NATIONAL QUALITY FORUM

Variation in Measure Specifications:
Expert Panel Meeting

June 29, 2016

Definition of Reference Measure

- The source and/or original measure used for comparison in order to determine if a variant is created
- Does not indicate the selected measure is the best measure for use

Defining 'Reference Measure'

Better Alignment ↑

- Category 1- Measure has been reviewed and approved by a multi-stakeholder consensus-based entity utilizing an evidence-based validation process.

- Category 2- Measure has not been reviewed but is used in an accountability program.

- Category 3- Measure is not in an accountability program and has not been reviewed, but the measure's specifications are publicly available and can be accessed for use.
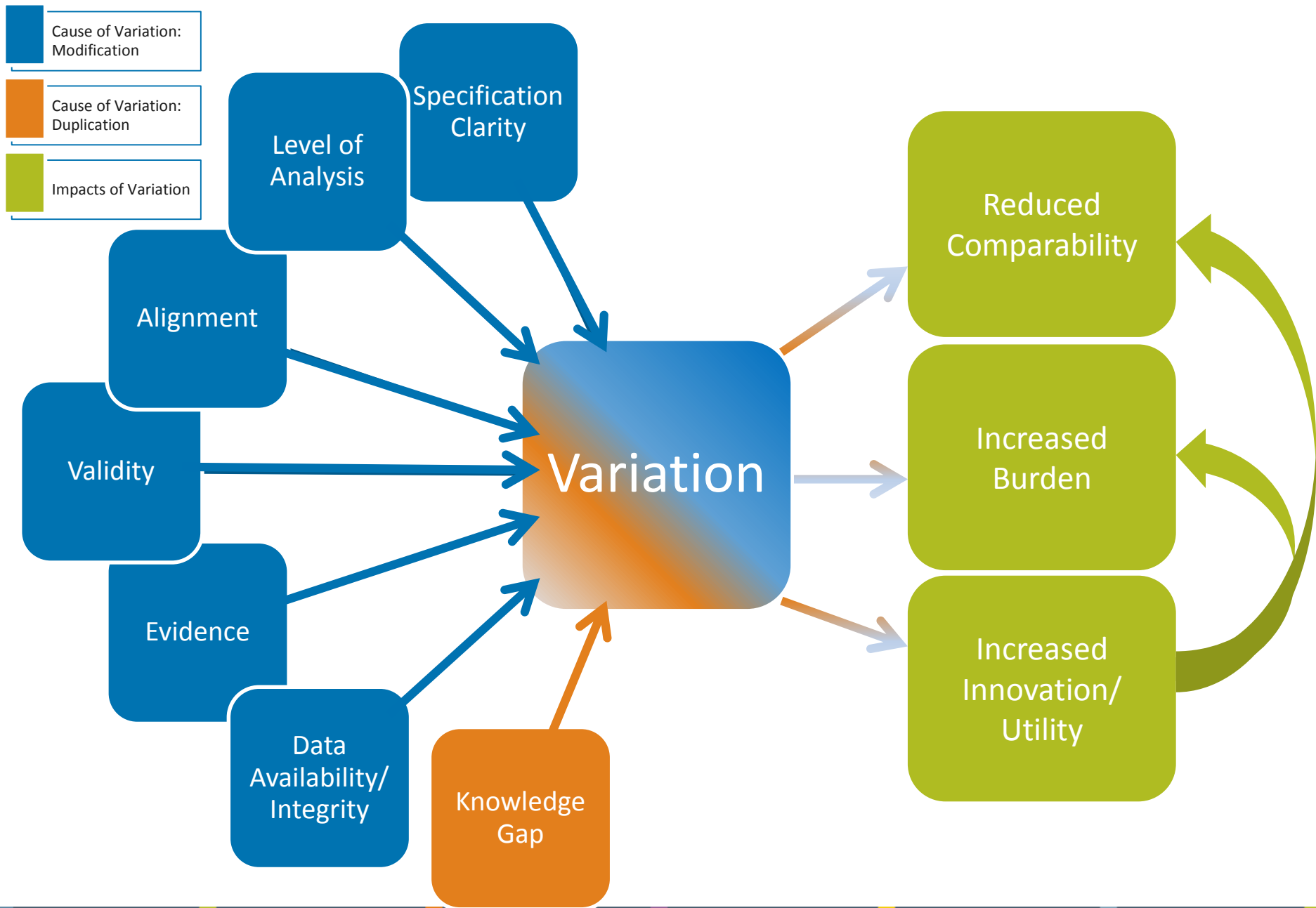
Discussion

- How will the reference specification and or reference measure be decided and chosen when all potential reference specifications and or measures are within one category (ex: Category 2)?
- What would a reference measure decision tree need to consider and address?

