CQMC Implementation Guide DRAFT

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About the Core Quality Measures Collaborative

The Core Quality Measure Collaborative (CQMC) is a public-private partnership working to address the proliferation of measures by facilitating cross-payer measure alignment. The CQMC was convened in 2015 by America's Health Insurance Plans (AHIP). CQMC membership includes the Centers for Medicare and Medicaid Services (CMS), health insurance providers, medical associations, consumer groups, purchasers (including employer group representatives), and other quality collaboratives working together to recommend core sets of measures by clinical area to assess the quality of healthcare in the United States. The CQMC is a voluntary effort in which members choose to participate and subsequently promote adoption of the core measures.

Executive Summary

The U.S. healthcare system is moving from one that pays for the volume of services to one that pays for value. Value-based payment requires quality, patient experience, and efficiency metrics to assess the success of alternative payment models (APMs) and their participants at delivering value.

This increased reliance on performance measures as part of these models has led to a corresponding expansion in the number of measures. This expansion increases the burden on providers implementing the measures, the confusion among consumers and purchasers seeing conflicting measure results, and the operational difficulties among payers. The Core Quality Measure Collaborative (CQMC) is a public-private partnership working to address the proliferation of measures by facilitating cross-payer measure alignment through the creation and adoption of core measure sets.

Moving from fee-for-service to more advanced payment models is challenging. It is not uncommon for initiatives to fail. This Implementation Guide identifies key elements of success for value-based payment programs and synthesizes strategies and resources to help your organization succeed.

Strong and committed leadership is foundational for success in payment transformation. Successful and lasting change requires clear and consistent support and reinforcement at all organizational levels. Organizations will need to partner and engage in different ways. Leadership is essential to building the relationships and trust necessary for lasting partnerships.

The four elements of success for value-based payment implementation are:

1. **Leadership and Planning**
   Senior leadership support is crucial to the success of value-based payment efforts. Implementation of value-based payment programs and core sets within these programs, flows from and feeds into strategic planning and relationship building.
2. **Stakeholder Engagement and Partnership**
   Advancing performance measurement and payment models will require strong relationships, cooperation, and trust. Innovation in payment, performance measurement, and care models requires collaboration. Health care organizations will need to work together in new ways.
3. **Measure Alignment**
   Aligning on the same measures sends a clear message about what is important. It brings clarity to all stakeholders and allows work to focus on adding value through improvement instead of diverting resources to managing multiple, potentially conflicting, measures and specifications.
4. **Data and Quality Improvement Support**
   Value-based payment can only result in system transformation when all stakeholders have the necessary data, information, and resources to improve and transform. Organizations will need to source and share data in new ways to support this transformation.

It is crucial to make sure your organization's leadership team shares the vision of these elements and is willing and able to provide complete and ongoing support for this effort.

Background

The U.S. healthcare system is moving from one that pays for the volume of services to one that pays for value. Value-based payment requires quality, patient experience, and efficiency metrics to assess the success of alternative payment models (APMs) and their participants at delivering value.

This increased reliance on performance measures as part of these models has led to a proliferation of measures and a corresponding increase in burden on providers implementing the measures, confusion among consumers and purchasers seeing conflicting measure results, and operational difficulties among payers. Thus, the CQMC aims to:

- Identify high-value, high-impact, evidence-based measures that promote better patient outcomes, and provide useful information for improvement, decision-making and payment.
- Align measures across public and private payers to achieve congruence in the measures being used for quality improvement, transparency, and payment purposes.
- Reduce the burden of measurement by eliminating low-value metrics, redundancies, and inconsistencies in measure specifications and quality measure reporting requirements across payers.

The CQMC is accomplishing these goals through the development and implementation of core measure sets.

About the CQMC Core Sets

The CQMC defines a core measure set as a parsimonious group of scientifically sound measures that efficiently promote a patient-centered assessment of quality and should be prioritized for adoption in value-based purchasing and APMs.

Meeting the needs of multiple stakeholders for multiple applications of measurement (such as public reporting, provider feedback reports, or VBP) is a challenging task. These core sets are not intended to cover every possible scenario for every stakeholder, but rather to serve as a starting point for implementation and alignment. Organizations seeking to implement measures should choose measures from within the core sets when possible.

To date the CQMC has chosen to focus on clinician measurement, primarily in the outpatient setting, and to identify measure sets that could support multiple care delivery models. The sets are developed using a multistakeholder process. See Appendix B for more details on this process.

Initial core set development focused on eight core sets in areas identified as high priority by CQMC members. These eight sets are available on the CQMC website. The eight sets cover the following topic areas:

1. Accountable Care Organizations (ACOs), Patient-Centered Medical Homes (PCMH) and Primary Care
2. Cardiology

3. Gastroenterology

4. HIV and Hepatitis C

5. Medical Oncology

6. Obstetrics and Gynecology

7. Orthopedics

8. Pediatrics

The CQMC is committed to continuing to expand these sets and will be adding core sets for Neurology and Behavioral Health in the Summer of 2020. Future sets will be added to the CQMC website site as they become available. For information on the process used to select core set areas, see Appendix C.

These existing core sets will be revised as needed to reflect the changing measurement landscape, including, but not limited to, changes in evidence-based clinical practice guidelines, data sources, or risk adjustment.

Who Should Use This Guide?

The primary audience for this Guide is health plans seeking to implement or evolve value-based payment (VBP) programs. While intended primarily for plans, a broad set of stakeholders, including providers, purchasers, regional collaboratives, and policy and regulatory bodies may find the content valuable to help encourage increased alignment of health care performance measurement.

