Applying Performance Measures to Improve Quality and Demonstrate Value

National Pay-for-Performance Summit

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Strategies for Reforming Health Care

- **Public Reporting**: engaging consumers and others stakeholders

- **Health Information Technology**: enabling improvement

- **Value-Based Payment**: rewarding achievement

- **Clinically-Integrated Delivery Systems**: achieving patient-centered, coordinated care

Quality Measurement Enterprise

- Priorities and Goals

- Standardized Measures

- Electronic Data Platform

- Alignment of Environmental Drivers

- Evaluation and Feedback

To improve the quality of American healthcare by:

- **Building consensus on national priorities and goals** for performance improvement and **working in partnership to achieve them**;

- **Endorsing national consensus standards** for **measuring and publicly reporting** on performance; and

- Promoting the attainment of national goals through **education and outreach** programs.

- Standard setting organization

  - Performance measures, serious reportable events, and preferred practices

- Neutral convener

  - National Priorities Partnership
  - Measure Applications Partnership

Quality Measurement Enterprise: NQF Contributions

Priorities and Goals → Standardized Measures → Electronic Data Platform → Alignment of Environmental Drivers → Evaluation and Feedback

National Priorities Partnership

High Impact Conditions

National Priorities Partnership
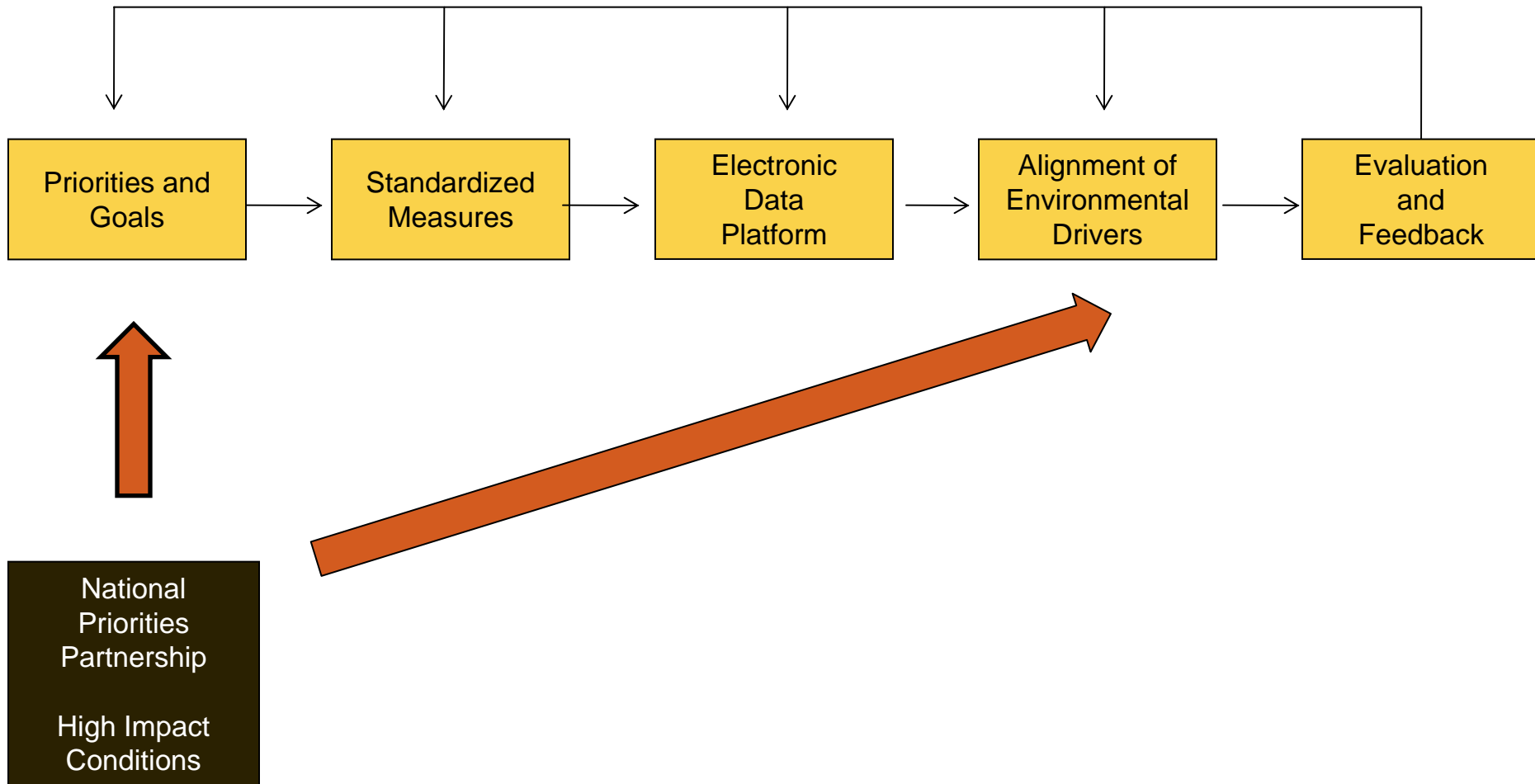
A 48-Partner multistakeholder effort, including:

42 Voting Partners
- Consumers
- Purchasers
- Quality alliances
- Health professionals/providers
- State-based associations
- Community collaboratives & regional alliances
- Accreditation/certification groups
- Health plans
- Supplier & industry groups

Six Ex-Officio, Non-Voting Partners
AHRQ, CDC, CMS, HRSA, NIH, VHA

Co-Chairs:
Bernie Rosof, Physician Consortium for Performance Improvement
Margaret O'Kane, National Committee for Quality Assurance

The Difference Priorities Can Make

NATIONAL PRIORITIES PARTNERSHIP

| Performance **measures** developed around priority areas	Public reporting, payment, oversight, and improvement programs **aligned** with the National Quality Strategy	Multiple **actions** to make improvements in priority areas

Can get us there faster…

WHERE WE ARE GOING
Better Care, Affordable Care, and Healthy People/Healthy Communities

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Health reform legislation, the Affordable Care Act (ACA), requires HHS to **"establish a national strategy to improve the delivery of healthcare services, patient health outcomes, and population health.**"

HR 3590 §3011, amending the Public Health Service Act (PHSA) by adding §399HH (a)(1)

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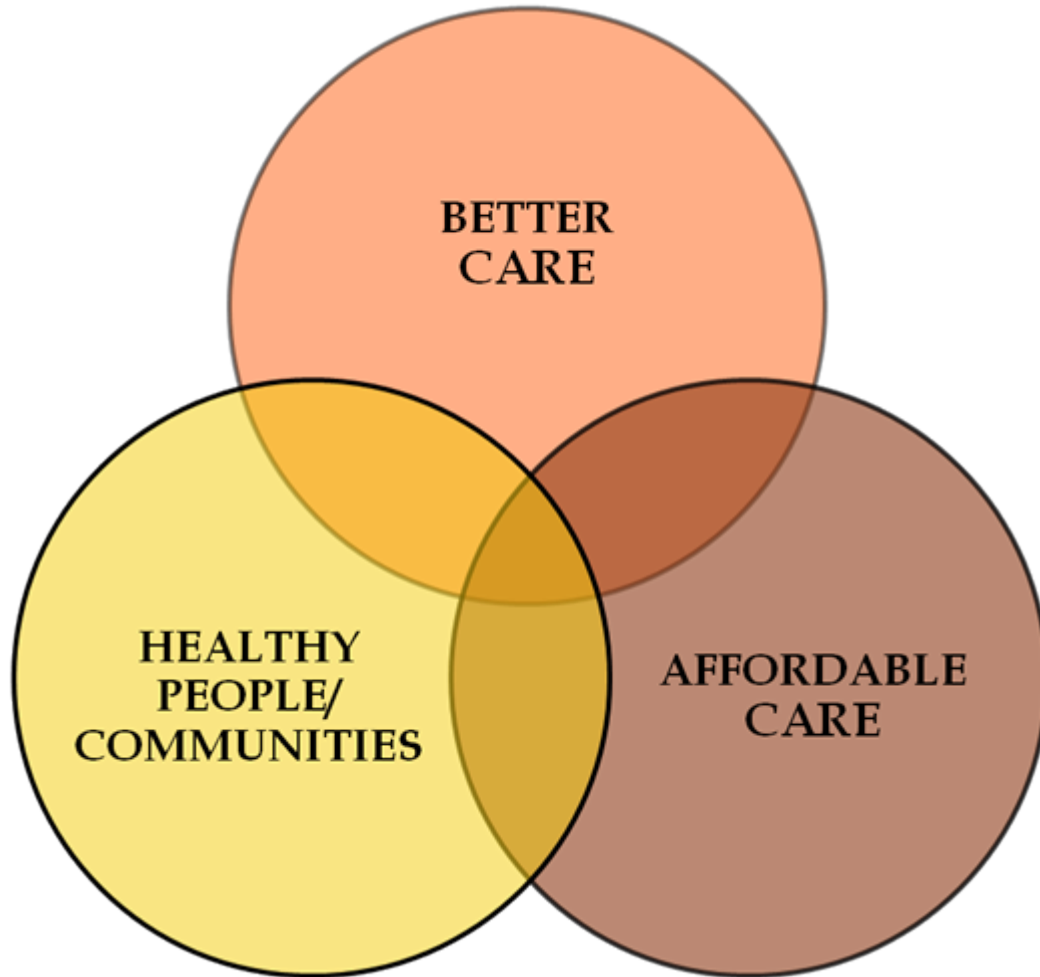
Principles reflect:

- Patient-centeredness and family engagement

- Quality care for patients of all ages, populations, service locations, and sources of coverage