Inputs in Taxonomy

- Expert Panel Deliberations

- Member and Public Comments

- Key Informant Interviews

Causes of Variation and Mitigation Strategies from Key Informant Interviews

Data (Cause and Mitigation)

Cause**:** Availability, Accessibility, Completeness.

Mitigation: Aggregation & Audit.

Transparency (Mitigation)

Annotate and acknowledge modification of reference measures and reasons for variation.

Measure Complexity (Cause)

Workforce training. Understanding numerator, denominator, exclusions.

Additional Definitions: Mitigate

- Diminish/lessen the impact of variation. Reduce the effects of varying a measure.

Strategies to Address Variation

Avoid Variation

- Feedback Loop
- Benchmark

Lower Burden

- Look for a Reference Measure

Increase Comparability
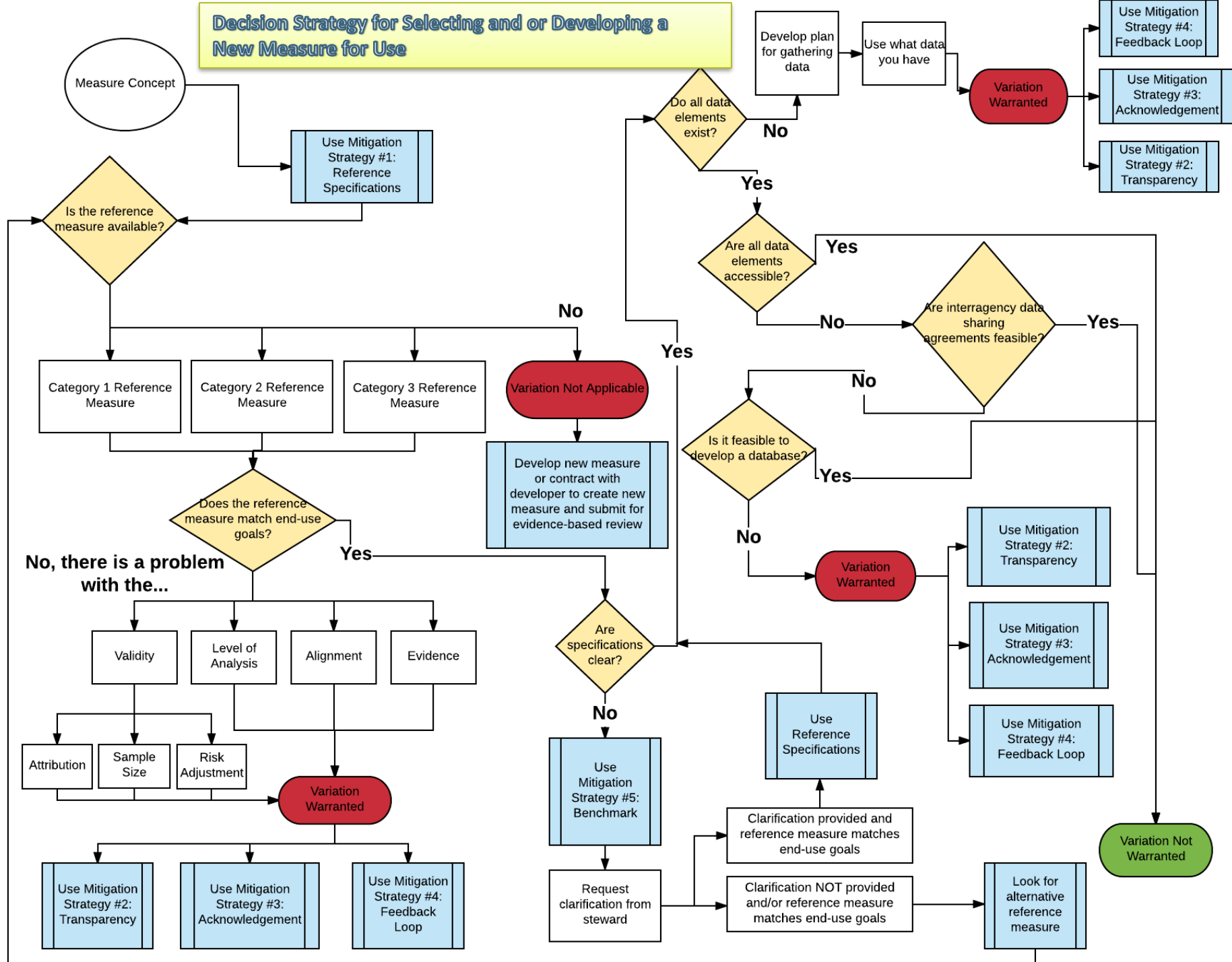
- Transparency- Disclose Changes Made
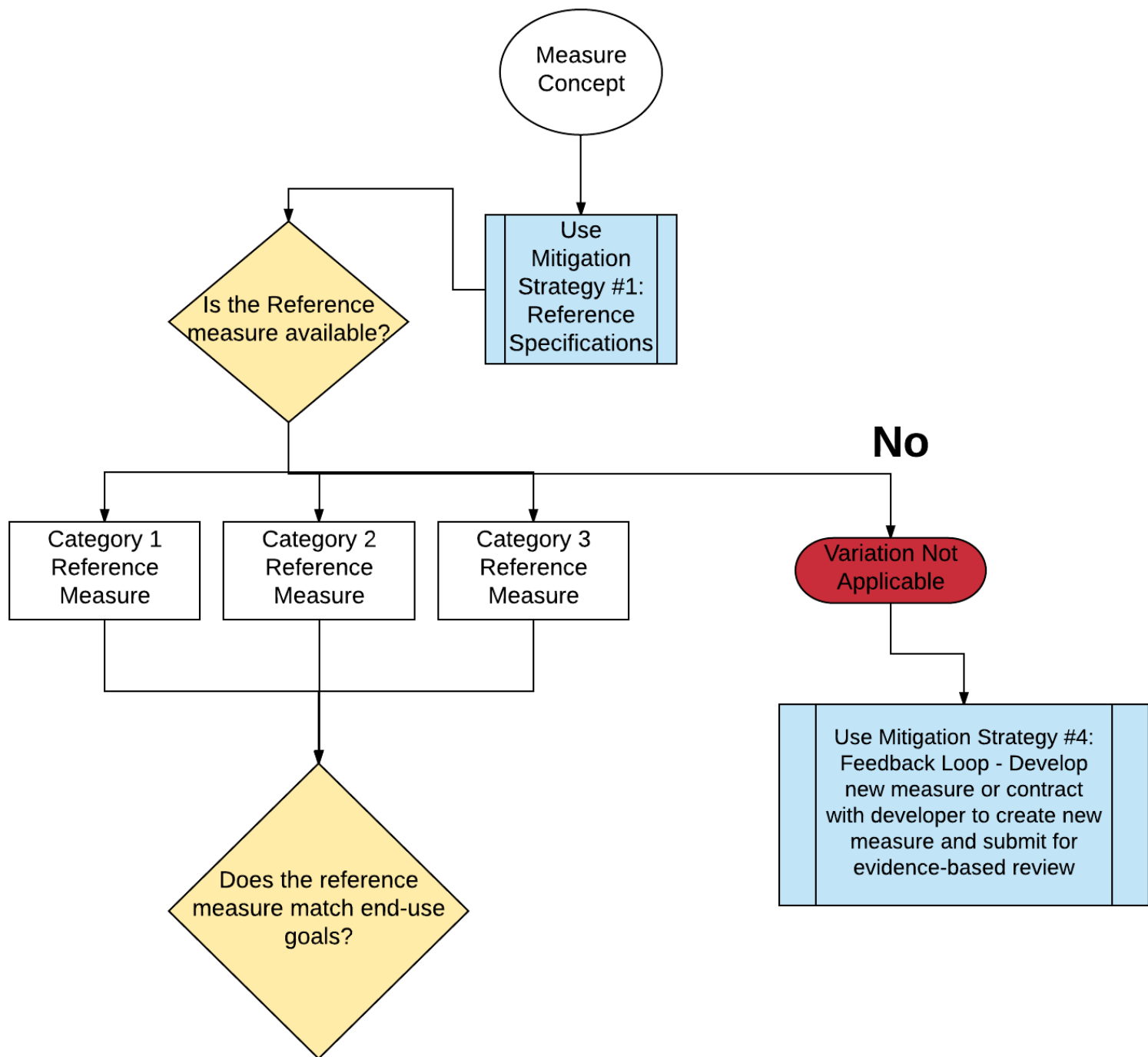- Acknowledge Variation
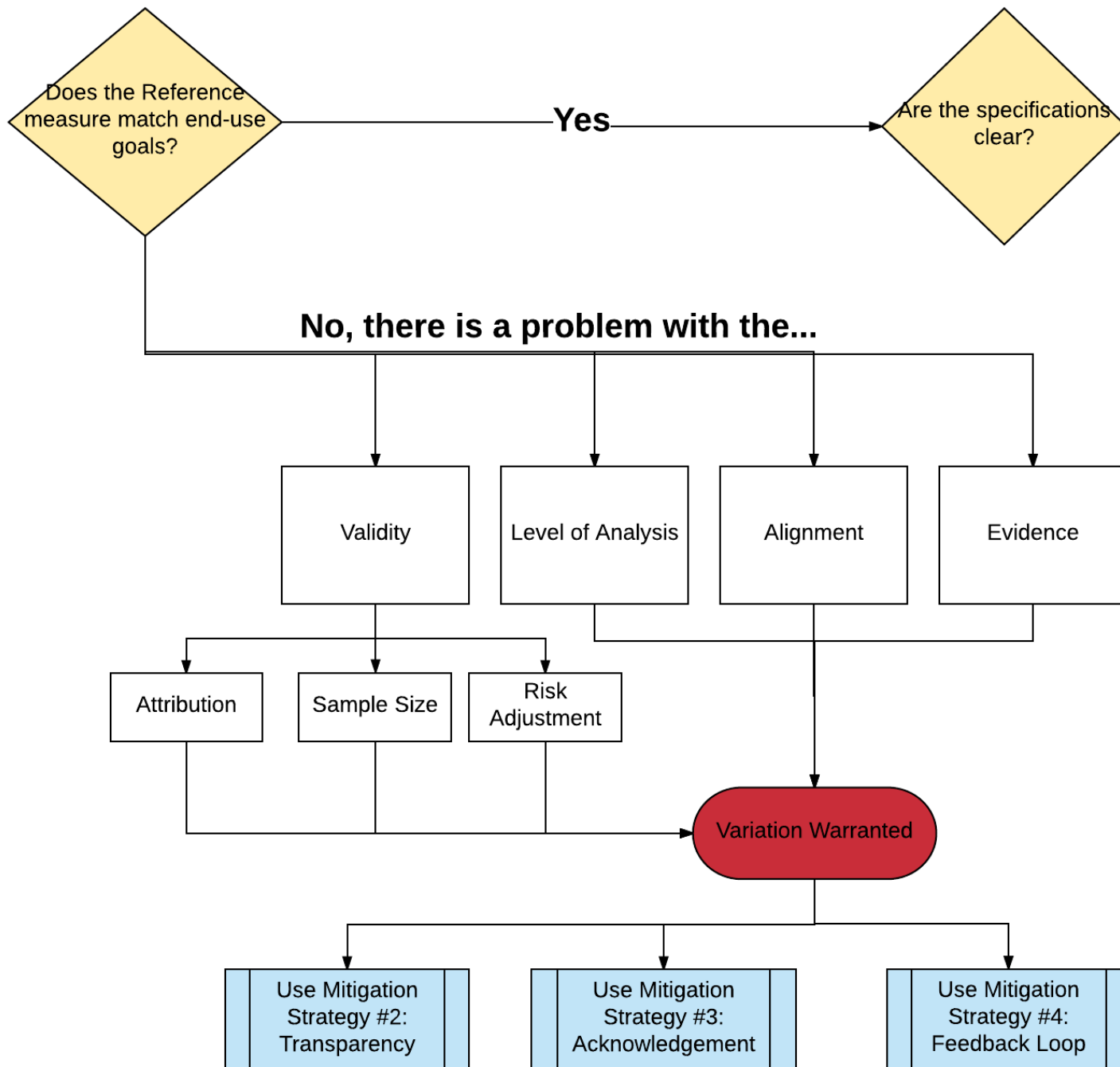
Unifying Framework