How to Use This Guide

Your plan can use the implementation strategies to design, refine, strengthen, and extend your plan's VBP initiatives. The Guide is not a list of "must-do's," but rather offers options from which to choose, depending on context, resources, and needs. The implementation strategies include content for plans that are starting out on a value-based payment journey as well as plans seeking to strengthen and sustain existing initiatives. These categories are roughly based on likely resource-intensiveness and organizational effort. Plans can determine which approaches are the best fit based on context and strategy. The considerations include a broad range of options to use and increase the likelihood of success.

The Guide is organized into key elements of success for VBP programs. We define success to mean full implementation of a program that achieves its goals, presumably increasing the value of care. Details of contractual or payment arrangements are outside the scope of this guide. Each element of success includes a brief description, implementation strategies, potential barriers and suggested solutions, and curated tools and resources that provide more in-depth information and guidance on relevant topics. Appendix A includes hyperlinks to overarching tools and resources that cross multiple areas. The Guide also includes information, strategies, and resources on key drivers of change, specifically planning and building relationships.

Elements of Success for Value-Based Payment Implementation

The CQMC identified four elements for successful VBP implementation by health plans:

1. Leadership and Planning
2. Stakeholder Engagement and Partnership
3. Measure Alignment
4. Data and Quality Improvement Support

While these elements are explored in separate sections for ease of navigation, the elements are inter-related, and all are necessary for successful VBP implementation.

Element of Success 1: Leadership and Planning

Senior leadership support is crucial to the success of VBP efforts. Implementation of value-based payment programs and core sets within these programs, flows from and feeds into strategic planning and relationship building.

Key Takeaways

- Involve a cross-functional team from the start: clinical, technical, and measurement staff, etc. Include natural leaders/champions. Each area will bring insight, skills, and knowledge to the process.
- Set clear goals for the program. Tie goals to improving care for patients. All stakeholders can find common ground in this. Prioritize and maintain focus on what is most important. Be prepared to adjust tactics to achieve the goals.
- Create a culture that welcomes innovation. Teams may need to iterate and revise initial plans and projections on the way to success. Learn from "failures" along the way.

Implementation Strategies: Starting Out

- Start small. Implement what is doable. Small wins and positive early experiences will help set the stage for more challenging work.
- Be strategic about where to start. Set the project up for success.
    - Select teams and partners that are enthusiastic about VBP.
    - Consider partnering with groups that have already demonstrated success in VBP.
    - Leverage senior leaders as active and engaged project sponsors.
- Identify an experienced project manager with a track record of success and involve them in the project as early as possible.
- Design an internal process for choosing measures and setting strategic plan for future measurement. Incorporate core measure sets into this process.
- Create and maintain an inventory of measures already in use.
- Create an inventory of available data. Include internal and external data sources. Sources may include data available through stakeholders; regional, state, and national data; or data sets available for purchase. See Element of Success 4: Data and Quality Improvement Support for more strategies and resources on data and data sharing.

- Determine what value-based payment arrangements are already in place, both in your organization and in other organizations. Consider aligning measurement with other organizations to increase signal and reduce burden.
- Determine what type of VBP model will be used.
- Determine if provider participation in the VBP program will be voluntary or mandatory. Consider starting voluntarily with willing partners and progressing from there.
- Consider these factors when weighing which core measures to use in a VBP: type of payment arrangement, experience with measurement, available data, technical capabilities, strategic priorities.
- Contact the Measure Steward for the most recent measure specifications. Review the measure specifications and create a plan for implementation. See Appendix E for considerations.
- Choose core measures with opportunity for improvement. It will easier to obtain stakeholder partnership and engagement around measures that have variation in performance or that performance has opportunity for improvement across the board.
- Prioritize core measures that offer participation and opportunity for most providers and where improvement will impact many patients and purchasers.
- Set a vision for future measurement initiatives. Identify paths to that future state and work on moving forward. Progress may be slow. Be patient and play the long game.
- Allow adequate time and resources to build a strong foundational program.
- Highlight and support the use of core measures in internal and external communications.
- Keep it simple, especially to start.

Implementation Strategies: Strengthening and Sustaining
- Rebalance measures as you move from fee-for-service based payment models to population-based payment models. Payment for volume of services may lead to concerns of overtreatment. Shifting to payment models such as global budget may correspond to a shift to concerns of undertreatment.
- The more payment models shift from a fee-for-service basis to population-payment basis, the more systems (both information and healthcare) will also need to change. Planning, cooperation, and coordination will be crucial and will need to expand to include more stakeholders.
- Include administrative services only (ASO) business in payment transformation. It is easier to implement, support, and sustain system and culture changes for a large, aligned population than for smaller, conflicting populations.
- Culture change associated with payment and system transformation will require clear and consistent leadership support in all stakeholder organizations.