- Elimination of disparities

- Alignment of public and private sectors

- Patient and Family Engagement

- Safety

- Care Coordination

- Palliative Care and End-of-Life Care

- Equitable Access

- Elimination of Overuse

- Population Health

- Infrastructure Supports

NPP's Recommended Priorities
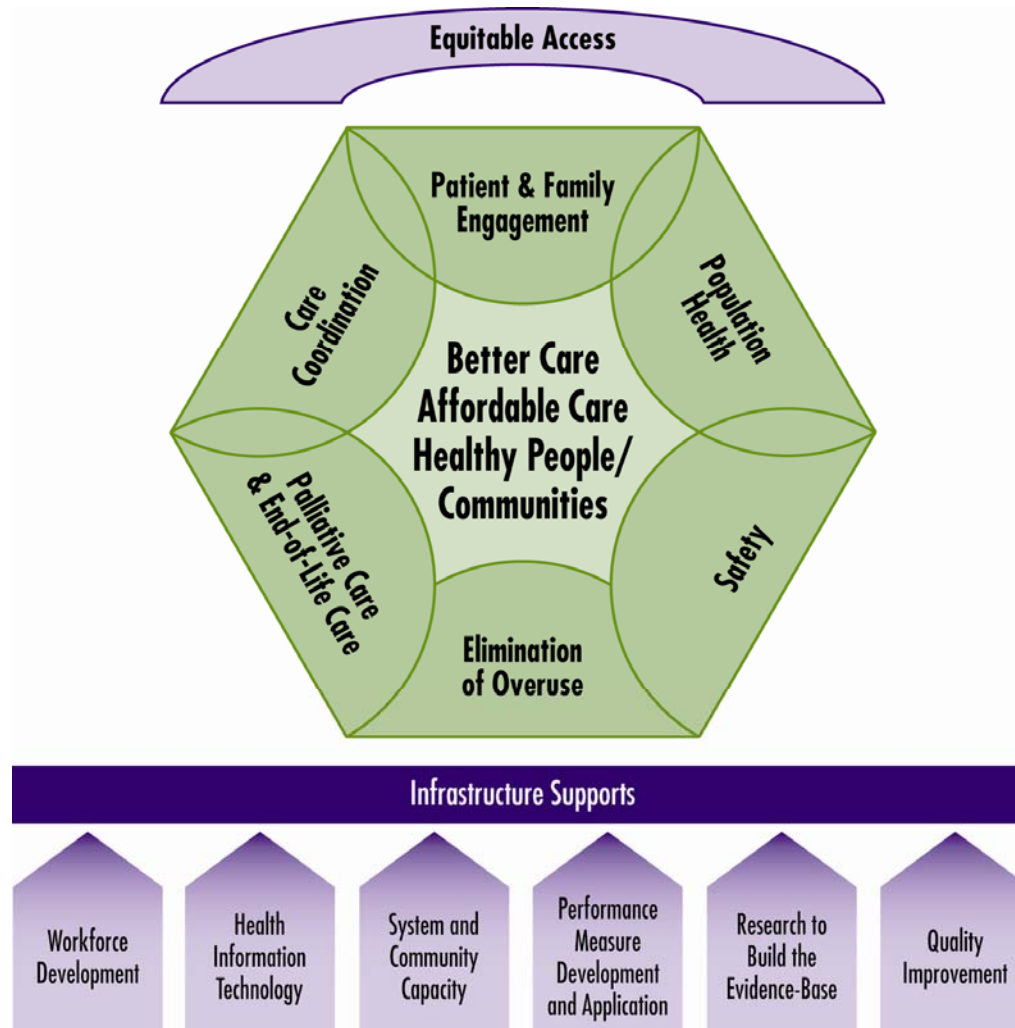
- Public Reporting

- Informed Consumer Decision making

- Performance-Based Payment

- Accreditation and Certification

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High Impact Conditions
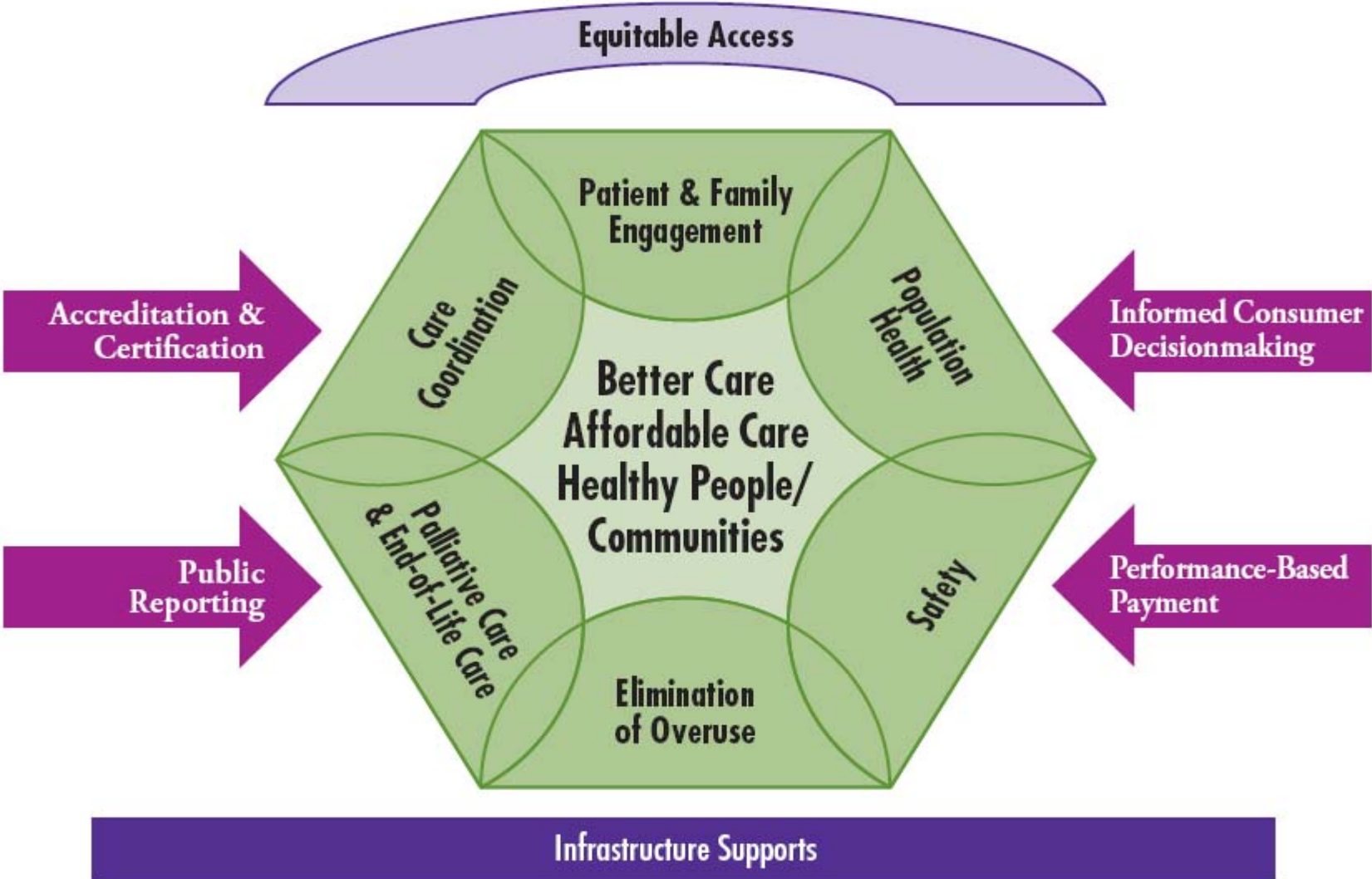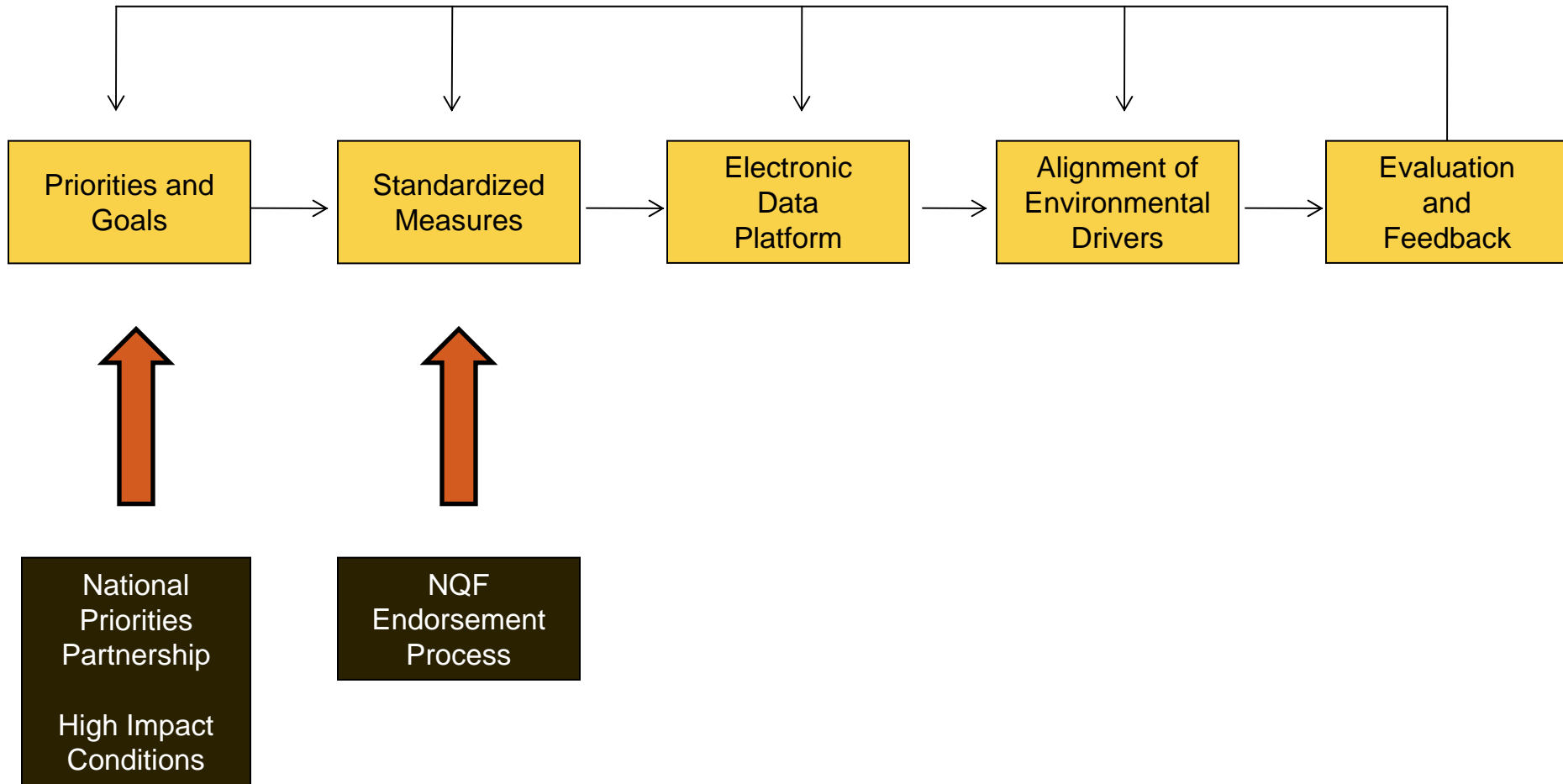
Medicare Conditions