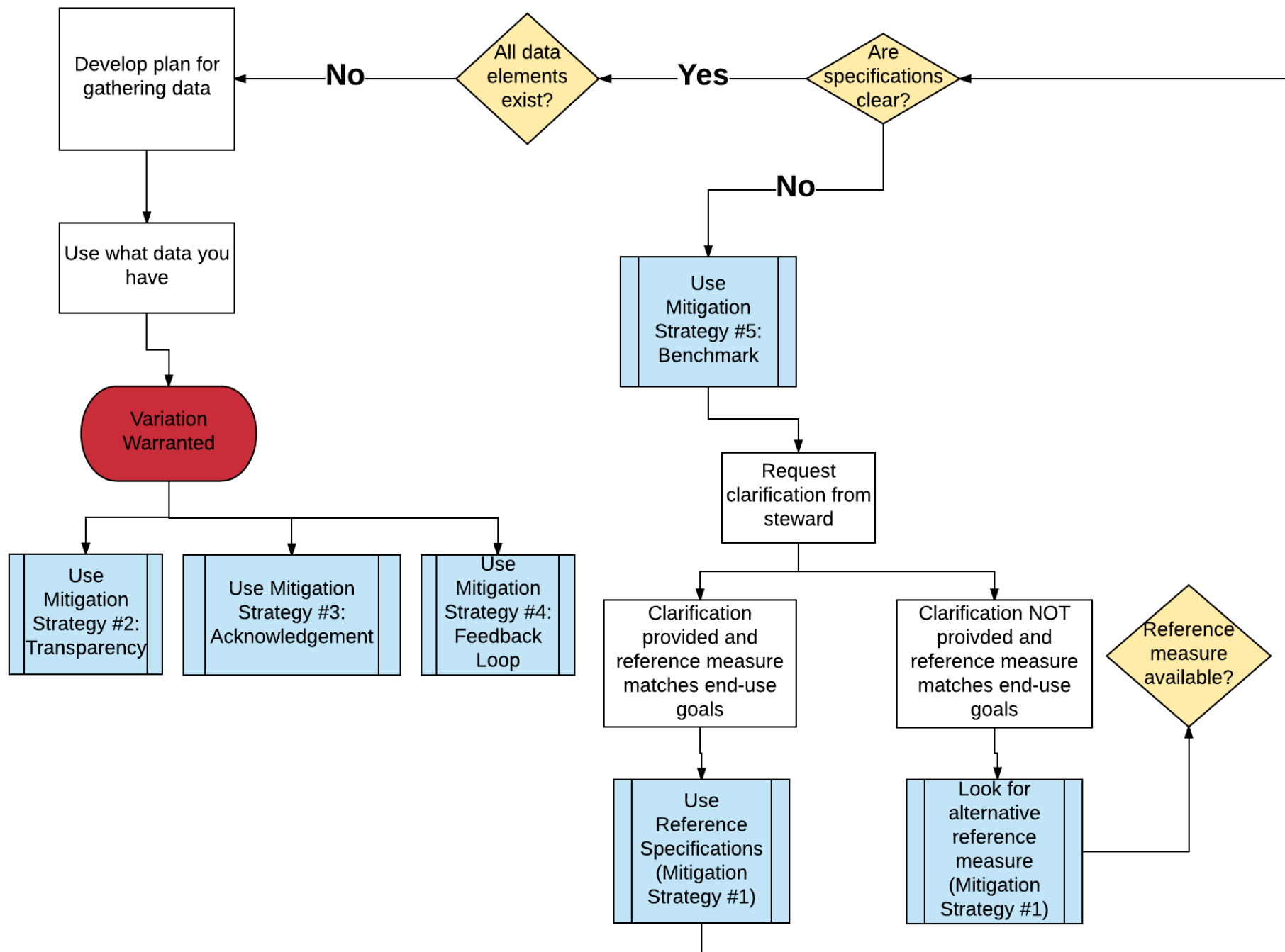- Developing a decision tree to guide measure implementers as they choose among measure variants
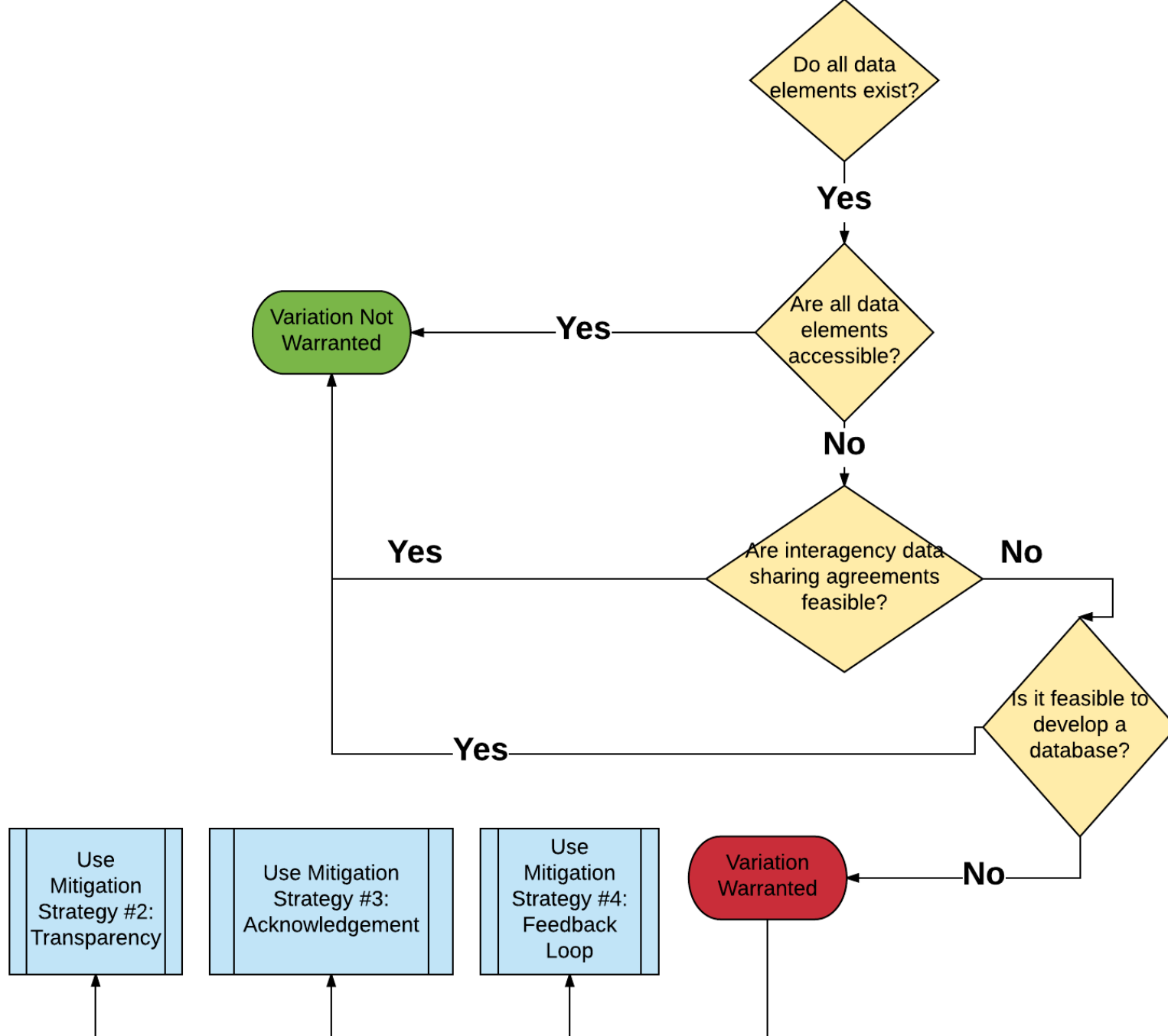
Mitigation Strategies

