inventory covering all federal programs, including a crosswalk identifying alignment. Characterize each measure by purpose such as payment, research, or quality improvement. Different standards may be needed for each purpose.
   c. In conjunction with private sector stakeholders, identify a parsimonious set of core quality measures considered essential to understanding quality performance and tracking progress in these priority areas. These measures should be meaningful to patients and providers.
   d. Work with federal agencies to realign their quality measure sets with the national priorities and core measures. Identify opportunities to phase out or reduce reliance on measures outside these core sets. Agencies may differ in their measurement needs, but these differences should be purposeful and justifiable, including appropriate adherence to legislative mandates for programs.
3. By July 1, 2020, identify and execute short-term goals for improving management of the measure stewardship process, and implement a plan to achieve these goals. Publish a standards document for the quality measures lifecycle. Explore opportunities to encourage the private sector to develop measures.
4. By July 31, 2020, build on existing, comprehensive review efforts of the CMS Compare sites and Star Ratings, and develop a strategy to reform the way in which CMS shares quality information with patients, to make it more innovative, consumer-friendly, and helpful for patient decision-making. Consider leveraging a different platform and other sources of data not currently made available to the public (e.g., hospital-level procedure volume data).
5. By December 31, 2020, identify opportunities, including private sector partnerships, to improve the timeliness of data shared with providers and investigate sources of delay through rapid-cycle feedback loops, so that providers and organizations can quickly understand their performance and reliably understand future performance.
6. By December 31, 2020, develop actionable recommendations for basing measurement on broader and more generalizable datasets where possible (e.g., leverage all relevant data in CMS programs or all payer data, rather than relying exclusively on Medicare fee-for-service). Leverage and link other types of data not currently used in these programs, such as accreditation, volume, or staffing, to provide a more robust and comprehensive view of quality performance.

Further Actions under Consideration

- Review the use of quality measures in state Medicaid programs, identifying opportunities to help align the use of quality measures across states while still allowing states the flexibility to innovate in how they administer their Medicaid programs.
- Build a user-centric measures repository using newly accessible data (such as de-identified or synthetic) to speed and streamline the measure development process, accelerating the time to market for new quality measures that leverage the most current technologies and address critical national priorities and that can replace existing measures based on legacy data sources.
- Enhance and expand processes for educating providers and patients on federal quality measurement activities and value-based programs, to ensure greater understanding, engagement, and performance. Innovate on the ability to capture the patient voice through Patient Reported Outcomes Measurements (PROM) and develop strategies for PROM to be more available and operational in quality measurement programs, with a focus on measures that demonstrate care is congruent to patient goals.

- Review the use of quality measures in Accountable Care Organization and Alternative Payment Model provider systems, identifying opportunities to help align the use of quality measures across value-based payment models, while still allowing providers the flexibility to innovate in how they administer their care.

Summary

This Roadmap identifies specific actions to drive change through governance and oversight, data collection and reporting, and aligned measures in federal quality programs. The infographic in **Figure 1** below summarizes the planned actions and general timing for milestones. When implemented, this Roadmap will accelerate change and advance the Administration's goals of improving transparency, reducing provider burden, allowing informed consumer decision-making, and ultimately improving the health of all Americans.

Alternative Text for Figure 1

The HHS Secretary will stand up a transition team to execute on three simultaneous work streams: Governance, Data, and Measures.

Governance: By April 2020, the transition team will assess the scope of federal programs that collect, store, and use quality data. By July 2020, they will develop a plan for long-term governance including a strategy for engaging the private sector and patients. By October 2020, they will develop a mechanism for ongoing evaluation of program effectiveness. And finally, by December 31, they will establish the enduring governance structure.

Data: By Spring 2020, the transition team will solicit public input on information needs. By July 2020, they will publish a plan for publicly releasing HHS data sets and establish a process for validating provider-reported data. By December 31, 2020, they will improve accessibility and availability of federal datasets related to healthcare quality, establish agreements to share data across federal programs, and solicit ideas on data infrastructure changes that would reduce provider burden.

