Framework for Semantic Interoperability in Value-based Payments

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Introduction

Definitions of the concepts and terminologies used in the administration of value-based payment (VBP) models can vary depending on the program or contract. This may lead to differing interpretations among implementers who must reconcile diverse concepts to participate in contracting activities and establish workflows. As the industry continues to prioritize greater technologic and semantic interoperability, varying terms and definitions used in the governance of VBP models must be unified to avoid confusion and abrasion and to establish a context for greater innovation and engagement in this space.

CORE Participants encountered the impact of contrasting definitions while developing business rules that establish foundational infrastructure and data content requirements that benefit VBP models. Stakeholders represented on the CORE VBP Subgroup, responsible for developing operating rule requirements, often contend with terms that have slight or significantly different meanings or are used interchangeably. In recognition of this, the assembled group agreed to establish the CORE Framework for Semantic Interoperability in VBP (herein: "The Framework").

The Framework, as envisioned by the Subgroup, is meant to align disparate definitions of concepts and terminology used in VBP. The Framework was developed with the collaborative input of the CORE VBP Subgroup with membership comprised of health plans, providers, vendors, clearinghouses, associations, and standards development organizations. The definitions included in the Framework represent a synthesis of vocabulary standards and leverage specific industry resources that are recognized as best practices. Definitions contained in the "The Framework" are cited where appropriate.

The intent of the Framework is two-fold:

1. **Operating Rule Support:** As CORE continues to consider and develop operating rules that establish business requirements for the administration of VBP, The Framework will define the VBP-specific terminology and concepts used in rules.
2. **Industry Resource:** By aligning differing industry resources, it is anticipated that The Framework can be used as an external reference for industry stakeholders as they participate in discussions and maintain workflows to support, participate, and sponsor VBP models.

The Framework is a living document and will undergo routine maintenance as new terms or concepts are introduced or to address evolving business needs. The first iteration of this document represents a synthesis of the concepts and terms with the highest support among the Subgroup members, who favored a simplified presentation that can be built upon over time.

Operating Rules versus "The Framework"

The concepts, terms, and definitions included in the Framework do not prescribe any methodologies, infrastructure, or data content requirements that a program sponsor or implementer must use in the administration of a VBP model. The Framework is a resource for terms used in CORE Operating Rules and an external industry resource for program sponsors and implementers seeking to align the semantics of VBP administration.

That said, if a specific term or concept included in The Framework – in current and future versions – is included in a CORE Operating Rule, conformance with that operating rule is contingent upon alignment with the term or concept included. Therefore, while The Framework does not specify operating rule requirements on its own, if its definitions are leveraged for an operating rule requirement, implementers are expected to meet its content.