Suggested Tools and Resources

Resource	Address

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Health Care Payment Learning & Action Network whitepaper on the use of performance measurement in value-based payment models	http://hcp-lan.org/workproducts/pm-whitepaper-final.pdf
Managing Transitions by William Bridges Book on managing the human side of organizational change. Strategies and tactics to help employees navigate and even embrace organization change and transitions.	Available on Amazon or through other bookstores: https://www.amazon.com/dp/0738219657/ Company website: https://wmbridges.com/
Center for Healthcare Quality & Payment Reform: How to Create an Alternative Payment Model: Designing Value-Based Payments That Support Affordable, High-Quality Healthcare Services	http://www.chqpr.org/downloads/How_to_Create_an_Alternative_Payment_Model.pdf
American Medical Association, Center for Healthcare Quality & Payment Reform: A Guide to Physician-Focused Alternative Payment Models	http://www.chqpr.org/downloads/Physician-FocusedAlternativePaymentModels.pdf
Agency for Healthcare Research and Quality: Will It Work Here? A Decisionmaker's Guide to Adopting Innovations	https://innovations.ahrq.gov/guide/guideTOC

Taking Action

Factors to consider while planning and designing a VBP initiative:

- Risk tolerance and proficiency of plan
- Technological capabilities of plan
- Potential partners and stakeholders
- Marketplace: consolidation, concentration
- Patients and conditions to include/not include
- Current and desired financial incentive structure
- Are you going to build a solution internally, purchase a solution, build partnerships?
- What barriers do you want to remove?
- What behaviors do you want to encourage?
- What other initiatives are in place? Is there opportunity to collaborate?
- What needs to be in place for stakeholders to collaborate without anti-trust concerns?

Budget considerations

Functions that may need to be covered in a budget include:

- Project management/administration
- Research and design if building out new functions or products

- Any necessary software for risk adjustment, data transfer, or measure calculations
- Legal costs for review of data use agreements, shared services agreements, or other agreements
- Fees associated with joining a regional collaborative or other existing group
- Data collection
- Data analysis
- Auditing of results to ensure the calculations are correct and bolster credibility
- Updating and negotiating/renegotiating contracts
- Any post-audit revisions
- Programming or system changes to claims payment software to process payments under new payment model
- Payments made as part of the program, either incentive or to support quality initiatives
- Program evaluation

Dr. Harold Miller's Six Steps to Creating a Successful APM (See full document in Resources and Tools above):

- Step 1: Identify one or more opportunities for reducing spending and/or improving the quality of care
- Step 2: Identify changes in care delivery that will reduce spending or improve quality in those opportunity areas
- Step 3: Identify the barriers in the current payment system that prevent or impede implementing the improved approach to care delivery
- Step 4: Design the Alternative Payment Model so that it will overcome the barriers in the current payment system and assure the delivery of higher-value care
- Step 5: Determine how payers and providers can operationalize the APM as easily and quickly as possible
- Step 6: Implement the APM, assess its performance, and make improvements as needed

Element of Success 2: Stakeholder Engagement and Partnership

Advancing performance measurement and payment models will require strong relationships, cooperation, and trust. Innovation in payment, performance measurement, and care models requires collaboration. Health care organizations will need to work together in new ways. Organizations will need to share data and work together.[1] Coordinated efforts, both internally and externally, will be necessary to move from payments based on fee-for-service structures to population-based payments. Partnering with providers and other stakeholders in program design and implementation increases ownership and contributes to program success.[2][3] Successful relationship building is a foundation for elements such as measure alignment and data sharing. We have purposely defined stakeholder broadly in this Guide, to include as many use cases as possible.

Key Takeaways

- Partner and build relationships with external and internal stakeholders. Future measurement initiatives will require new collaborations and working relationships. Building these relationships now will help everyone advance measurement and implementation goals.

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- Use a neutral facilitator to help achieve stakeholder alignment.
- Collaborate with other entities to align priorities and work toward cross-organization alignment on measurement.

Implementation Strategies: Starting Out

- Include providers and other stakeholders in the program design process.
    - o Start with a proposal for groups to react to instead of starting with a blank page.
    - o Work with stakeholders to prioritize implementation.
    - o Offer program design options where possible while maintaining alignment where necessary.
    - o Work to consensus. Strive for a solution all stakeholders understand and can live with.
- Work to address "rules of engagement" prior to running results/measures. Keep discussion focused on design of the program and not specific cases or organizations.
- Use a neutral and respected third-party auditor to validate measure results.
- **Offer a dry-run option for new or updated measures to help create stakeholder comfort with process and results. A dry run is calculating and sharing results privately with providers without taking financial action on the results. This will allow all parties to work through the process without payment pressures.**
- Offer a preview period for results, allowing providers to see their results prior to the results being used in a program. Establish a process for addressing questions and concerns.
- Be transparent about the measures and methodologies used in value-based payment programs. Sharing this information with providers, purchasers, and patients builds trust in the program and provides visibility into the linkage between the program and high-quality care.
- Consider working with a convening entity or regional collaborative if one is available. Advocate for the use of core measures.
- **Provide feedback and information to stakeholders to assist with quality improvement and benchmarking efforts. Ask stakeholders what information is most useful to them.**
- Choose measures that are meaningful to all stakeholders (purchasers, patients, providers). Prioritize measures that align with core sets and that capture processes and outcomes that are meaningful and motivating.
- It will easier to obtain stakeholder buy-in and engagement around measures that have opportunity for improvement. This may mean there is variation in performance or that performance has opportunity for improvement across the board.
- Choose areas of focus and prioritize. Clearly communicate these areas during stakeholder discussions and when contracting. Find areas of commonality and start with those areas.
- Cultivate internal champions for the adoption of core sets and measures.
- Focus on the clinical aspects and benefits to patients with the clinicians. Let the data and analytics teams focus on the specification and calculation details.
- Help team members understand how their work feeds into and produces high-quality care for patients. Translate and distill measure specifications and results into language that is relevant to their work. Discuss how to achieve results within the spirit of the measure focus. Strive for

commitment to high-quality care as a route to high-performance versus a narrow focus on measure specifics.