1. Look for a Reference Measure
2. Transparency- Disclose changes made
3. Acknowledge Variation
4. Feedback Loop
5. Benchmark

Decision Strategy for Selecting and or Developing a New Measure for Use

Measure Concept → Use Mitigation Strategy #1: Reference Specifications

Is the reference measure available?

No →
- Category 1 Reference Measure
- Category 2 Reference Measure
- Category 3 Reference Measure

Does the reference measure match end-use goals?

No, there is a problem with the...
- Validity
  - Attribution
  - Sample Size
  - Risk Adjustment
- Level of Analysis
- Alignment
- Evidence

→ **Variation Warranted**
- Use Mitigation Strategy #2: Transparency
- Use Mitigation Strategy #3: Acknowledgement
- Use Mitigation Strategy #4: Feedback Loop

Yes → (from "Does the reference measure match end-use goals?")

Variation Not Applicable → Develop new measure or contract with developer to create new measure and submit for evidence-based review

Do all data elements exist?

No → Develop plan for gathering data → Use what data you have → **Variation Warranted**
- Use Mitigation Strategy #4: Feedback Loop
- Use Mitigation Strategy #3: Acknowledgement
- Use Mitigation Strategy #2: Transparency

Yes → **Are all data elements accessible?**

Yes → **Are interragency data sharing agreements feasible?**

No → **Is it feasible to develop a database?**

No → **Variation Warranted**
- Use Mitigation Strategy #2: Transparency
- Use Mitigation Strategy #3: Acknowledgement
- Use Mitigation Strategy #4: Feedback Loop

Yes → (from "Is it feasible to develop a database?")

Yes → **Variation Not Warranted** (from "Are interragency data sharing agreements feasible?")

Are specifications clear?

No → Use Mitigation Strategy #5: Benchmark → Request clarification from steward →
- Clarification provided and reference measure matches end-use goals → Use Reference Specifications
- Clarification NOT provided and/or reference measure matches end-use goals → Look for alternative reference measure

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                              │   Measure   │
                              │   Concept   │
                              └──────┬──────┘
                                     │
                                     ▼
        ┌─────────────────┐   ┌──────────────┐
        │                 │   │     Use      │
        │ Is the Reference│◄──│  Mitigation  │
        │ measure         │   │  Strategy #1:│
        │ available?      │   │  Reference   │
        │                 │   │  Specifications│
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│  1    │ │  2   │ │  3   │             │  Applicable  │
│Reference│Reference│Reference│          └──────┬───────┘
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             ▼                  │ Use Mitigation Strategy #4:│
      ┌─────────────┐           │ Feedback Loop - Develop    │
      │ Does the    │           │ new measure or contract    │
      │ reference   │           │ with developer to create   │
      │ measure     │           │ new measure and submit for │
      │ match end-use│          │ evidence-based review      │
      │ goals?      │           └───────────────────────────┘
      └─────────────┘
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Measure Concept

Is the Reference measure available?