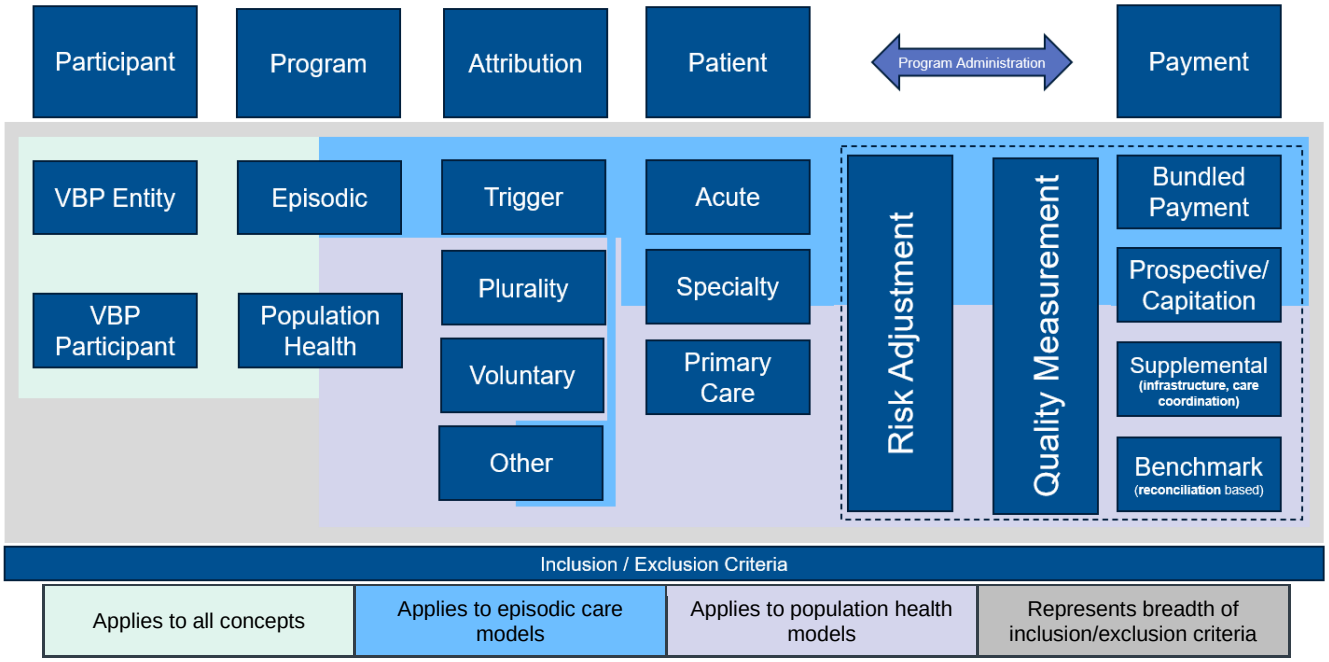
Where appropriate and applicable, CORE included contextual notes or synonyms for definitions and concepts included in The Framework to enhance understanding and broaden the impact of definitions on day-to-day workflows and implementations.

Conceptual Structure of "The Framework"

Though definitions are presented as individual items in The Framework, the nature of VBP models implies an interconnectedness of concepts. The interrelatedness of VBP is shown in **Figure 1** where the colors indicate the pathway in which VBP concepts most commonly overlap. The visualization in **Figure 1** serves as a guide that can aid with the interpretation and application of the definitions listed in this document.

It is important to recognize that variation exists in how programs are implemented and what processes are required to administer them. To that end, this visualization is not one-size-fits-all; rather, it broadly illustrates how VBP models are structured and how general terminology or concepts can overlap across models. The detailed definitions included in this document provide the greater context necessary to understand and unify the language used in the administration of value-based contracts.

Figure 1: Simplified view of Value-based Payment Frameworks



Questions about the concepts included in this guide can be submitted to CORE@caqh.org. You can follow the included links to learn more about CORE Operating Rules or learn more about current initiatives.

Section I: General Value-based Payment Terminology

Overarching VBP terminology and concepts applicable to most implementations.

Term #	Terminology or Concept	"Framework" Definition
1	**Value-based Payment (VBP) Model**	Otherwise known as alternative payment models (APM) or value-based care models (VBC) – among other names – these models are typically designed and sponsored by health plans to financially incentivize care that is efficient and results in good outcomes and/or adherence to best practices.
2	**Program Sponsor**	Typically, a private, employer-based, or government health plan that designs and administers a **VBP model**. Program sponsors are responsible for the preparation of methodological documents, contracting or participation agreements, and monitoring compliance of VBP entities and/or VBP participants with program requirements.
3	**VBP Entity**	A legal entity that holds a **VBP model** contract and agrees to be held responsible for the quality, efficiency, and coordination of care for attributed patients. Individual providers, practices, health systems, or other non-provider entities may serve as **VBP Entities**. Commonly, a larger **VBP Entity** may execute agreements with downstream participating healthcare and service providers to serve as **VBP Participants.**
4	**VBP Participant**	A medical group practice, health system, hospital, healthcare provider, community-based organization, pharmacy, other eligible organization, or individual that signs a participation agreement with a **VBP Entity** to participate in a **VBP Model**.
5	**Contract Period**	The amount of time a **VBP Entity** **and/or** **VBP Participant** agrees to administer a VBP program. A contract period can span multiple performance years. Program participants may terminate a contract early but may face penalties for doing so.
6	**Performance Period**	The defined period that **VBP Entities** and/or **VBP Participants** are accountable for expenditures, care, and outcomes for **attributed patients**.
7	**Look-back Period**	A defined period that occurred prior to the performance period or contract period that is used to determine attribution, financial benchmarking, or other **VBP Model** methodologies that require the application of an algorithm (e.g., **patient attribution**) or calculation (e.g., determination of a **financial benchmark**).