- Incorporate core measures into internal programs and focus. Share results broadly. Discuss results in team meetings. Provide feedback on performance and strategies for improvement.
- Align internal compensation and incentive programs with value-based payment principles and measures.

Implementation Strategies: Strengthening and Sustaining

- Consider creating a regional collaborative or shared data analytics entity for all stakeholders to align on measures and share data and data resources.
- Discuss ways in which stakeholders can support each other and work together to achieve quality goals (e.g. for blood pressure control, ensure formulary includes most effective options and implement value-based benefit design to minimize patient barriers, provide medication adherence feedback to accountable provider).
- Solicit ideas from providers on ways to change health care delivery to improve the value of care. Explore what payer (or other stakeholders) changes could facilitate those changes.
- Identify providers serving patients with social risk factors and engage them in the process. Discuss how to design and implement the VBP program to help providers improve care for these patients.
- Consider any perverse financial incentives resulting from measures and how to address via payment/contract. For example, if performing well on the measures will results in a reduction in urgent and emergent visits, consider the impact this may have on overall reimbursement.
- Offer a range of options for value-based payment programs. Meet each provider where they are today and work to progress to preferred arrangements.

Suggested Tools and Resources

Resource	Address
Center for Healthcare Quality & Payment Reform: How to Create an Alternative Payment Model: Designing Value-Based Payments That Support Affordable, High-Quality Healthcare Services In the Implementing the Alternative Payment Model section (page 158), Dr. Harold Miller presents a thorough accounting of barriers and solutions by stakeholders.	http://www.chqpr.org/downloads/ How_to_Create_an_Alternative_Payment_Model.pdf
Health Care Transformation Task Force Toolkit for Successfully Building Value-Based Partnerships	https://hcttf.org/building-successful-value-based-partnerships/
Agency for Healthcare Research and Quality: Tools and Resources for Practice Transformation and Quality Improvement	https://www.ahrq.gov/ncepcr/tools/transform-qi/index.html

Taking Action

Stakeholder Identification

Consider the following stakeholder groups when developing stakeholder engagement plans:

- Internal stakeholders (for example, IT department, claims system administration)
- Provider organizations (for example, contracted provider groups, specialty societies, medical societies)
- Purchasers and employer organizations (for example, entities purchasing insurance, self-funded organizations using administrative services, state purchasers such as state benefit plans and Medicaid)
- Patient organizations (for example, patient focus group, patient advocacy groups)
- Regional organizations (for example, collaboratives, health information exchanges)
- Other relevant organizations

Stakeholder Roles and Responsibilities

Clear roles and responsibilities are critical to project success. These roles and responsibilities will vary by implementation. Consider the use of a responsibility assignment tool to work through and document roles and responsibilities so that all stakeholders are clear and in agreement. One popular tool is a RACI (responsible, accountable, consulted, informed) matrix.

- Responsible entities/individuals perform the work. At least one entity should be assigned responsibility.
- Accountable entities/individuals are answerable for timely and correct completion of the work. For clarity, only one entity should be designated as accountable.
- Consulted entities/individuals provide input to the work through two-way communication.
- Informed entities/individuals are informed of work through one-way communication.

Sample RACI matrix

Task	Plan	Provider	Purchasers	Patients
First task	A	R	C	C
Second task	A	C	I	I
Third task		A		

Element of Success 3: Measure Alignment

Measure alignment is frequently identified as a key success factor for value-based payment programs.[4] [5] Core measure sets are a promising strategy for measure alignment and the Health Care Payment & Learning Action Network recommends using core sets as sources of measures for population-based payment.[6] The CQMC core sets have been developed with a goal of alignment with existing national measurement programs. Users of this guide will find familiar measures within the sets. These measures

should serve as a starting point for implementation and alignment. These are living sets that will be updated on a regular basis, evolving alongside the science and capability of performance measurement.

Implementation Strategies: Starting Out

- Visit the CQMC website and browse the core sets. Become familiar with the content. http://www.qualityforum.org/CQMC_Core_Sets.aspx
- Compare the core set measures with measures you already use. There may already be areas of overlap.
- Compare core measures with measures currently in use. You may discover non-core measures currently in use that address similar areas to measures in the core sets. Determine if it is possible to replace the existing measure with the core measure.
- Choose cross-cutting measures to supplement specialty-specific measures. This will increase the proportion of care captured and decrease the likelihood of missing results for providers due to small case numbers. See Addressing Small Numbers and Measure Reliability for more information.
- Prioritize core measures for implementation in new programs.
- Use measures as specified. Changing measure specifications results in misaligned measures and increased measurement burden.
- Coordinate with measure developer for specifications. The measure developer is the source of truth for measure specifications.
- Provide implementation feedback to the measure developer. Feedback on implementation questions and issues is a valuable resource for measure developers. Measure developers, in turn, should share feedback with measure stewards.
- Highlight the importance of alignment and core sets in discussions and communications. Secure buy-in from other stakeholders for these principles as well.

Implementation Strategies: Strengthening and Sustaining

- Join the CQMC and help build, strengthen, and sustain the core measure set development.
- When implementing patient-reported outcome measures (PROMs), use tools and instruments as specified. Changing the tool or instrument without thorough testing to examine potential impact on measure results may lead to misaligned measures and unintended consequences (e.g. provider withdrawal from market, increasing barriers to care).
- Use adequate risk-adjustment when selecting outcome measures for VBP programs and monitor unintended consequences to ensure providers serving vulnerable sub-populations are not underpaid for their services.