Condition	Votes
1. Major Depression	30
2. Congestive Heart Failure	25
3. Ischemic Heart Disease	24
4. Diabetes	24
5. Stroke/Transient Ischemic Attack	24
6. Alzheimer's Disease	22
7. Breast Cancer	20
8. Chronic Obstructive Pulmonary Disease	15
9. Acute Myocardial Infarction	14
10. Colorectal Cancer	14
11. Hip/Pelvic Fracture	8
12. Chronic Renal Disease	7
13. Prostate Cancer	6
14. Rheumatoid Arthritis/Osteoarthritis	6
15. Atrial Fibrillation	5
16. Lung Cancer	2
17. Cataract	1
18. Osteoporosis	1
19. Glaucoma	0
20. Endometrial Cancer	0

Child Health Conditions and Risks

Condition and Risk	Votes
Tobacco Use	29
Overweight/Obese (≥85th percentile BMI for age)	27
Risk of developmental delays or behavioral problems	20
Oral Health	19
Diabetes	17
Asthma	14
Depression	13
Behavior or conduct problems	13
Chronic Ear Infections (3 or more in the past year)	9
Autism, Asperger's, PDD, ASD	8
Developmental delay (diag.)	6
Environmental allergies (hay fever, respiratory or skin allergies)	4
Learning Disability	4
Anxiety problems	3
ADD/ADHD	1
Vision problems not corrected by glasses	1
Bone, joint or muscle problems	1
Migraine headaches	0
Food or digestive allergy	0
Hearing problems	0
Stuttering, stammering or other speech problems	0
Brain injury or concussion	0
Epilepsy or seizure disorder	0
Tourette Syndrome	0

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Quality Measurement Enterprise: NQF Contributions

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┌──────────────┐   ┌──────────────┐   ┌──────────────┐   ┌──────────────┐   ┌──────────────┐
│ Priorities   │ → │ Standardized │ → │ Electronic   │ → │ Alignment of │ → │ Evaluation   │
│ and Goals    │   │ Measures     │   │ Data         │   │ Environmental│   │ and          │
│              │   │              │   │ Platform     │   │ Drivers      │   │ Feedback     │
└──────────────┘   └──────────────┘   └──────────────┘   └──────────────┘   └──────────────┘
       ↑                  ↑
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National Priorities Partnership

High Impact Conditions

NQF Endorsement Process

Quality Measurement in Evolution

- Drive toward higher performance

- Shift toward composite measures

- Measure disparities in all we do

- Harmonize measures across sites and providers

- Promote shared accountability & measurement across patient-focused episodes of care:

  - Outcome measures

  - Appropriateness measures

  - Cost/resource use measures coupled with quality measures, including overuse

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EQUITABLE ACCESS

Patient & Family Engagement

Care Coordination

Population at Risk

Evaluation & Initial Management

Follow-up Care

PHASE 1

PHASE 2

PHASE 3

Population Health

Overuse

Palliative Care

End of Episode ~ Risk-Adjusted Health Outcomes and Total Cost of Care

Clinical Episode Begins

Time

Safety

Infrastructure Supports

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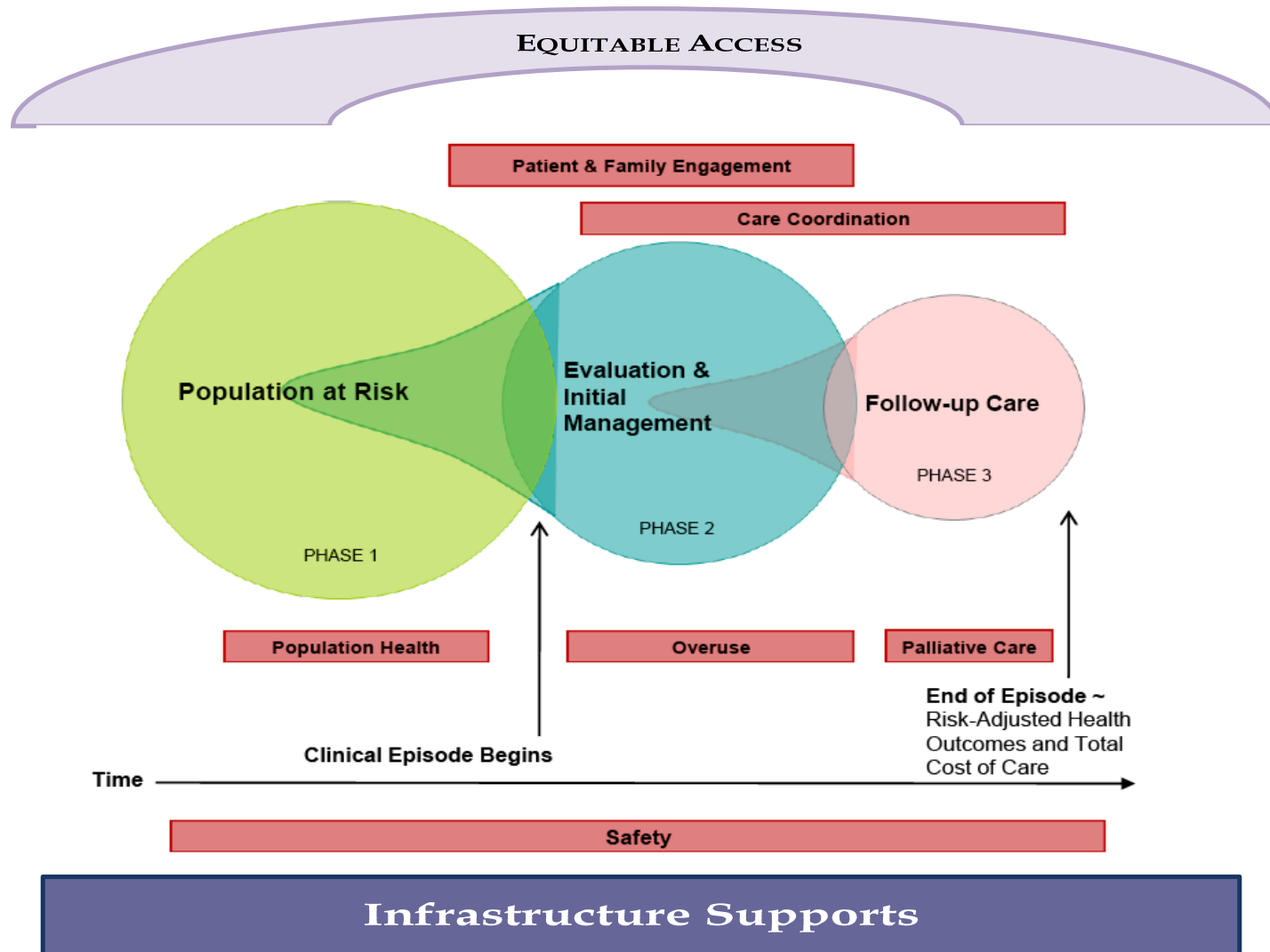
- Public review of proposed Committee rosters
- Enhanced transparency of Committee Proceedings
- Tightened Conflict of Interest requirements
- Structured Evaluation Criteria ratings
- Updated specifications table
- Time-limited endorsement
- Expedited review
- New Endorsement Maintenance (EM) Process
- Proposed schedule of future projects

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- Review of endorsed measure occurs every 3 years
- Conduct full 9-step CDP project (including Call for Measures with Implementation Comments)
- All aspects of the endorsed measure are reviewed against current measure evaluation criteria
- Review of new measures within the same topic area occurs at the same time with existing measures
  - Drives toward parsimony in the volume of measures
  - Supports harmonization of measure specifications

1. Cancer
2. Cardiovascular
3. Care coordination
4. Disparities
5. Endocrine
6. Functional Status
7. Gastrointestinal
8. GU/GYN
9. Healthcare Infrastructure
10. HEENT
11. Infectious disease

12. Mental health
13. Musculoskeletal
14. Neurology
15. Palliative & end-of-life care
16. Patient experience/engagement
17. Perinatal
18. Prevention
19. Pulmonary/Critical Care
20. Renal
21. Safety
22. Surgery

- Use of time-limited endorsement was restricted to non-complex measures in gap areas that are required for a time-sensitive legislative mandate
- Testing results must now be submitted within one year

Expedited Review

- To meet emerging national needs, the NQF Board of Directors approved a series of changes to the expedited CDP in Sept 2010

- For expedited reviews, each CDP step will be no less than ten business days (instead of 30 calendar days)

- <u>All</u> of the following criteria should be met prior to consideration by the CSAC for an expedited review:

  - the extent to which the measures under consideration have been sufficiently tested and/or in widespread use

  - whether the scope of the project/measure set is relatively narrow

  - time-sensitive legislative/regulatory mandate for measures

- With the assistance of experts in Six Sigma Lean Processing, NQF initiated a CDP re-engineering process in November 2010

- Used "value stream mapping" to determine the steps that add value/burden to the process

- Incorporated suggestions from the external evaluation of the CDP by Mathematica Policy Research

- Major focus on enhancing the timeliness of the CDP (reduce average completion time to 7-8 months)

Strengthen Evaluation Criteria

- **Importance to measure and report**
  - What is the level of evidence for the measures?
  - Is there an opportunity for improvement?
  - Relation to a priority area or high impact area of care?
- **Scientific acceptability of the measurement properties**
  - What is the reliability and validity of the measure?