8	**Inclusion/Exclusion Criteria**	A defined set of criteria that determines what **VBP entities and/or VBP Participants**, patients, expenditures, services, or diagnoses are included in the methodologies and administrative aspects of a VBP model.
9	**Patient**	A health plan beneficiary or member that is attributed to a provider or care team participating in a **VBP Model**. Patients typically must receive care from **VBP Entity or Participant** during a performance year.

Section II: Episodic Care (Bundled Payments)

A VBP model design that emphasizes cost and quality for a time-limited episode of care.

Term #	Terminology or Concept	"Framework" Definition
10	**Episode of Care**	Episodic care **VBP Models** consist of contractually defined index events and follow-up periods during which program participants are responsible for the total or partial cost of care for a defined scope of services and/or supplies, while maintaining care quality relative to a pre-determined set of **outcome, process**, or time-and-cost efficiency metrics. A **VBP Entity** or **VBP Participant** may share in savings or be responsible for losses relative to a bundled payment and pre-determined **quality measures**. Episodic care VBP programs are typically aligned with Category 3 of the HCP-LAN APM Framework.
11	**Procedural Episodes of Care**	Distinguished from **Condition-based Episodes of Care** due to the presence of a surgical intervention, procedural episodes of care are defined and/or triggered by the presence of select Diagnosis Related Groups (DRG), Current Procedural Terminology (CPT) and/or Healthcare Common Procedure Coding System (HCPCS) codes on an institutional or professional claim. Consistent with the definition of **Episode of Care**, the bundled payment for a procedural episode of care is inclusive of a contractually agreed upon set of services and/or supplies provided over a defined follow-up period.

12	**Condition-based Episodes of Care**	Distinguished from **Procedural Episodes of Care** due to their treatment being primarily non-surgical, medical interventions or on-going care for chronic diseases, condition-based episodes of care are defined or triggered by the presence of select DRG and/or International Classification of Diseases codes (currently: 10th Edition (ICD-10)) on an institutional or professional claim. Consistent with the definition of **Episode of Care**, the bundled payment for a condition-based episode of care is inclusive of a contractually agreed upon set of services and/or supplies provided over a defined follow-up period.

Section III: Population-based Models

A VBP model design that emphasizes cost and quality across a population of attributed patients.

Term #	Terminology or Concept	"Framework" Definition
13	**Population-based Models**	A **VBP Model** where VBP Entities and/or VBP Participants are responsible for both the accrued healthcare expenditures relative to a financial benchmark or **capitated** amount, and care quality and/or time-and-cost efficiency measures for an **attributed roster of patients** over a defined **performance period**.
14	**Accountable Care Organization (ACO)**	A **VBP Entity** that participates in and may or may not assume risk in a population-based model contract. An ACO contracts with **VBP Participants** that coordinate to improve the quality of care and care outcomes while reducing unnecessary services and costs for attributed patients. The ACO may or may not have downstream financial relationships with aligned **VBP Participants** to incentivize coordination of care, efficiency, and quality.
15	**Managed Care Organization (MCO)**	An entity that aligns healthcare provider entities to provide care at lower costs. Managed care organizations may contract with providers or establish **ACOs** to reduce healthcare spend. MCOs may serve as the processor or payer of medical claims.

