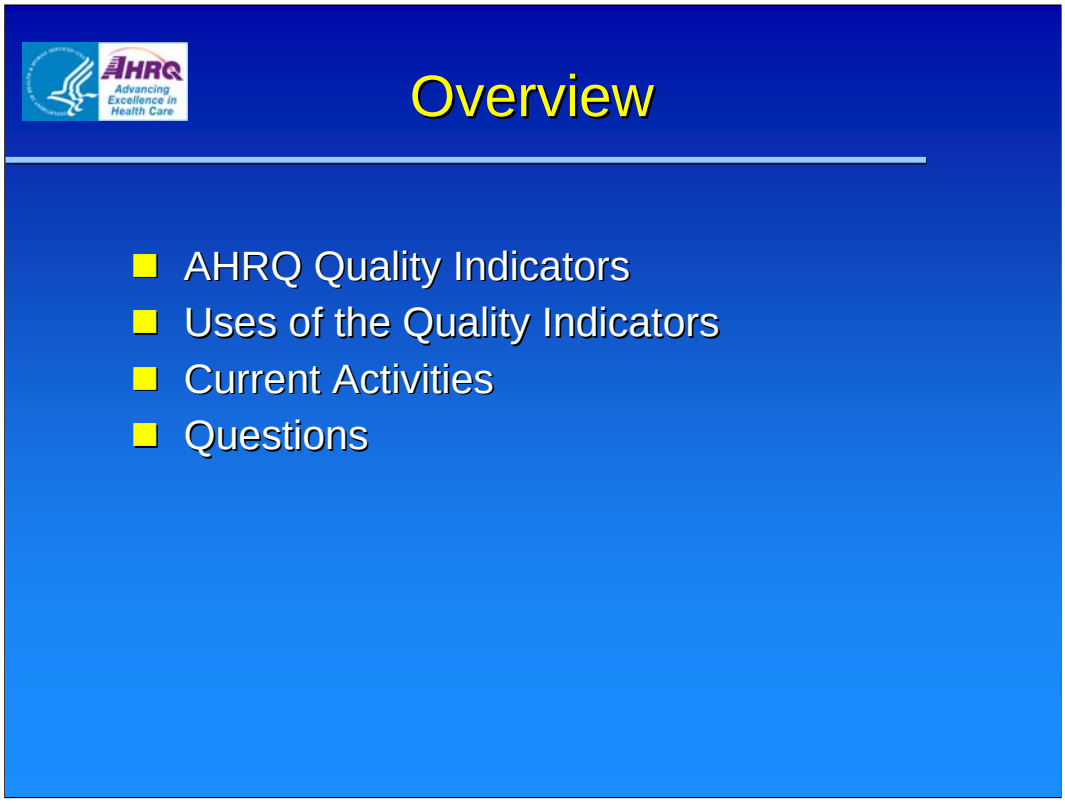
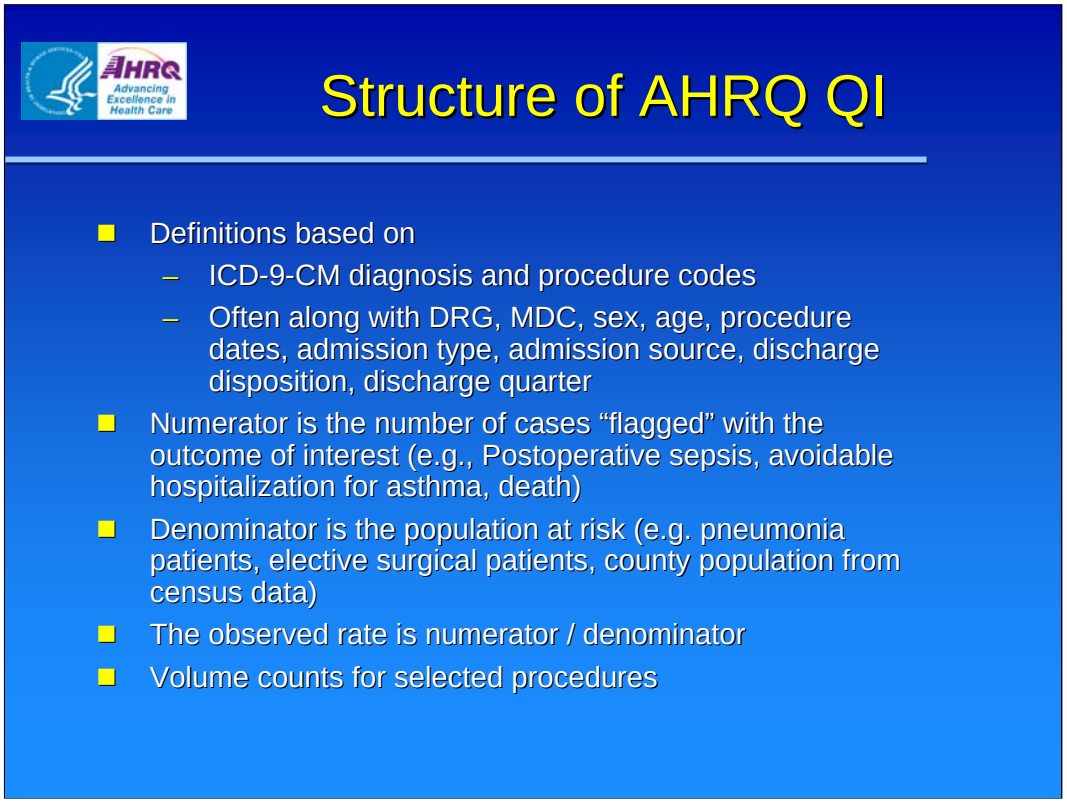
This presentation will provide an overview of the Quality Indicators, also known as the QIs. The were developed for the AHRQ, which is a federal agency in the Department of Health and Human Services. The QIs contribute to AHRQ's mission which is "to improve the quality, safety, efficiency, and effectiveness of health care for all Americans.