- **Usability**
  - Can the intended audiences understand and use the results for decision-making?

- **Feasibility**
  - Can the measure be implemented without undue burden, capture with electronic data/EHRs?

- New guidance for measure evaluation:
  - Evidence for the focus of measurement (criterion 1c) and Importance to Measure and Report
  - Measure Testing and Scientific Acceptability of Measure Properties
  - Measure Harmonization

- Approved by Board of Directors on September 23, 2010
- Implementation in projects beginning in January 2011
- New submission form now ready

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Guidance Reports

- Guidance - not definitive scoring rules
- Measure evaluation still requires expert judgment in conjunction with evidence for focus of measurement and measure properties
- Relevant to both reviewers and developers
- Ratings are used to make decisions about whether criteria are met
- Will result in some modifications to evaluation criteria and measure submission form

Importance to Measure and Report

- The specific focus of what is measured should be considered **important enough to expend resources for measurement and reporting**, not only that it is related to an important broad topic area.

- These concepts are addressed in separate sub-criteria for

  - Relation to an **NPP goal or high impact** aspect of healthcare

  - Evidence to support the measure focus

  - **Opportunity for improvement**

Structure → Process → Intermediate Outcome → **Health Outcome**
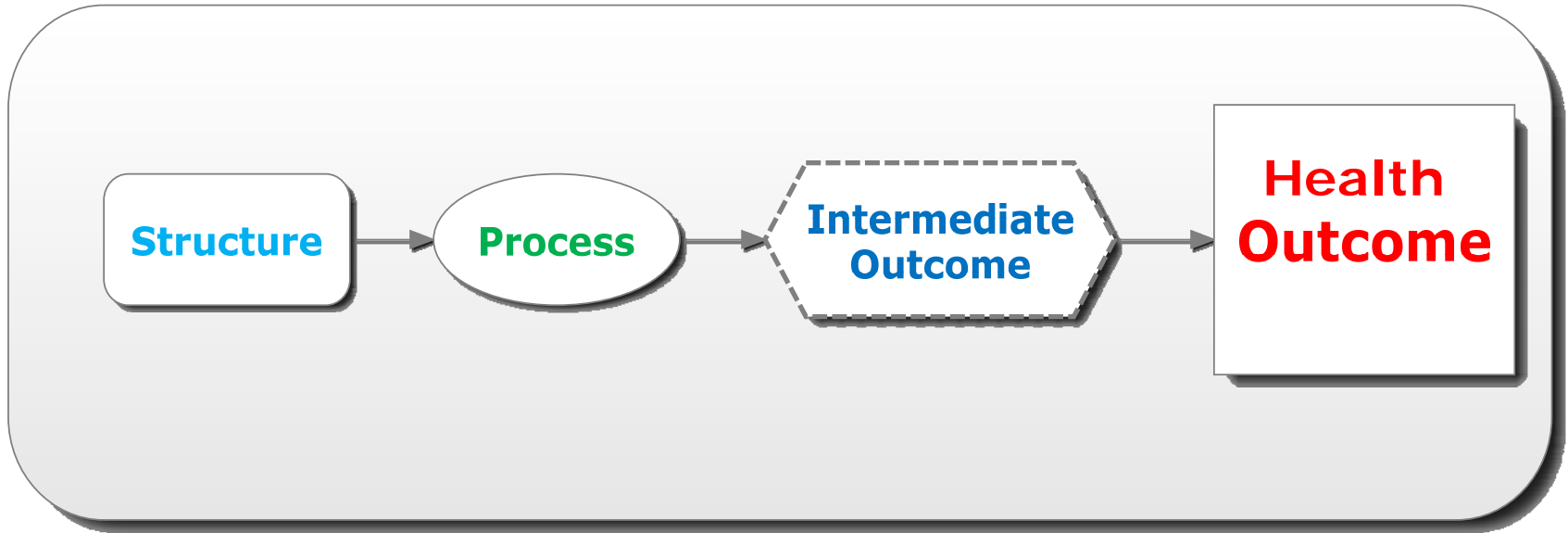
- Hierarchical preference for
  - Health outcomes of substantial importance with plausible process/structure relationships
  - Intermediate outcomes
  - Processes/structures

  Most closely linked to outcomes

Determining Strength of Evidence

Quality of individual studies

Magnitude of net benefit (benefit over harms)

Quantity, Quality, and Consistency of Net Benefit for Entire Body of Evidence

Strength of recommendation for a clinical service or intervention

- <u>All</u> 3 subcriteria must be met to pass the threshold criterion
    1. High impact
    2. Opportunity for improvement
    3. Evidence for the focus of measurement

Scientific Acceptability of Measure Properties

Reliability
- Precise specifications
- Reliability testing

Validity
- Measure specifications consistent with evidence
- Validity testing
- Exclusions supported by evidence
- Evidence-based risk adjustment strategy
- Identification of meaningful differences
- Comparability if specified for more than one data source
- Identification of disparities

- Relates to sub-criteria under Scientific Acceptability of Measure Properties

- Reliability and validity should be empirically demonstrated at the measure score and/or data element level

- Guidance on rating for reliability and validity on scale of high, moderate, low

- Guidance related to EHR measures

- Guidance on decision if pass Scientific Acceptability of Measure Properties

Usability

- Requires evidence that the measure results are meaningful and understandable to intended audiences and useful for <u>both</u> public reporting <u>and</u> informing quality improvement.

  - This is consistent with NQF policy of <u>not</u> endorsing measures solely for quality improvement.

  - Measures should be **harmonized** and provide a distinctive or **additive value** to existing endorsed measures.

Harmonization Principles

Harmonization

- Should not stifle innovation
- Ideally, should be addressed before measures are submitted to NQF
- Should not result in inferior measures
- Should be considered at the conceptual (e.g., numerator & denominator statements) and technical level (e.g., codes, definitions, calculation)
- Should eliminate unintended differences among related measures
- If there is a decision not to harmonize measures, the value must outweigh the burden

Evaluating Harmonization

- Measures not accepted unless harmonization addressed

- Measures that are accepted for evaluation will first be evaluated individually on the four NQF criteria: *Importance to Measure and Report, Scientific Acceptability of Measure Properties, Usability and Feasibility*

- If a measure meets the four criteria, it will be compared to related measures to assess harmonization or justification for lack of harmonization

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Feasibility

- Extent to which the required data are readily available, __retrievable without undue burden__, and can be implemented for performance measurement.
    - Required data are routinely generated concurrent with and as a byproduct of care delivery.
    - Required data elements are available in electronic sources OR credible, near-term path to electronic collection
    - **Data elements are specified for transition to EHRs -NQF Quality Data Model (QDM)**