16	**Clinically integrated network (CIN)**	Groups of providers who agree to formally collaborate and align around mutually agreed protocols to improve care and lower costs. A CIN may form independently or act as a **VBP Participant** in a **VBP Model**. A CIN is a legal structure with specific protections and requirements for the participating providers and organizations. The Federal Trade Commission (FTC) has defined and provided guidance around CINs but does not formally monitor their administration or formation. More information is available in this write-up from the RAND Corporation.
17	**Patient-centered Medical Home (PCMH)**	A model of the organization of primary care that delivers the core functions of primary health care. The medical home encompasses comprehensive care, patient-centeredness, coordinated care, accessible services, and quality and safety (AHRQ).

Section IV: Patient Attribution

The method by which patients are assigned to VBP Entities and/or VBP Participants.

Term #	Terminology or Concept	"Framework" Definition
18	**Patient Attribution**	**Patient attribution** is the method of assigning patients to **VBP Entities and/or VBP Participants** in a **VBP Model**. Program participants are primarily responsible for the healthcare expenditures and quality and health outcomes for their assigned patients. Health plans typically share patient attribution information with VBP Entities and/or VBP Participants through a proprietary roster, assignment file, or electronic exchange.[1]
19	**Plurality of Care Attribution**	Assigning patients to a **VBP Entity and/or VBP Participant** with whom they have the highest number of relevant visits, spend, or aggregate number of claim submissions over a defined **look-back period**. This method may be used in concert with other indicated attribution methods.
20	**Triggering Service-based Attribution**	Use of individual codes from code sets such as DRGs, ICD diagnoses or CPT and/or HCPCS procedure codes – or a combination thereof – to assign a patient to a **VBP Entity and/or VBP Participant**. This method may be used in concert with other indicated attribution methods.

[1] The exchange of attribution information can be achieved using the X12 005010X318 834 facilitated by the CORE Attributed Patient Roster Data Content and Infrastructure Rules or the X12 005010X279A1 270/271 facilitated by the CORE Single Patient Attribution Data Content Rule.

21	**Condition or Diagnosis-based Attribution**	Using the presence of a specific condition or diagnosis on a claim (e.g., chronic kidney disease) to determine patient attribution to a VBP Entity and/or VBP Participant in an **Episodic** or **Population-based VBP model**. This method may be used in concert with other indicated attribution methods.
22	**Voluntary Patient Attribution**	Patient self-selection to a **VBP Entity** and/or **VBP Participant** of a VBP model. This method may be used in concert with other indicated attribution methods.
23	**Referring Provider Attribution**	If other indicated methods of attribution are not met, health plans may use the presence of a referring and/or prescribing provider to determine patient attribution to a **VBP Entity** and/**or** **VBP Participant** in a **VBP Model**.
24	**Regional Attribution**	Pre-determination of **patient attribution** to a **VBP Entity** and/or **VBP Participant** in a **VBP Model** based on a geographic area.
25	**Prospective Attribution**	Patients are assigned to a **VBP Entity** **and/or** **VBP Participant** at the beginning of a **performance year** based on a **lookback period** typically using a **plurality of care** method.
26	**Retrospective Attribution**	Patients are assigned to a **VBP Entity** and/or **VBP Participant** in a **VBP Model** based on the care provided during a **performance year** typically using a **plurality of care method**.

Section V: Risk Adjustment

The method and concepts through which the acuity of a patient population is accounted for.

Term #	Terminology or Concept	"Framework" Definition
27	**Risk Adjustment**	A method used to predict the healthcare needs of an **attributed individual or population of patients** based on their underlying demographic and medical characteristics. Risk adjustment typically results in a risk adjustment factor which serves as a multiplier that increases or decreases payments made between a program sponsor and program participant and/or adjusts measures of care quality and time-and-cost efficiency.
28	**Immutable Demographic Characteristics**[2]	Factors unable to be changed or altered that contribute to the calculation of **patient** or population-level risk. This may include characteristics such as age or inherited and/or congenital factors that cannot be changed.
29	**Potentially Mutable Demographic Characteristics**[2]	Factors that can change or be altered that contribute to the calculation of **patient** or population-level risk. This may include concepts such as gender identity.
30	**Federal or State Assistance Eligibility**	Formal Federal and state classifications relating to eligibility for income-based subsidies that contribute to the calculation of **patient** or population-level risk. This may include dual eligibility status or Medicare Part D subsidies.
31	**Social Risk Factors**	Non-medical factors that influence health outcomes representing the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These may include housing insecurity, or income status, among others. Resources to learn more about social risk factors include the WHO and the HL7 Gravity Project.