Suggested Tools and Resources

Resource	Address
National Quality Forum: Variation in Measure Specifications: Sources and Mitigation Strategies	http://www.qualityforum.org/Publications/2016/12/Variation_in_Measure_Specifications_-_Sources_and_Mitigation_Strategies_Final_Report.aspx

Element of Success 4: Data and Quality Improvement Support

Data sharing and quality improvement support are frequently identified as key elements of success for VBP and APM implementation.[7][8][9][10] Strategies in this section address not just how data are obtained and used to calculate measure results, but also what data are necessary for performance improvement. Data sharing depends on the relationships and stakeholder engagement discussed earlier in this document.

Key Takeaways

- Review and use the Health Care Payment Learning and Action Network's *Data Sharing Requirements Initiative White Paper* included in the Suggested Tools and Resources of this section.
- Creating value may require working together in new ways and providing new types of supports, including data, technical assistance, and payments to support infrastructure change.[11] Collaborate to move forward efficiently.

Implementation Strategies: Starting Out

- Inventory existing internal and external data assets that may be used for reporting.
- Explore what community or regional data sources are available. Using a community or regional data source that is more comprehensive than internal data sources will help capture care more accurately and yield more meaningful results. Examples of data sources include all-payer claims databases (APCDs), standardized data sets, and regional collaborative data warehouses.
- Avoid the temptation to exchange or collect more data than are necessary. Data capture that does not add value adds additional overhead and burden.
- Explore the use of existing Quality-Data Codes such as Category II CPT Codes and G-Codes as a way of obtaining quality data through existing claims mechanisms. Uniform use of these codes in an APCD could make all-patient quality data available for shared use and analysis.
- Use existing Quality-Data Codes rather than creating additional, unique Quality-Data Codes to help reduce administrative burden.[12]
- If using results from a registry, verify the registry's policies and procedures for data and results sharing to avoid any surprise restrictions on data use.
- EHRs may not have measures embedded, even if they are certified. Alignment around core measures should send a more unified signal to the marketplace and encourage inclusion of the measures in future versions.
- Support EHR customers advocating for alignment on core measures and coordinate requests for vendors to improve capture and reporting of core measures. Ask other stakeholders and partners to amplify the importance of electronic and digital measurement of core measure sets.
- Progress to patient-reported outcome measures (PROMs) through building blocks.
    - Provide supports for implementation of patient-reported outcome tools and instruments.
    - Set completion rate targets as part of the payment program.
    - Progress to paying for reporting PROM results.
    - Move to full implementation of payment based on results of PROMs.

- Obtaining clinical data for use in measurement and quality improvement does not have to be high-tech or complicated. One health plan sent lists of relevant patient identifiers to provider organizations. The providers queried their systems for the identifiers and returned a parsimonious list of most recent clinical data results. The health plan then loaded these results into its care management system, enabling disease prevention and management programs, HEDIS results, and other internal quality uses.

Implementation Strategies: Strengthening and Sustaining

- Consider providing targeted support to assist providers caring for patients with social risk factors.[13]
- Leverage technology where possible to automate collection and to capture necessary data in reportable fields and formats. This technology should not increase clinician burden.
- Be thoughtful about where data capture best fits into the clinical workflow and who should gather the data.
- Consider starting a regional collaborative or other entity to create shared data resources and reporting within the community.
- Participate in pilot programs for innovative data sharing or data exchange.[14]
- Create a mechanism for sharing claims information with provider groups, particularly those in a risk-bearing arrangement. Example mechanisms are provider portals and interfaces.[15]
- Providers can consider virtual structure such as an independent practice association to jointly support technological capability, both infrastructure and personnel.

Potential Barriers and Suggested Solutions

Data needed for measurement crosses sources (such as vaccinations).

- Determine potential data sources.
- Consider using a shared-services (external resources) model for assistance with combining clinical data from more than one system. Data standardization and provider identity matching can be difficult and resource intensive. Creating a shared-services model or leveraging existing external resources is probably more efficient than developing a new solution.[16]
    - Include organizations producing public reports of healthcare quality as potential shared-service partners.
    - Explore working with state agencies on data sharing. For example, the Wisconsin Department of Health Services created the Wisconsin Immunization Registry to track vaccinations, making vaccine records available to all providers and patients.
    - Consider working with a health information exchange or regional collaborative to fill data gaps.
- An organization working on its own to combine the clinical data will need to be prepared to address these requirements:[17]
    - Patient identity management – matching patient records across the systems
    - Provider identity management – matching providers across the systems
    - Data standardization – ensuring the same data value from different sources corresponds to the same clinical meaning

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- Implement an internal data governance structure, including separate agreements and governance for each data flow.[18] Obtain legal input early in agreements to address legal concerns ahead of completing negotiations.
- Consider using the Data Use and Reciprocal Support Agreement (DURSA) in the Tools and Resources section as a starting point for agreements.
- Leverage existing data standards such as Health Level 7's Consolidated Clinical Document Architecture to obtain data.