Use Mitigation Strategy #1: Reference Specifications

Category 1 Reference Measure

Category 2 Reference Measure

Category 3 Reference Measure

No

Variation Not Applicable

Use Mitigation Strategy #4: Feedback Loop - Develop new measure or contract with developer to create new measure and submit for evidence-based review

Does the reference measure match end-use goals?

Develop plan for gathering data

All data elements exist?

Yes → Are specifications clear?

No → Develop plan for gathering data

Use what data you have

Variation Warranted

Use Mitigation Strategy #2: Transparency

Use Mitigation Strategy #3: Acknowledgement

Use Mitigation Strategy #4: Feedback Loop

No → Use Mitigation Strategy #5: Benchmark

Request clarification from steward

Clarification provided and reference measure matches end-use goals

Clarification NOT proivded and reference measure matches end-use goals

Reference measure available?

Use Reference Specifications (Mitigation Strategy #1)

Look for alternative reference measure (Mitigation Strategy #1)

```mermaid
flowchart TD
    A{Do all data elements exist?} -->|Yes| B{Are all data elements accessible?}
    B -->|Yes| C([Variation Not Warranted])
    B -->|No| D{Are interagency data sharing agreements feasible?}
    D -->|Yes| C
    D -->|No| E{Is it feasible to develop a database?}
    E -->|Yes| C
    E -->|No| F([Variation Warranted])
    F --> G[Use Mitigation Strategy #2: Transparency]
    F --> H[Use Mitigation Strategy #3: Acknowledgement]
    F --> I[Use Mitigation Strategy #4: Feedback Loop]
```

Do all data elements exist? — Yes → **Are all data elements accessible?**

Are all data elements accessible? — Yes → Variation Not Warranted / No → **Are interagency data sharing agreements feasible?**

Are interagency data sharing agreements feasible? — Yes → Variation Not Warranted / No → **Is it feasible to develop a database?**

Is it feasible to develop a database? — Yes → Variation Not Warranted / No → Variation Warranted

Variation Warranted →
- Use Mitigation Strategy #2: Transparency
- Use Mitigation Strategy #3: Acknowledgement
- Use Mitigation Strategy #4: Feedback Loop

Additional Definitions

- Accountability Programs
- Validation
- Measure
- Measure Specifications
  - *Measure Description*
  - *Numerator Statement*
  - *Denominator Statement*
  - *Exclusions*
  - *Population (Level of Analysis)*
  - *Care Setting*
  - *Risk Adjustment*

  - *Target Population*
- Variant
- Duplication vs Modification
- Data element
- Data Source
- Measure score
- Transparency
- Feedback Loops
- Measure Harmonization
- Benchmarking
- Burden
- Comparability

Additional Definitions: Accountability Programs

- Programs that vary in scope and tie rewards to performance on quality measures.

- Accountability programs may also be referred to as incentive programs or high-stakes uses of measurement.

- When incentives such as payment and market competition are highlighted in healthcare, measurement programs are more impactful and face greater scrutiny.

Additional Definitions: Validation

- Process of testing to determine if a measure has the property of validity.

- The term validation is often used in reference to the data elements and is another term for validity testing of data elements.

- Validation also is used in reference to statistical risk models where model performance metrics are compared between two different samples of data called the development and validation samples.

Additional Definitions: Measure

- A healthcare performance measure is a way to calculate whether and how often the healthcare system does what it should. Measures are based on scientific evidence about processes, outcomes, perceptions, or systems that relate to high-quality care.

- The result of a measure is usually shown as a ratio or a percentage. If you have a question about the health of a community or group of people or how well the health system is performing, a measure can give you the information you need.

- A measure can be very narrow, such as the percentage of diabetic patients whose blood sugar reaches a certain level, or broad, such as the number of community members whose diabetes is well-managed according to specified criteria.

Additional Definitions: Measure Specifications

- Measure specifications are the technical instructions for how to build and calculate a measure.

- They describe a measure's building blocks: numerator, denominator, exclusions, target population, how results might be split to show differences across groups (stratification scheme), risk adjustment methodology, how results are calculated (calculation algorithm), sampling methodology, data source, level of analysis, how data are attributed to providers and/or hospitals (attribution model), and care setting.