[2] Mutable and immutable demographic characteristics can be and are both routinely "self-reported" by individuals. Self-reporting has been recognized by CORE Participants as the gold standard for reporting demographic information.

32	**Disability Status**	Based on the Americans with Disabilities Act definition, disability status includes factors representing a physical or mental impairment that substantially limits one or more major life activity. In this context, record of a disability is used to in the calculation of **patient** or population-level risk.
33	**Chronic Medical Conditions**	Persistent, provider-diagnosed conditions that contribute to the calculation of **patient** or population-level risk and include but are not limited to congestive heart failure, diabetes mellitus, or past cancer diagnoses.
34	**Past Surgical or Implant History**	Factors including, but not limited to, past knee or hip replacement or the current implantation of cardiac devices that contribute to the calculation of **patient** or population-level risk.
35	**Interactions between Chronic Conditions**	Interactions between the presence of chronic medical conditions and/or surgical procedures that contribute to the calculation of **patient** or population-level risk. This may include a count of chronic conditions or the presence of two or more specific diagnoses that, together, are associated with greater severity of illness.

Section VI: Quality Measurement

How outcomes, efficiency, and adherence to best practices are defined and measured.

Term #	Terminology or Concept	"Framework" Definition
36	**Quality Measurement**	The method by which care outcomes, processes, or adherence to evidence-based clinical guidelines are quantified, and longitudinal or point-in-time changes in performance are tracked. Quality performance may be used to determine eligibility for **value-based payments** and/or the rate of savings or losses in **VBP Models**.
37	**Outcomes-based Quality Measures**	Measures the result of care or services delivered. Outcome measures reflect the impact of the health care service or intervention on the health status of **patient**. For example, the percent of patients who died or experienced infection following surgery (AHRQ).

38	**Process-based Quality Measures**	Measures adherence to services delivered or process that represent current evidence-based clinical guidelines. Process measures indicate what a provider does to maintain or improve health, either for healthy people or for those diagnosed with a healthcare condition (AHRQ).
39	**Patient Experience of Care Measures**	Patient experience of care measures encompass the interactions that patients have with the healthcare system, including their care from health plans, from doctors, nurses, and staff in hospitals, from physician practices, and other healthcare facilities. Patient experience of care is often recorded through use of the Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys (AHRQ).
40	**Patient-reported Outcomes (PROs)**	A report of the status of a **patient's** health condition or health behavior that comes directly from the patient, without interpretation of the patient's response by a clinician or anyone else (CMS). PROs are recorded using Patient Report Outcome Measure (PROMs) tools and incorporated into VBP programs using Patient Reported Outcome Performance Measures (PRO-PM).

Section VII: Payment Concepts in VBP

Specific fund flows and methodologies that make-up payment in VBP.

Term #	Terminology or Concept	"Framework" Definition
41	**Payment in VBP**	Refers to the contractual funds flow between a **program sponsor** and **VBP entities** and/or **VBP participants** based on accrued healthcare expenditures and performance on pre-determined measures of care quality and time-and-cost efficiency for an **attributed** roster of patients over a defined **performance period**.
42	**Retrospective Reconciliation**	The final determination of the portion of shared savings owed by a **VBP program sponsor** to a **VBP entity** and/or **VBP Participant**, or the portion of shared losses owed back to a **VBP program sponsor**. Retrospective reconciliation is typically determined using any of the following methods and may be further adjusted by performance on pre-determined measures of care quality and time-and-cost efficiency: a. Performance relative to a risk-adjusted **financial benchmark** b. Performance relative to a risk-adjusted **bundled payment** c. Over or under-payments of risk-adjusted **capitation** d. Recoupment of **supplementary payments**, if applicable