Suggested Tools and Resources

Resource	Address
Health Care Payment Learning & Action Network guide to implementing data sharing to support VBP and APMs. This thorough guide helps organizations understand what data they will need to reach their payment reform goals, assess their current-state data sharing capabilities, and how to close data sharing gaps. It contains numerous case studies and examples of data sharing. The guide provides context of regional and national initiatives to encourage alignment in data sharing methodologies. Key concepts and tools include: • Foundational Building Blocks (p 7) • Business Requirements for Data Sharing (p 10) • Strategies for Addressing Governance, Barriers, and Sustainability (p 19) • Data Sharing Barriers (p 22) • Specific Scenarios and Checklists for Developing Data Sharing Capacity (p 28) • Building Shared Infrastructure (p 37) • Detailed Resources (p 45)	http://hcp-lan.org/workproducts/dsri-report.pdf
Health Care Payment Learning & Action Network whitepaper on data sharing includes use and case studies of successful data sharing, along with fundamental recommendations.	http://hcp-lan.org/workproducts/ds-whitepaper-final.pdf
A systematic review of the literature on value-based care, identifying spending reduction incentives, quality incentives, and infrastructure supports and three key	https://newsroom.uhc.com/content/dam/newsroom/Harvard%20Report_FINAL_0923.pdf

components. Includes interviews and case studies from provider organizations.	
CMS 2020 Part B Claims Reporting Quick Start Guide contains guidance and frequently asked questions on the use of Quality Data Codes in MIPS QPP measure reporting.	https://qpp-cm-prod-content.s3.amazonaws.com/uploads/820/2020%20Part%20B%20Claims%20Reporting%20Quick%20Start%20Guide.pdf
Data Use and Reciprocal Support Agreement (DURSA): a comprehensive, multi-party trust agreement for entities that wish to exchange data. The full text is available online and it may be freely adopted and adapted by other entities.	https://ehealthexchange.org/onboarding/dursa/

Taking Action

Use the checklists in the Guide to Implementing Data Sharing to assess current capabilities and gaps and develop strategies for moving forward. The guide is the first entry in the Tools and Resources section above.

Consider measure-calculation options:

- Measure results may be calculated by the plan, using claims and/or raw data supplied by providers.
- Measure results may be calculated by providers, with measure components (numerator, denominator, etc.) provided to the plan.
- Measure results may be calculated by a third-party (registry, data analytics partner, regional collaborative, etc.) or vendor.
- Consider these options both in the context of starting points and for long-term measurement goals.

Consider data sharing options[19]:

- Data can be physically exchanged and move among data sharing partners. Each partner would maintain a copy of the data.
- Data can stay with the original organization and other organizations may be granted access to the data. Examples include application programming interfaces (APIs) and health information exchanges (HIEs).
- Data may be submitted to a third-party organization, such as a regional collaborative or data analytics partner.

Consider these infrastructure supports, which may be critical to the success of value-based care arrangements:[20]

- Raw data – Data that have not been analyzed, for example, claims data

- Analyzed data – Data or reports that have been analyzed or transformed, for example, care spending
- Technical assistance – Technical resources to build new capacities, for example, training materials or webinars
- Access to care management and tools – Services and tools that help manage care, even across providers and care settings
- Risk management support – Strategies to limit exposure to large losses, for example an absolute dollar claims cap
- Infrastructure payments – Financial resources to build new capacities

Technical Considerations for Implementation

While technical considerations may not rise to the level of key success factors, they may impact strategic decisions and can jeopardize program success. Technical considerations may dictate which core measures and sets are feasible for implementation. We found limited public information on some topics for VBP; however, we were able to draw on resources created to support public reporting of quality measures.

Benchmarking/Performance Targets

Choosing benchmarks and performance targets wisely is important for VBP success. Benchmark and target specifics should be discussed with stakeholders. Here we focus on strategies and considerations for benchmarking or setting performance targets.

Implementation Strategies

- Consider benchmarking that will reward both good performance and performance improvement.[21] If only top performers are rewarded, there is little motivation for improvement.
- Consider starting with incentives for sharing data or results and progressing to performance-based incentives.
- Strive for program designs that reward all performance improvement and that encourage sharing of best practices. Avoid creating winners at the expense of losers.[22]
- Set realistic benchmarks that providers can achieve.
- Consider baseline room for improvement when setting targets.[23]
- Performance targets should be set in absolute terms and established prior to the measurement period. All providers who achieve the target should receive an incentive payment.[24] [25]
- Setting relative targets, that is, rewarding provider performance in direct comparison to other providers, may stifle sharing of best practices and cooperative improvement.
- Absolute benchmarks (setting a specific target performance goal) may need to be adjusted if specifications change, for instance, if the target blood pressure in a measure is raised or lowered. Have a plan for addressing this if it occurs.
- Keeping the same targets for a longer period, ideally the length of the contract, creates stability and may make it easier for providers to justify investments related to quality improvement.
- Results may need to be grouped and evaluated by data source if different submission methods are used (for instance, registry and electronic clinical quality measures).

Patient Attribution

Patient attribution is a methodology used to assign patients, and their quality outcomes, to providers or clinicians.[26] It is important that providers and plans agree on the patient attribution methodology. The methodology must be data-driven and evidence-based so that all parties find it fair and trustworthy.

Implementation Strategies

- Patients may be attributed to providers prospectively or based on visits during the performance year. The timing of the attribution should be discussed and agreed upon by the plan and provider. The discussion should take the year-to-year stability of the patient population and plan enrollment into account.
  - Prospective attribution (attribution that happens prior to the performance year) allows providers to know their patient population prior to being measured on treatment of that population.
  - Performance year attribution (attribution that happens based on the performance year) may capture actual population and performance more accurately than prospective attribution.[27]
- The 2018 NQF Report on Attribution makes the following recommendations for patient attribution:[28]
  - Use the Attribution Model Selection Guide to evaluate factors to consider in the choice of an attribution model.
  - Attribution models should be tested.
  - Attribution models should be subject to regular multistakeholder review.
  - Attribution models should attribute care to entities who can influence care and outcomes.
  - Attribution models used in mandatory public reporting or payment programs should meet minimum criteria:
    - o use transparent, clearly articulated methods that produce consistent and reproducible results;
    - o ensure that accountable units can meaningfully influence measured outcomes;
    - o use adequate sample sizes, outlier exclusion, and/or risk adjustment to fairly compare the performance of attributed units;
    - o undergo sufficient testing with scientific rigor at the level of accountability being measured;
    - o demonstrate that the data sources are sufficiently robust to support the model in fairly attributing patients/cases to entities; and
    - o be implemented with an open and transparent adjudication process that allows for timely and meaningful appeals by measured entities.