Linkage of HIT and Measurement

Data Sources

- Capture the right data

Performance Measures

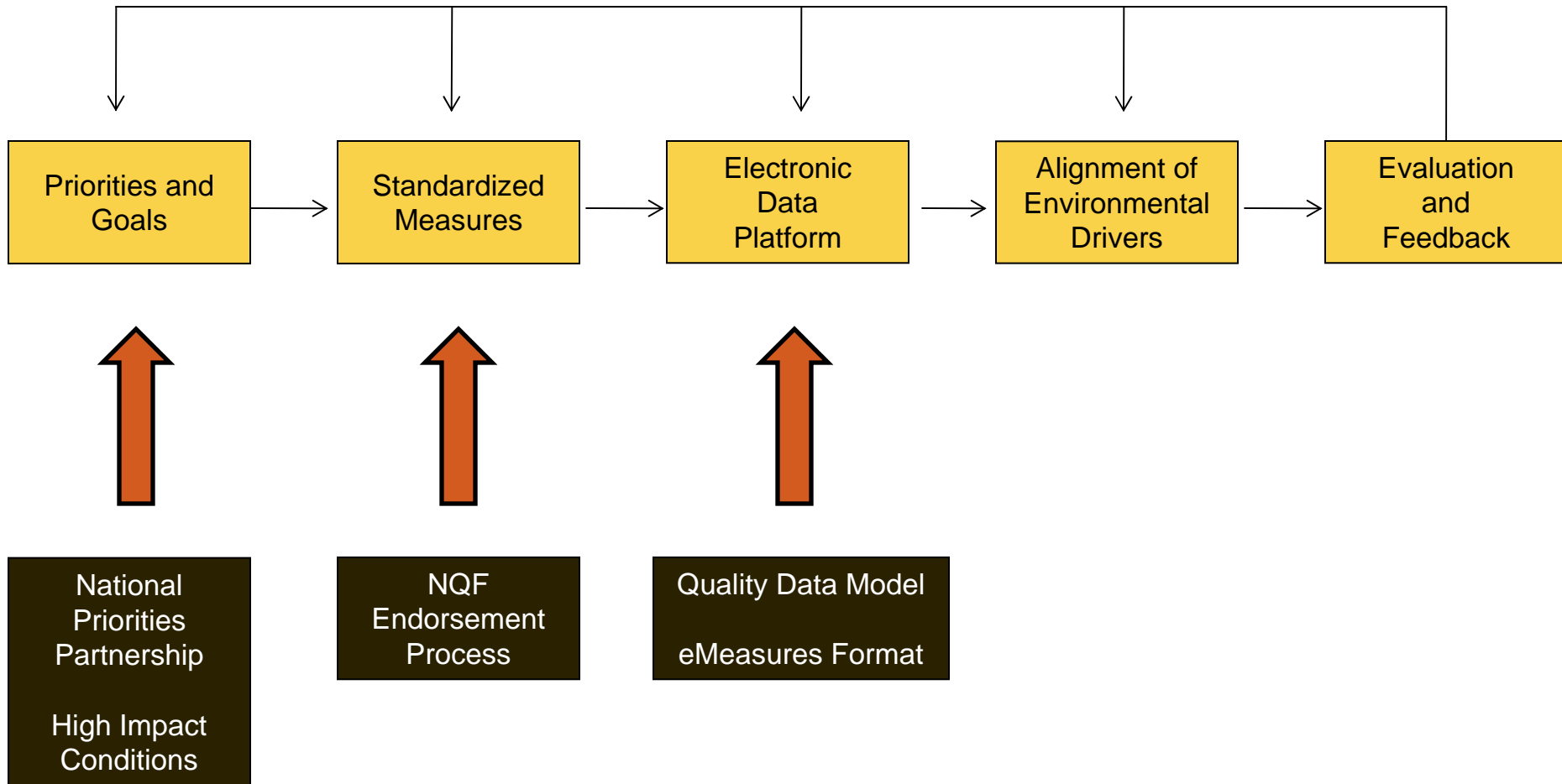- Calculate the performance measure

EHRs and HIT tools

- Provide real-time information to the clinician with decision support

E-Infra structure

- Publicly report for secondary uses: accountability, payment, public health, and comparative effectiveness
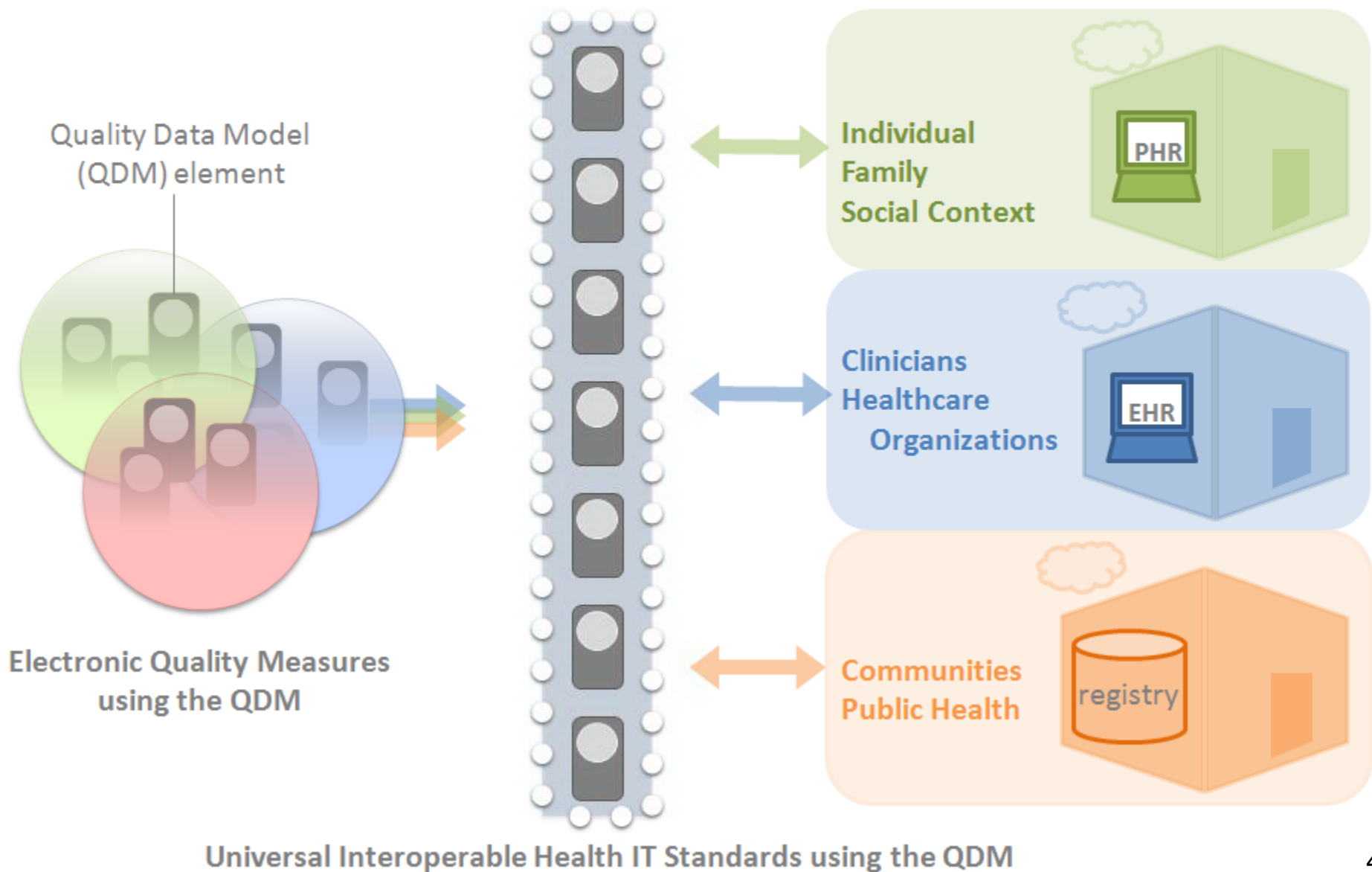
Quality Measurement Enterprise: NQF Contributions

- ## Immediate Strategy
  - Over 100 measures have been retooled

- ## Preferred Approach
  - Establish a comprehensive data platform to support performance measurement and improvement
  - Develop performance measures that take advantage of available data and are "turnkey"

- Outlines the dimensions of information for a comprehensive data foundation to effectively measure health outcomes for individuals and communities

- Utilizes information concepts from an individual as well as a community and/or population level

HEALTH INFORMATION TECHNOLOGY: MOVING MEASURES TO AN ELECTRONIC PLATFORM

Quality Data Model (QDM) element
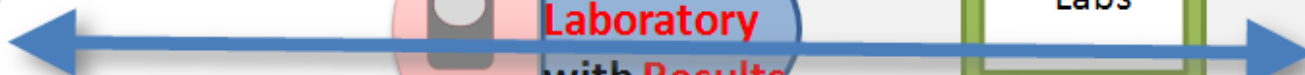
Electronic Quality Measures using the QDM

Individual Family Social Context

PHR

Clinicians Healthcare Organizations

EHR

Communities Public Health

registry

Universal Interoperable Health IT Standards using the QDM

Quality Data Model: Example

"**Laboratory test result**
of *Glucose*
using LOINC codes …"

Clinicians

14743-9 in
Laboratory
with **Results**

"Labs"

"Glucose"

local
codes
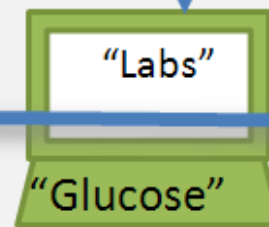
**Measure
Developers**

**Patients,
Clinicians,
Care providers**

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Quality Data Model: Example

"**Laboratory test result**
of *Glucose*
using LOINC codes …"

SNOMED-CT 55561003

LOINC 11450-4

Clinicians

LOINC

```
0110010101001101
0110010101100001
0111001101110101

0111001001100101
0111001100100000
0110000101110010

0110001101101111
0110111101101100
0010000100100001
```

```
0110010101001101
0110010101100001
0111001101110101
```
14743-9 in
Laboratory
with **Results**

```
0110001101101111
0110111101101100
0010000100100001
```

"Labs"

"Glucose"

local
codes

local
codes

**Measure
Developers**

Clinical
Document
Architecture
(CDA)
Templates

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HEALTH INFORMATION TECHNOLOGY: MOVING MEASURES TO AN ELECTRONIC PLATFORM

standards setting (e.g. HL7)

measure developers

reporting

EHR

PHR

registry

Quality Data Model

+ eMeasure standard

Measure Authoring Tool

evolution

eMeasure

implementation
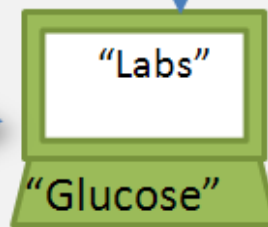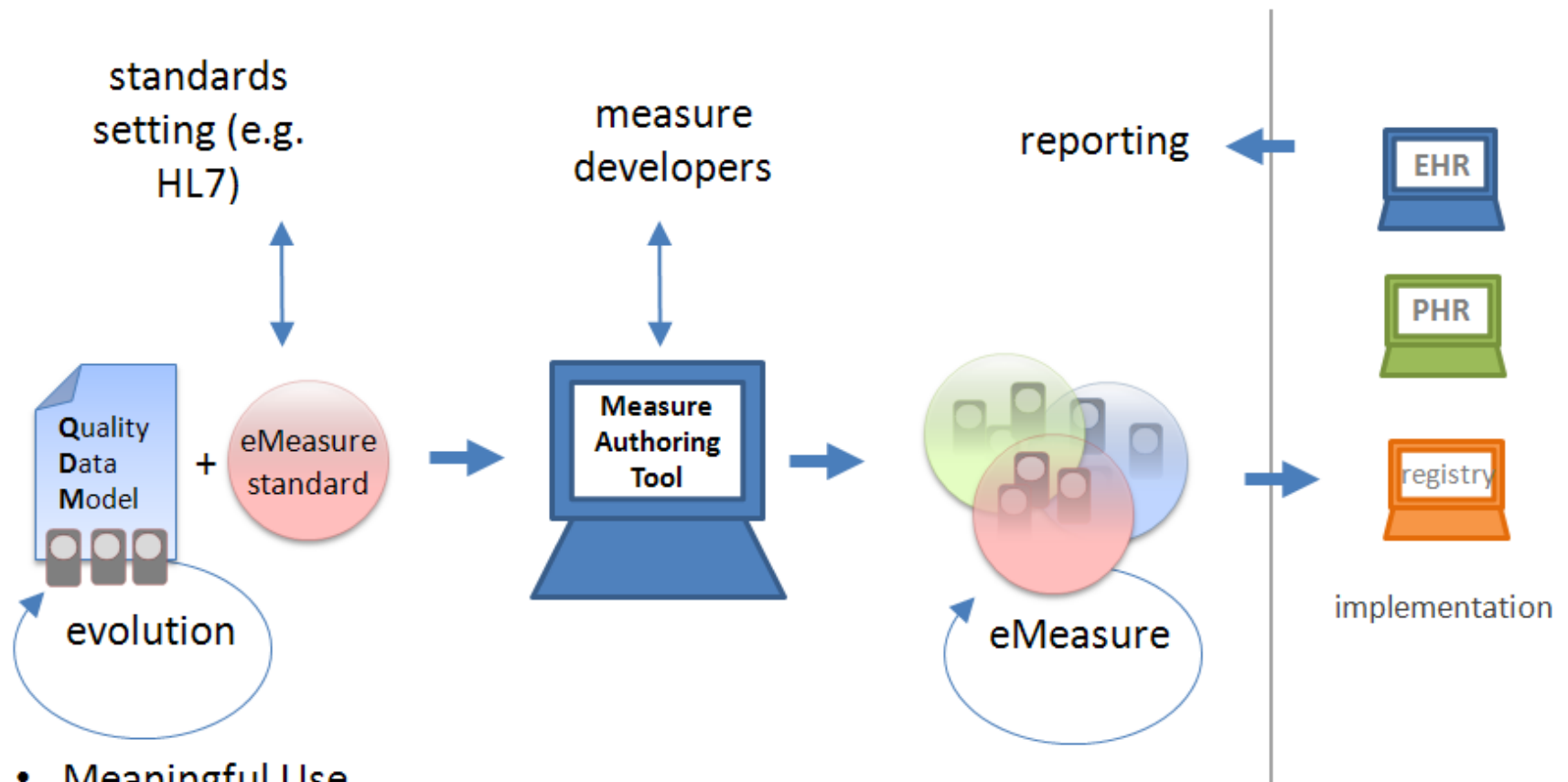
- Meaningful Use
- Clinical Decision Support
- Health IT Assessment Framework