43	**Financial Risk Arrangements**	The contractual agreement between a **VBP program sponsor** and **VBP entity** and/or **VBP Participant** that specifies the amount of savings or losses they are respectively entitled to or responsible for relative to a **bundled payment**, **financial benchmark**, or **capitated arrangement**. Savings and losses are potentially subject to adjustments based on pre-determined measures of care quality and time-and-cost efficiency. Financial risk arrangements for **VBP Models** are generally aligned, but not limited to, Categories 2 through 4 of the Alternative Payment Model (APM) Framework maintained by the Health Care Payment Learning & Action Network (HCP-LAN).
44	**Financial Benchmark**	A set, **risk-adjusted** dollar amount typically determined by historical fee-for-service spend, market-based trends, or other methods that is used to measure financial performance in **VBP Models**. Programs using a **financial benchmark** most closely align with the HCP-LAN Categories 3 and 4.
45	**Capitation**	**Risk**, care quality, and/or time-and-efficiency adjusted payments prospectively made at pre-determined intervals by a VBP program sponsor to a **VBP entity** and/or **VBP participant** that accounts for a global or select set of services and/or supplies for **an attributed patient population.** Capitation payments are predictive and are based on historical fee-for-service spend, market-based trends, or other methods. Capitation may be subject to a **retrospective reconciliation** to address over or under-payments. Programs using capitation most closely align with the HCP-LAN Category 4.
46	**Bundled Payment**	A **risk-adjusted** prospectively set or prospectively paid amount that is meant to cover the cost of a select condition, procedure, or service and associated, appropriate follow-up care and supplies for an individual **patient** over a defined period. If prospectively set, payment is subject to **retrospective reconciliation**. Bundled payments are typically associated with **episodic care** programs and most closely align with the HCP-LAN Category 3.

47	**Supplemental Payments**	Contractually defined prospective payments from a VBP program sponsor to a **VBP Entity** or **VBP Participant** for the purpose of investment into infrastructure and/or care coordination enhancements that benefit the administration of the contracted requirements of a **VBP Model**. Payments may be subject to **retrospective reconciliation**, but can be provided by the **VBP program sponsor** without a need for the funds to be paid back. Supplemental payments can be provided in any category of the HCP-LAN Framework.

Refinement to "The Framework"

It is the intent of CORE Participants involved in The Framework's development that this resource is a **living document**. Consistent with this perspective, The Framework's contents are periodically reviewed and updated to reflect current terminologies and business needs. Though the frequency of industry submissions cannot be predicted, CORE employs predictable review and approval timelines that incorporate industry consensus and leverage the existing CORE Rule Development and Voting Process.

The Framework is updated consistent with the steps outlined below.

1. **Industry Input:** CORE Staff formally accepts industry requests for additions, edits, and removals from the Framework from all industry stakeholders. Requests must be emailed to: CORE@caqh.org. CORE staff works with submitters to clarify and ensure completeness of submissions.

2. **Assignment of Industry Stewards:** Three subject matter experts from CORE Participating Organizations with knowledge of the creation, structure, and maintenance of industry value-based payment terminology serve as industry stewards for The Framework. Each Industry Steward represents either a health plan, provider, or vendor CORE Participant. It is the responsibility of the Industry Stewards to evaluate and contingently accept or reject submissions.

   Industry Stewards are nominated in a CORE Call for Participants, which is renewed whenever there is a vacancy.

3. **CORE Work Group Evaluation:** All industry submissions evaluated and recommended for contingent addition or exclusion by the CORE Industry Stewards are further considered by a CORE work group that is convened for rule development for value-based payments. The CORE work group votes to accept or reject the CORE Industry Steward decision, at which point the addition or exclusion of the industry submission is considered final. CORE work group can include, but is not limited to, CORE Subgroups and CORE Review Workgroups.

Timelines and stakeholder expectations are communicated to the submitter, the CORE Industry Stewards, and CORE work group membership.