Addressing Small Numbers and Measure Reliability

Performance measures generally require a minimum amount of data to reliably calculate provider performance. Poor reliability may result in misclassifying performance, resulting in incorrect VBP incentives. Ground rules and parameters for reliability requirements should be part of the VBP design

discussion.[29] Plans should monitor VBP programs for results that do not meet the agreed-upon reliability threshold.

Implementation Strategies

- Choose area-specific measures that cover a large proportion of care delivered by a provider.
- Choose cross-cutting measures that apply to a large percentage of providers.
- Increase the percentage of care captured by:
  - Including more patients (for example, using all-payer data)
  - Extending the measurement period (for example, measure over a three-year period instead of one year)
- Increase the signal by combining measures into a composite measure or score.
- Consider using group-level results instead of clinician-level or system-level instead of group-level if unable to achieve sufficient reliability at the more granular level.[30]

Suggested Tools and Resources

Resource	Address
Center for Healthcare Quality & Payment Reform: How to Create an Alternative Payment Model: Designing Value-Based Payments That Support Affordable, High-Quality Healthcare Services In Table 11 (pages 108-109) of Dr. Harold Miller's guide to creating alternative payments models, he presents an overview of possible ways of setting performance targets, providing strengths, weaknesses, and use case examples.	http://www.chqpr.org/downloads/ How_to_Create_an_Alternative_Payment_Model.pdf
National Quality Forum report on Attribution Principles and Approaches	https://www.qualityforum.org/Publications/2016/12/ Attribution_-_Principles_and_Approaches.aspx
National Quality Forum report on Improving Attribution Models	http://www.qualityforum.org/Publications/2018/08/ Improving_Attribution_Models_Final_Report.aspx
The Agency for Healthcare Research and Quality (AHRQ) Talking Quality website. While the focus of this Guide is VBP applications of core measure sets, the technical issues of performance measurement overlap for VBP and public reporting.	https://www.ahrq.gov/talkingquality/index.html

Path Forward

As the U.S healthcare system continues moving forward on the path from fee-for-service to new payment models, performance measurement and the systems that support it will need to evolve. It is difficult to move to bolder performance measurement when capabilities for implementing those measures are limited. At the same time, it is difficult to build the required capabilities and infrastructure absent a measurement use case.

Healthcare stakeholders can support innovative measurement by working together to build the use case. By partnering and working together to develop data support and infrastructure and by focusing on core sets of measures, everyone can help build the path forward.

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Appendix A: Overarching Tools and Resources

Resource	Address
Health Care Payment Learning & Action Network website	https://hcp-lan.org/
Health Care Payment Learning & Action Network YouTube Channel	https://www.youtube.com/channel/UCdmTX6ut7JCHUebuyRpBJ4g
The Center for Healthcare Quality & Payment Reform's (CHQPR) guide to creating an alternative payment model contains step-by-step instructions on how to create an alternative payment model. It includes recommendations for all stakeholders and examples of how APMs might be designed for different use cases.	http://www.chqpr.org/downloads/How_to_Create_an_Alternative_Payment_Model.pdf

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Appendix B: Core Set Development and Maintenance Process

To develop the initial core sets, the CQMC split into workgroups. Each workgroup reviewed measures currently in use by CMS and health plans, measures endorsed by the National Quality Forum (NQF), and measures recommended for discussion by CQMC members. Based on this review and discussion, the workgroups identified a consensus core set for the selected clinical areas. The consensus core sets were then discussed by the CQMC Steering Committee and the full CQMC before being finalized.

In 2018, NQF reconvened the CQMC Workgroups to update the existing eight core sets. Core set maintenance involves members with different perspectives engaging in meaningful dialogue and coming to consensus around sets of measures that reflect the best opportunities to improve patient care and clinical outcomes. CQMC Workgroups reviewed new measures that could be added to the core sets to address high-priority areas. Workgroups also reviewed measures in the existing sets and removed measures if necessary, for example, if they no longer have an opportunity for improvement, no longer align with clinical guidelines, or have implementation challenges. The Workgroups also discussed measurement gaps and adoption successes and challenges.

Each Workgroup comprises representatives from medical associations, health plans, and other (purchaser, patient, and quality collaborative) organizations. Voting and non-voting members, along with expert guests, discuss relevant measures for each topic area, coming to consensus on which measures should be put forward for a formal vote. Voting members of the Workgroup then receive an electronic ballot and vote on measures for inclusion and measures for removal. Measure changes require a super-majority of votes: 60% of all votes and at least one vote from each category (association, plan, and other). The voting results and proposed core sets are then reviewed by the CQMC Steering Committee and finalized by the full CQMC.

Appendix C: Principles for the CQMC Core Measure Sets

The core set principles outline the CQMC's vision for a comprehensive core set. Ideally, each core set as a whole should encompass all core measure set principles.