HEALTH INFORMATION FRAMEWORK
Healthy People / Healthy Communities

Overarching agenda to guide development of comprehensive information requirements that enable:

- Management of health by individuals and care providers, and

- Assessment of individual and community health

Health Information Framework
Healthy People / Healthy Communities

Initial 6 areas of interest:

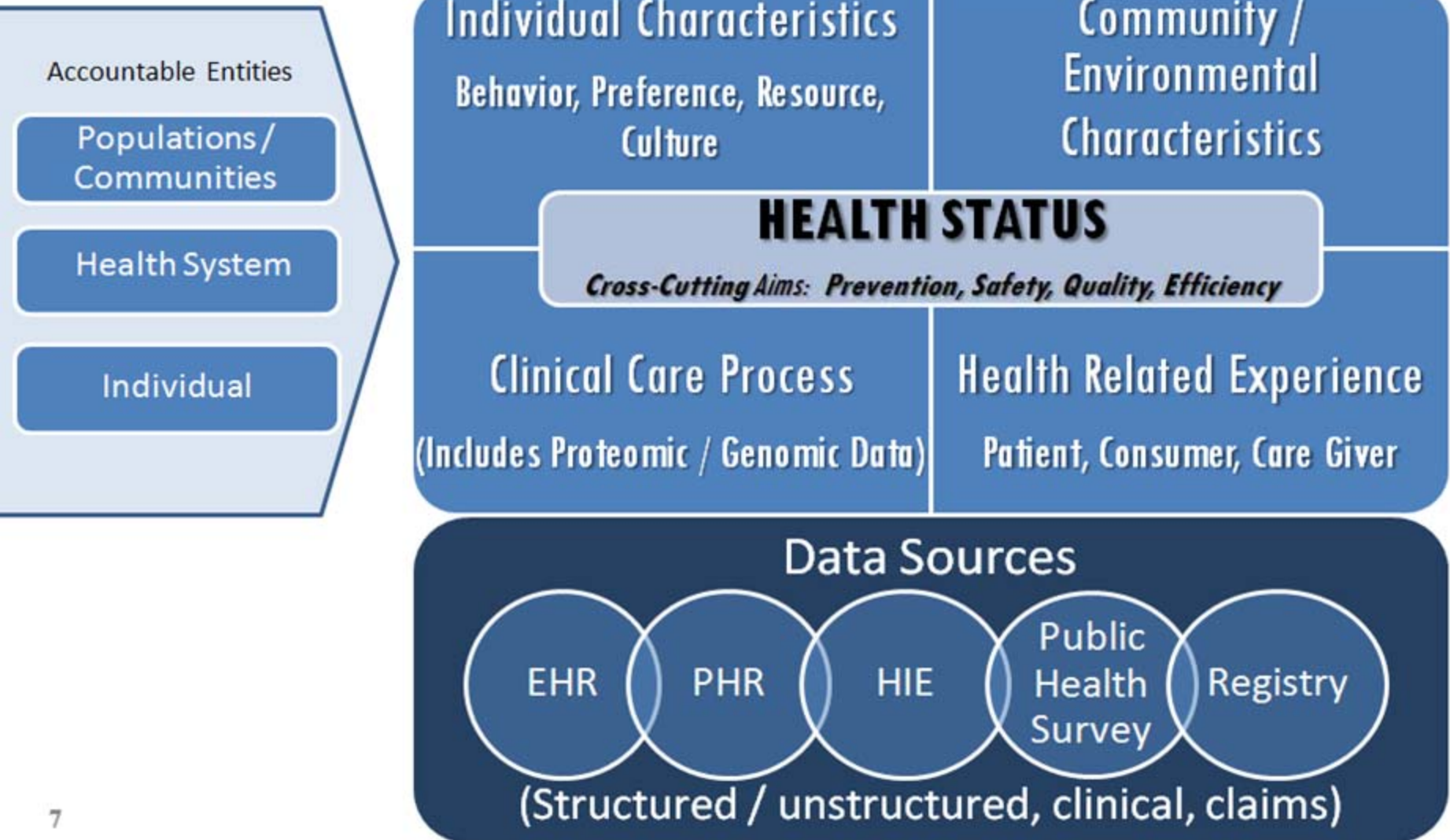- Behavioral Factors

- Social / Cultural Factors

- Preferences

- Clinical Care Factors

- Resources

- Environmental Factors

HEALTH INFORMATION TECHNOLOGY ADVISORY COMMITTEE

HEALTH INFORMATION FRAMEWORK
Healthy People / Healthy Communities

Accountable Entities

- Populations / Communities
- Health System
- Individual

Individual Characteristics

Behavior, Preference, Resource, Culture

Community / Environmental Characteristics

HEALTH STATUS

Cross-Cutting Aims: Prevention, Safety, Quality, Efficiency

Clinical Care Process

(Includes Proteomic / Genomic Data)

Health Related Experience

Patient, Consumer, Care Giver

Data Sources

EHR   PHR   HIE   Public Health Survey   Registry

(Structured / unstructured, clinical, claims)

Comprehensive Data Needed to Generate Performance Information

Laboratories

Pharmacies

Medical Claims

Registries

EHRs

Hospitals/ Institutions

Data Integration

Quality Improvement

Care Evaluation

Patients

Consumer Activation

Pay for Performance

Data Aggregation
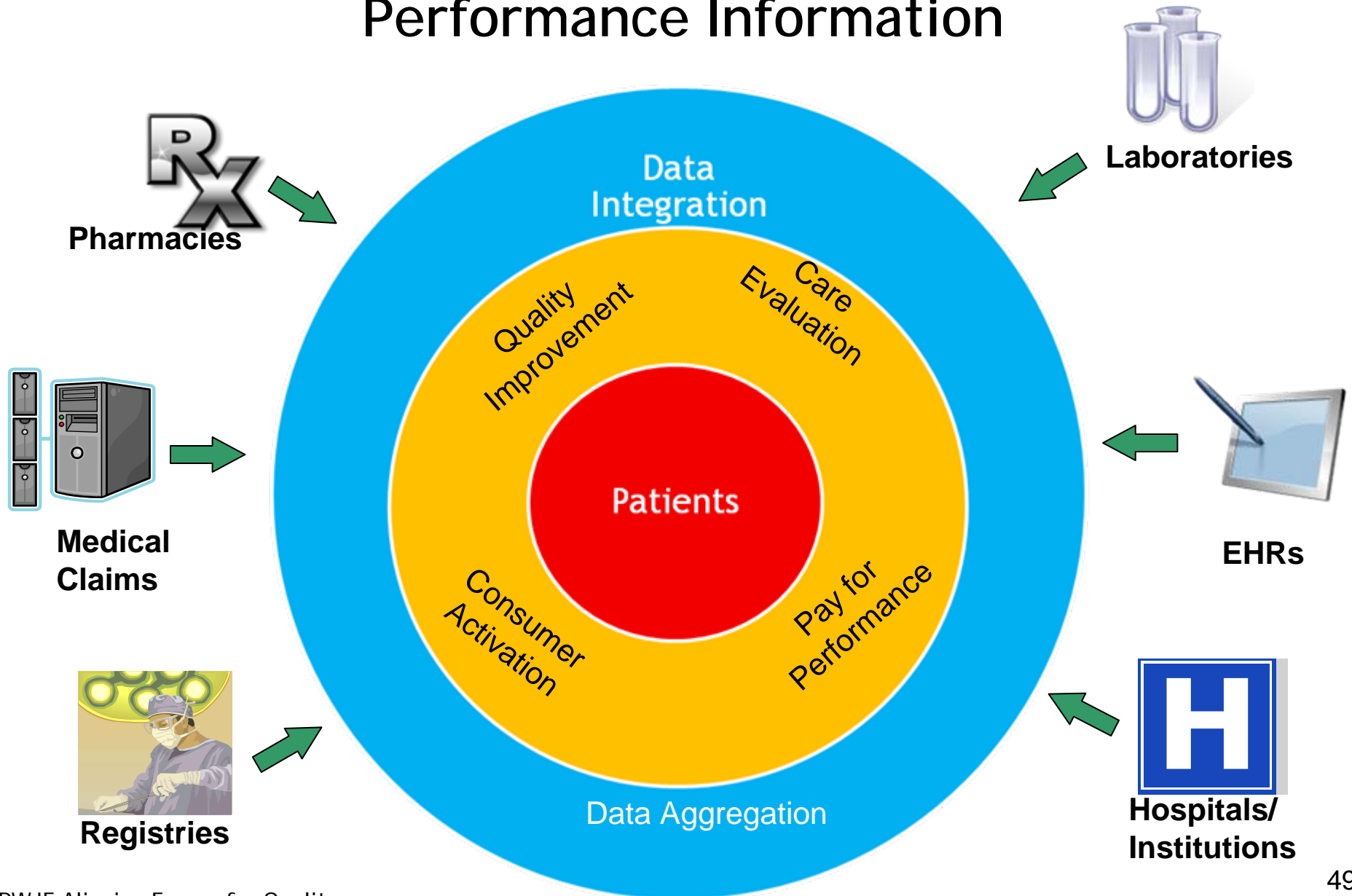
HEALTH INFORMATION TECHNOLOGY: MEASURE AUTHORING TOOL