Measures: This will require ongoing patient and private-sector engagement. By Spring/Summer 2020, they will develop recommendations to streamline hospital and clinician quality programs to reduce provider burden. By July 2020, they will convene public and private-sector stakeholders to prioritize healthcare quality measurement goals, publish a standards document for the quality measures lifecycle, and review and reform CMS Compare sites and Star Ratings to better support patient decision-making. By December 31, 2020, they will identify opportunities to improve timeliness of feedback to providers and use broader and more generalizable datasets to provide a comprehensive view of quality performance.

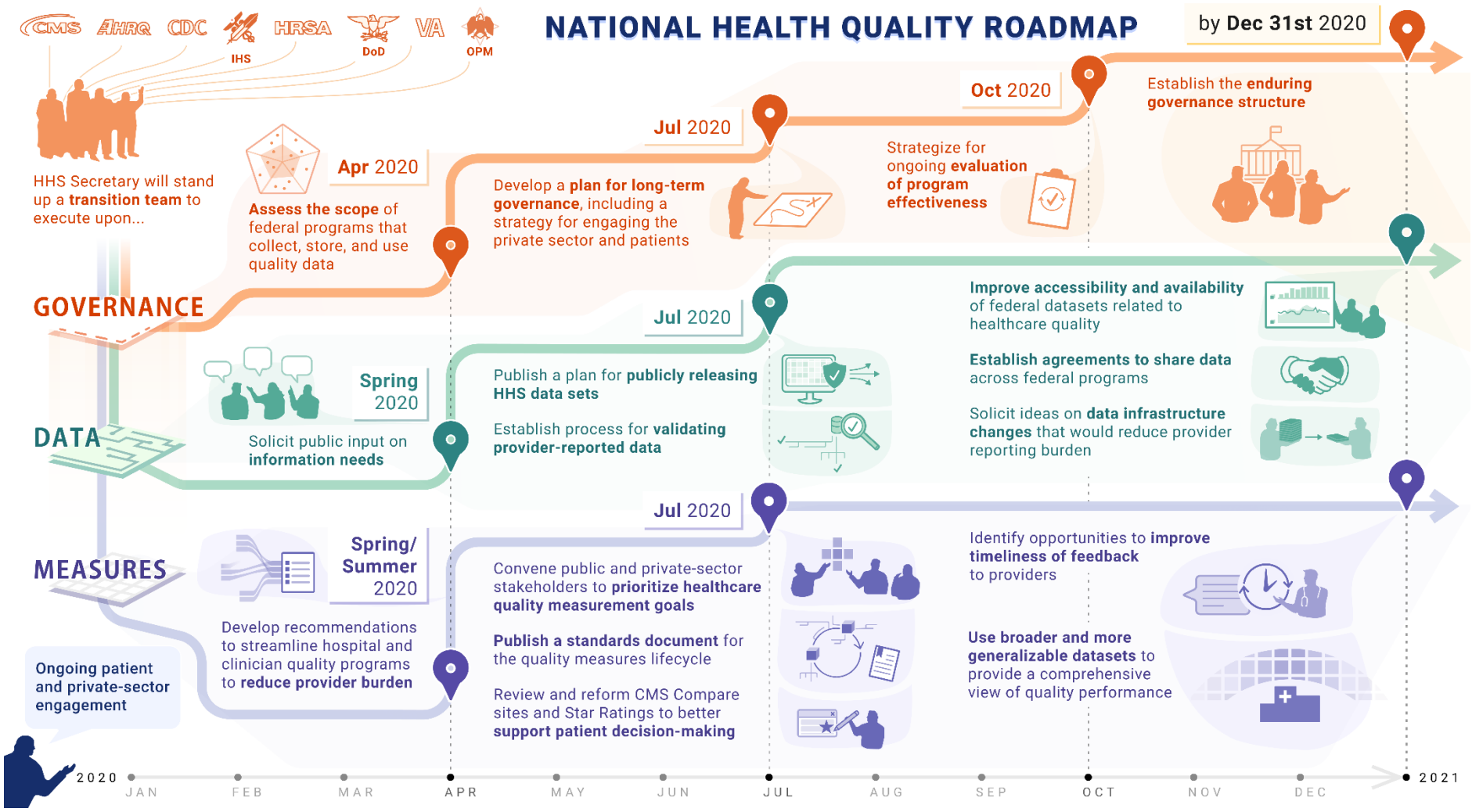

Figure 1. National Health Quality Roadmap