- Provide a person-centered and holistic view of quality, including consideration of Social Determinants of Health (SDOH) and experience of care.
- Provide meaningful and usable information to all stakeholders.
- Promote parsimony, alignment, and efficiency of measurement (only as many measures as necessary, and the least burdensome measure options).
- Include an appropriate mix of measure types while emphasizing outcome measures and measures that address cross-cutting domains of quality.
- Promote the use of innovative measures (for example, eMeasures, measures intended to address disparities in care, or patient-reported outcome measures).
- Include measures relevant to the medical condition of focus.

Appendix D: Principles for Measures Included in the CQMC Core Measure Sets

The selection principles guide the updating of the core sets and serve as a reference when determining whether a measure should be included in a core set. The selection principles consider various stakeholder priorities and aim to balance valued concepts. The principles for measures describe the attributes a measure should possess for inclusion in a CQMC core set. Individual measures should reasonably align with all principles for measures. Measures in a core set that no longer meet the selection principles should be considered for potential removal and discussed by the appropriate Workgroup. The selection principles allow CQMC members to weigh the merits of an individual measure and to determine if a set is promoting the values and goals of the Collaborative.

- Advance health and healthcare improvement goals and align with stakeholder priorities.
  - Address a high-impact aspect of healthcare where a variation in clinical care and opportunity for improvement exist.
- Are unlikely to promote unintended adverse consequences.
- Are scientifically sound (NQF-endorsed or otherwise proven to be evidence-based, reliable, and valid in diverse populations).
  - The source of the evidence used to form the basis of the measure is clearly defined.
  - There is high quality, quantity, and consistency of evidence.
  - Measure specifications are clearly defined.
- Represent a meaningful balance between measurement burden and innovation.
  - Minimize data collection and reporting burden, while maintaining clinical credibility (measures that fit into existing workflows, are feasible, and do not duplicate efforts).
  - Are ambitious, yet providers being measured can meaningfully influence the outcome and are implemented at the intended level of attribution.
  - Are appropriately risk adjusted and account for factors beyond control of providers, as necessary.

Appendix E: Reviewing Measure Specifications

This section is based on the CMS Measure Management System Blueprint.[31]

Measure specifications are technical instructions for how to build and calculate a measure. Measure specifications are available from the measure developer. The measure developer creates and maintains the measure. Measure developers are included in the measure information published for CQMC core sets. Review the measure specifications early in the project to determine where and how to obtain the data and information to calculate the measure. Include the multistakeholder team in the review to surface any concerns or questions.

Data Source

What data are used to calculate the measure? It may be possible to calculate a measure from more than one source. For instance, a measure might be calculated using a registry or using medical records. Results from different data sources may not be directly comparable.

Examples of data sources include:

- Administrative data
- Claims data
- Patient medical records – paper and electronic
- Electronic clinical data such as device data
- Registries
- Standardized patient assessments
- Patient-reported data and surveys.

Denominator

What population will be evaluated by the measure? The denominator statement includes parameters such as:

- Age ranges
- Setting
- Diagnosis
- Procedures
- Time interval
- Other qualifying events.

Format—Patients, age [age or age range], with [condition] in [setting] during [time frame]

Example: Patients 18-75 years of age by the end of the measurement year, who had a diagnosis of diabetes (type 1 or type 2) during the measurement year or the year prior to the measurement year (NQF 0062).

Denominator Exclusion

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Denominator exclusions define patients that should be removed from the denominator prior to calculating the measure.

Format of the exclusion statement—Denominator-eligible patients who [have some additional characteristic, condition, procedure]

Exclusions

Are there patients to whom the measure does not apply?

Format of the exclusion statement—Denominator-eligible patients who [have some additional characteristic, condition, procedure]

One example of an exclusion is a screening mammography for a woman who had a bilateral mastectomy.

Numerator

What population meets the intent of the measure? The numerator statement includes parameters such as:

- The event or events that will satisfy the numerator requirement
- The performance period or time interval in which the numerator event must occur, if it is different from that used for identifying the denominator.

Format—Patients who received/had [measure focus] {during [time frame] if different than for target population}

Example: Patients receiving a nephropathy screening or monitoring test or having evidence of nephropathy during the measurement year (NQF 0062).

Exceptions

Are there patients for whom clinical judgement might reasonably result in not meeting the intent of the measure? When calculating the measure, logic needs to be implemented for when to search for exceptions, as outlined in the example below.

Example: Asthma is an allowable denominator exception for the performance measure of the use of beta blockers for patients with heart failure. Thus, physician judgment may determine there is greater benefit for the patient to receive this treatment for heart failure than the risk of a problem occurring due to the patient's coexisting condition of asthma. Because the medication was given, the measure implementer does not search for exceptions, and the patient remains in the denominator. If the medication is not given, the implementer looks for exceptions and removes the patient, in this example a patient with asthma, from the denominator. If the medication was not given and the patient does not have any exceptions, the patient remains in the denominator and the provider fails the measure.

Level of Analysis

What entity or entities is the measure intended to measure? Unless otherwise noted, all measures in the CQMC core sets are at the clinician group and/or individual clinician level of analysis. This means they are specified and tested for use only at these levels of analysis.

Risk Adjustment Methodology

Some measures need to be adjusted for factors outside the control of the measured entity to ensure measure differences reflect differences in care. The risk adjustment model and methodology should be fully described in the measure documents.

Calculation Algorithm

How are the measure elements used to calculate the measure? In what order are steps performed? If the team has any questions or this is not clear, reach out to the measure developer for clarification.

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