DEMONSTRATION
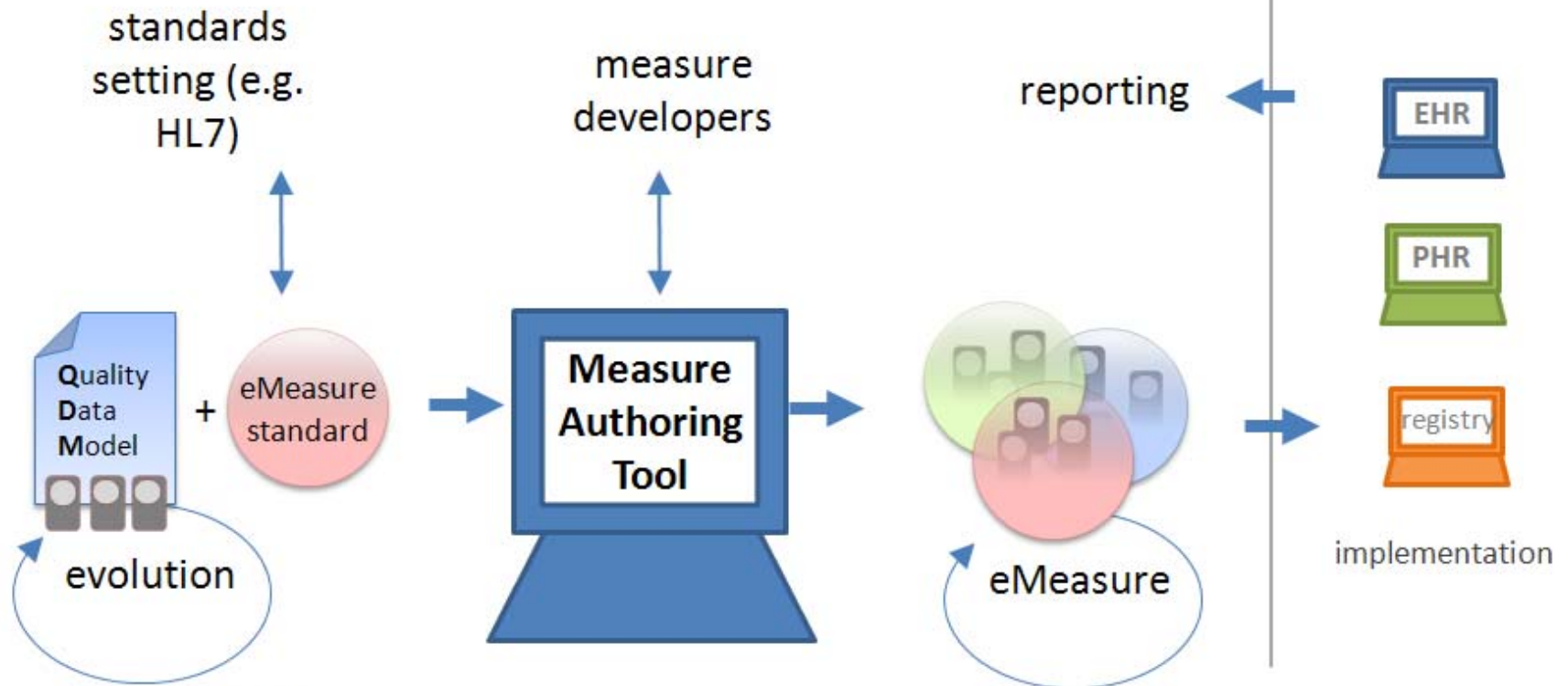
- Meaningful Use
- Clinical Decision Support
- Health IT Assessment Framework

Quality Measurement Enterprise: NQF Contributions
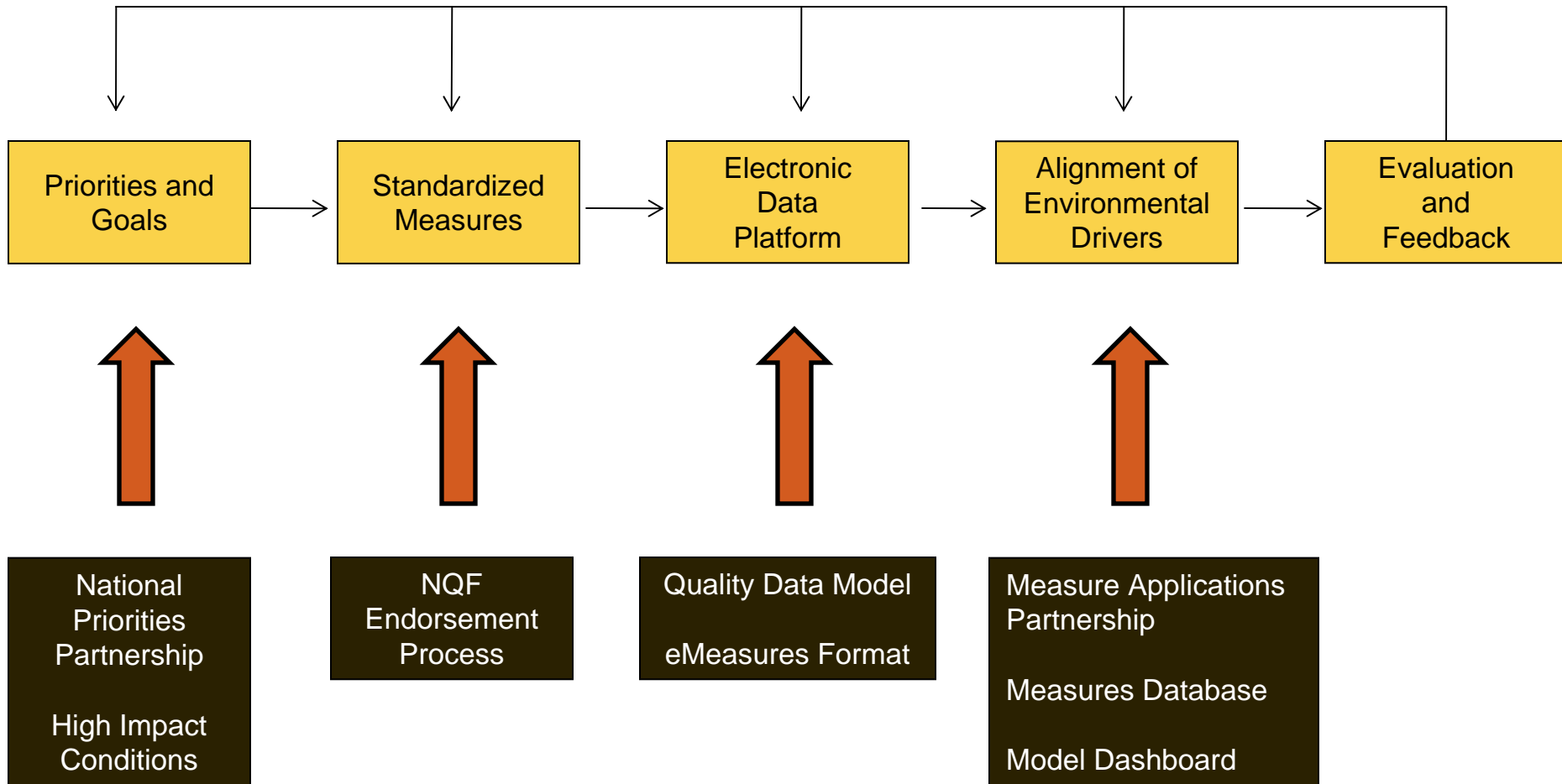
Priorities and Goals	Standardized Measures	Electronic Data Platform	Alignment of Environmental Drivers	Evaluation and Feedback

| National Priorities Partnership High Impact Conditions | NQF Endorsement Process | Quality Data Model eMeasures Format | Measure Applications Partnership Measures Database Model Dashboard | |

Applying Performance Information

Accountability

Quality Improvement | Professional Certification | Accreditation | HIT Incentives | Payment Incentives | Public Reports

Transparency
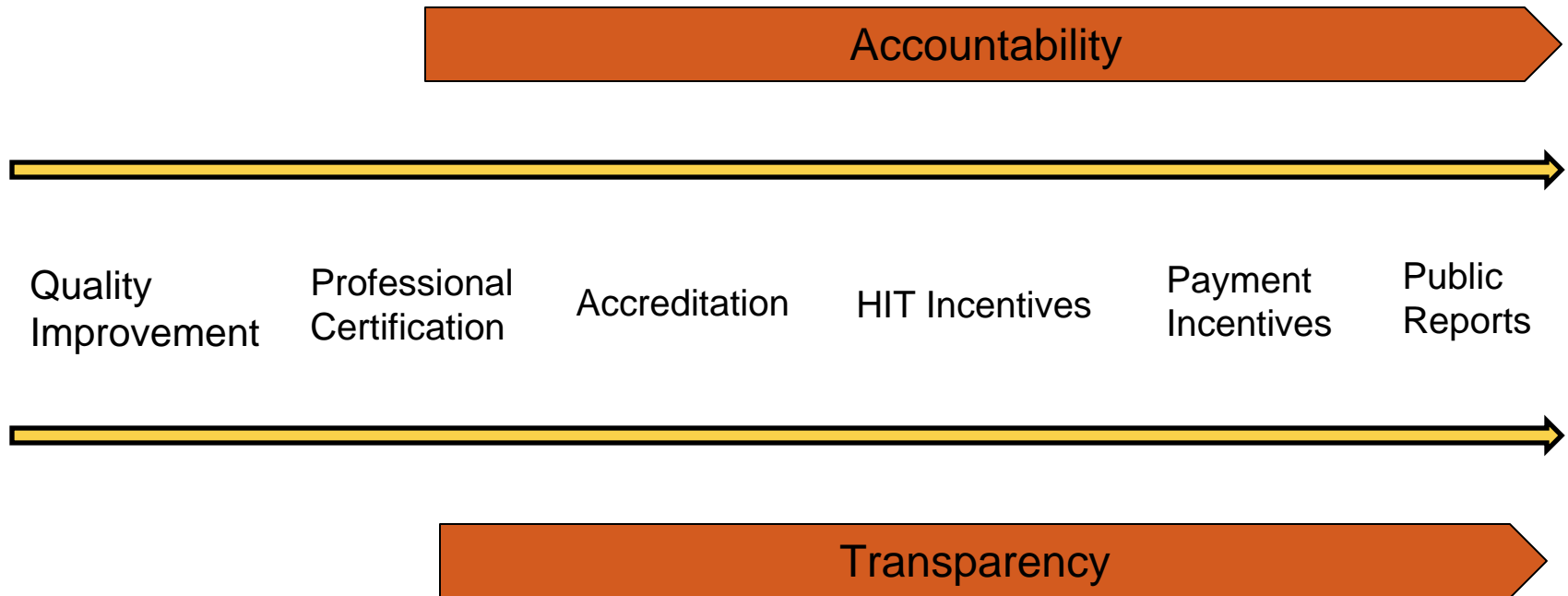
Health reform legislation, the Affordable Care Act (ACA), requires HHS to contract with the consensus-based entity (currently NQF) to **"convene multi-stakeholder groups to provide input on the selection of quality measures" for public reporting, payment, and other programs**.