- Taken together, measure specifications are a blueprint that tells the user how to properly implement the measure within their organization.

Additional Definitions: Measure Description

- A brief text description of the measure that includes the type of score, measure focus, target population, or time.

Additional Definitions: Numerator Statement

- A brief text description of what is being measured within the target population.

Additional Definitions: Denominator Statement

- A brief text description of the target population being measured.

Additional Definitions: Exclusions

- A brief text description of exclusions from the target population.
- Exclusion criteria—criteria applied before a measure is tested in order to remove any individuals with conditions that may skew the final measure score.

Additional Definitions: Population (Level of Analysis)

- A group of individuals defined by geography.
- **Target Population** -The population intended to be measured.

Additional Definitions: Care Setting

- Settings or services for which the measure applies and is assessed.

Additional Definitions: Risk Adjustment

- The method of adjusting for clinical severity and conditions present at the start of care that can influence patient outcomes for making valid comparisons of outcome measures across providers. A corrective approach designed to reduce any negative or positive consequences associated with caring for patients of higher or lower health risk or propensity to require health services.

- Risk adjustment is a statistical approach that allows patient-related factors (e.g., comorbidity and illness severity) to be taken into account when computing performance measure scores. Because patient-related factors can have important influence on patient outcomes, risk adjustment can improve the ability to make accurate and fair conclusions about the quality of care patients receive.

Additional Definitions: Variant *(Noun)*

- A measure that differs/deviates from the reference measure specifications.

- Variant is used to describe the measure and not the specific instance of variation.

Additional Definitions: Duplication

- A type/form of variation where two or more measures appear to have similar or identical measure specifications.

- Duplication increases measurement burden and lowers comparability across entities and organizations.

Additional Definitions: Modification

- The act of changing parts of a reference measure specification to create a variant.

Additional Definitions: Data element

- A quality data element is a single piece of information that is used in quality measures to describe part of the clinical care process, including both a clinical entity and its context of use (e.g., diagnosis, active)

- The data elements are often patient-level information (e.g., blood pressure, lab value, medication, surgical procedure, death).

Additional Definitions: Data Source

- Source(s) from which data are obtained for measurement.

Additional Definitions: Measure score

- The numeric result that is computed by applying the measure specifications and scoring algorithm. The computed measure score represents an aggregation of all the appropriate patient-level data (e.g., proportion of patients who died, average lab value attained) for the entity being measured (e.g., hospital, health plan, home health agency, clinician, etc.). The measure specifications designate the entity that is being measured and to whom the measure score applies.

Additional Definitions: Transparency

- Extent to which performance results about identifiable, accountable entities are disclosed and available outside of the organizations or practices whose performance is measured. The degrees of transparency range from making performance results available only to a few select staff within an organization to reporting the results to the public at large.
- The capability to verify the performance results adds significantly to measure transparency.

Additional Definitions: Feedback Loops

- Feedback loops are a way to collect and share useful information.
- They can be used for healthcare quality measurement by identifying measures that need modification or areas where adequate measures are not available.
- Such an exchange of information promotes continuous improvement and learning across the healthcare system.

Additional Definitions: Harmonization

- Having multiple similar measures can make it difficult to choose one to use. *Harmonization* is the process of editing the design of similar measures to ensure they are compatible. Measure developers can make changes to the way a topic or population is defined. Harmonization helps reduce the confusion of having measures that are similar but different.

- **Competing measures** - address the same topic *and* the same population.

- **Related measures** - address *either* the same topic or the same population.

Additional Definitions: Benchmarking

- Process of comparing the performance of accountable entities with that of their peers or with external best practice results.

- In developing comparative estimates, results should be risk adjusted for patient-level attributes to support the valid comparisons of these accountable entitles.

Finalize Definitions: Burden

- **Measurement Burden:**
  - While crucial to improving healthcare quality, measurement can have a downside: *it takes a lot of hard work!* Measurement burden can be the result of a number of factors, including costs and time associated with increased, duplicative, or labor-intensive data collection, analysis, or reporting.

Finalize Definitions: Comparability

- Defining a 'comparable' set of measure results:
    - *Measure results are comparable when they are using identical patient populations and risk adjustments.*

Next Steps

Webinar #5: Finalizing of Second Draft Contents *To Be Rescheduled for week of August 22-26, 2016*	Currently scheduled for September 8, 2016 2-4pm ET
Public and Member Commenting	September 6 – October 5, 2016
Webinar #6: Post-Comment Call *To Be Rescheduled for week of October 17-21, 2016*	Currently scheduled for November 3, 2016 2-4pm ET
CSAC Review	November 9- 10, 2016
Report Finalized	December 2016