HR 3590 §3014, amending the Social Security Act (PHSA) by adding §1890(b)(7)

Measure Applications Partnership

- Purpose

    - Identify the best available measures for use in specific applications

    - Identify gaps for measure development and endorsement

    - Provide input to HHS/CMS on the selection of measures for public reporting and performance-based payment programs

    - Encourage alignment of public and private sector programs

Measure Applications Partnership

- Two-Tiered Structure
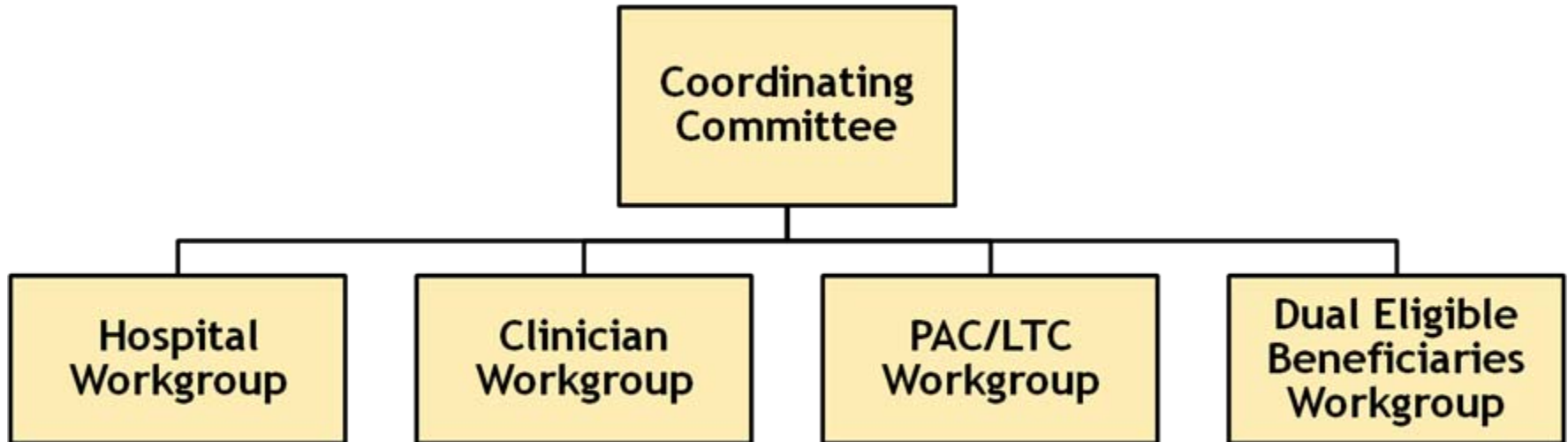
- Potential Tasks

    - Annual Pre-Rulemaking Input to CMS

    - Coordination strategies
        - Physician/clinician programs
        - PAC/LTC settings
        - Readmissions/HACs across payers
        - Dual eligible beneficiaries

- Function

  - Transparency
    - Two rounds of public comment on establishment
    - Two phases of public nominations
    - Open meetings
    - Public comment on input to HHS

  - Decision making framework
    - National Quality Strategy
    - Decision making criteria
    - Background analytics

- Two part project
  - Cataloging of payment reform models
  - Analysis of measurement implications

- Funded by the Robert Wood Johnson Foundation

- RAND engaged as subcontractor

- Report posted on NQF website

Cataloging of Payment Reform Models

1. Global Payment	4. Bundled (Episode) Payment	7. Hospital P4P	10. Physician P4P
2. ACO Shared Savings	5. Hospital-Physician Gainsharing	8. Readmissions	11. Shared Decision Making
3. Medical Home	6. Payment for Coordination	9. Hospital-acquired conditions	

Broadly-defined ◄ Performance goals addressed by payment ► Narrowly-defined

Population-based ◄ Type of payment ► Fee-for-service

More aggregated ◄ Degree of provider aggregation ► Less aggregated
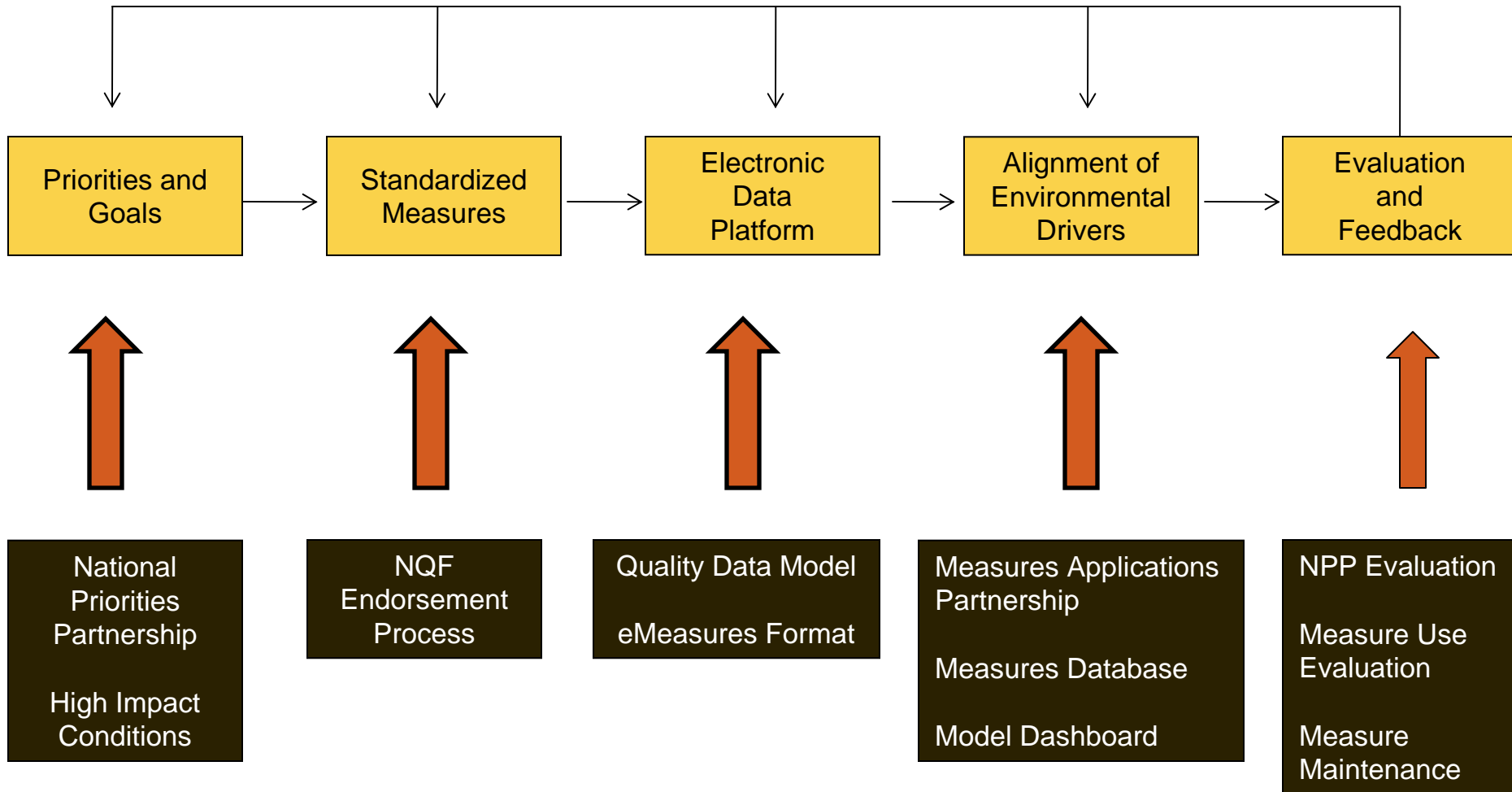
- Rationale for use of measurement

- Measures used in or proposed for highlighted programs

- Suitability of available measures

- Measure gaps for development and endorsement

- Pertinent implementation challenges

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Quality Positioning System (QPS)

- Online navigation tool for the NQF-endorsed measures database

- User-defined search parameters to create a customized portfolio

- Guidance for measure selection based on the National Quality Strategy and other frameworks

- Provide feedback to NQF about the measures or the tool

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Community Dashboard

- Provide a starting place for communities beginning public reporting

- Align reporting with the National Quality Strategy to facilitate comparisons, benchmarking, and national roll up

- Can be customized to recognize communities' specific areas of focus

Quality Measurement Enterprise: NQF Contributions

Priorities and Goals	→	Standardized Measures	→	Electronic Data Platform	→	Alignment of Environmental Drivers	→	Evaluation and Feedback

| National Priorities Partnership

High Impact Conditions | NQF Endorsement Process | Quality Data Model

eMeasures Format | Measures Applications Partnership

Measures Database

Model Dashboard | NPP Evaluation

Measure Use Evaluation

Measure Maintenance |

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NQF
NATIONAL QUALITY FORUM

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