I'd like to review the AHRQ Quality Indicators and their development, the current uses of the QIs, what's new in the program, and what we are planning for the future.


AHRQ
Advancing Excellence in Health Care
The AHRQ Quality Indicators

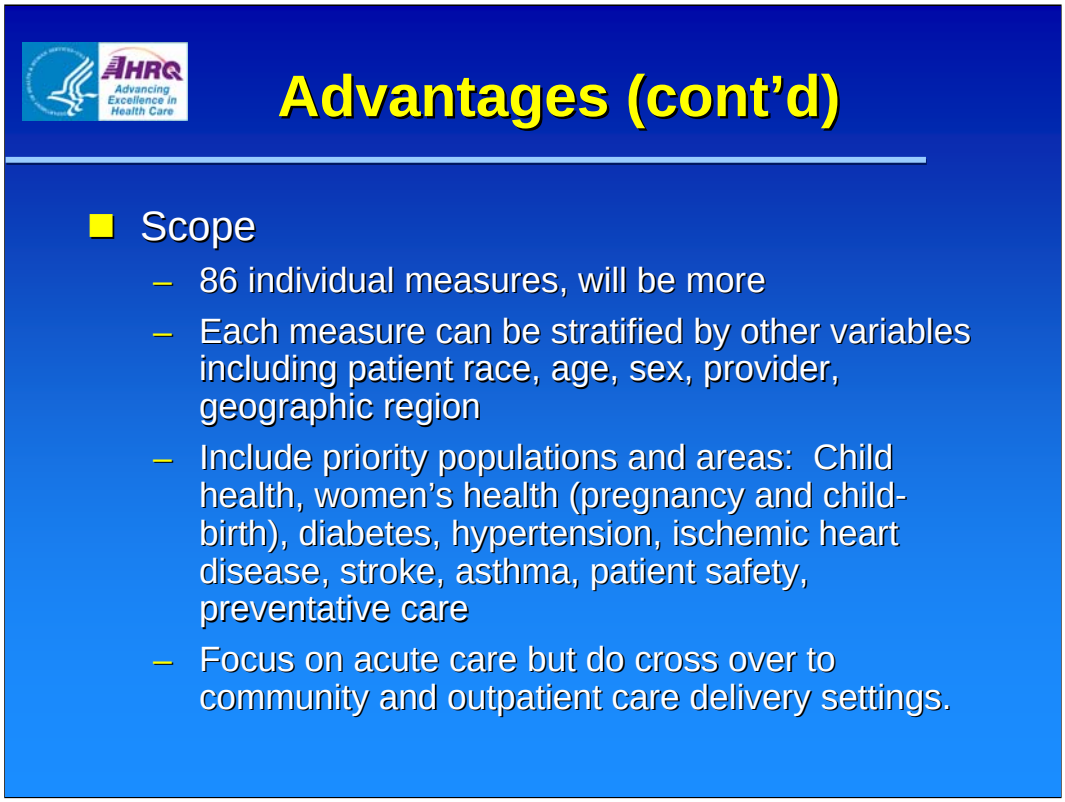
These were the 3 original modules of AHRQ Quality Indicators.



Use info found on the UB-92 Billing Form including patient demographics (age, sex); diagnoses and procedures (ICD-9-CM, DRG); expected payer, length of stay, patient disposition, admission source and type, admission month, and weekend admission data. Many states supplement the information on the billing records with additional data such as race/ethnicity, patient county patient Zip code, severity of illness, birth weight, procedure data (days from admission, primary payer details, secondary payer detailed charges patient identifiers encrypted, physician identifiers encrypted, physician specialty, and a hospital identifier unencrypted.

Advantages

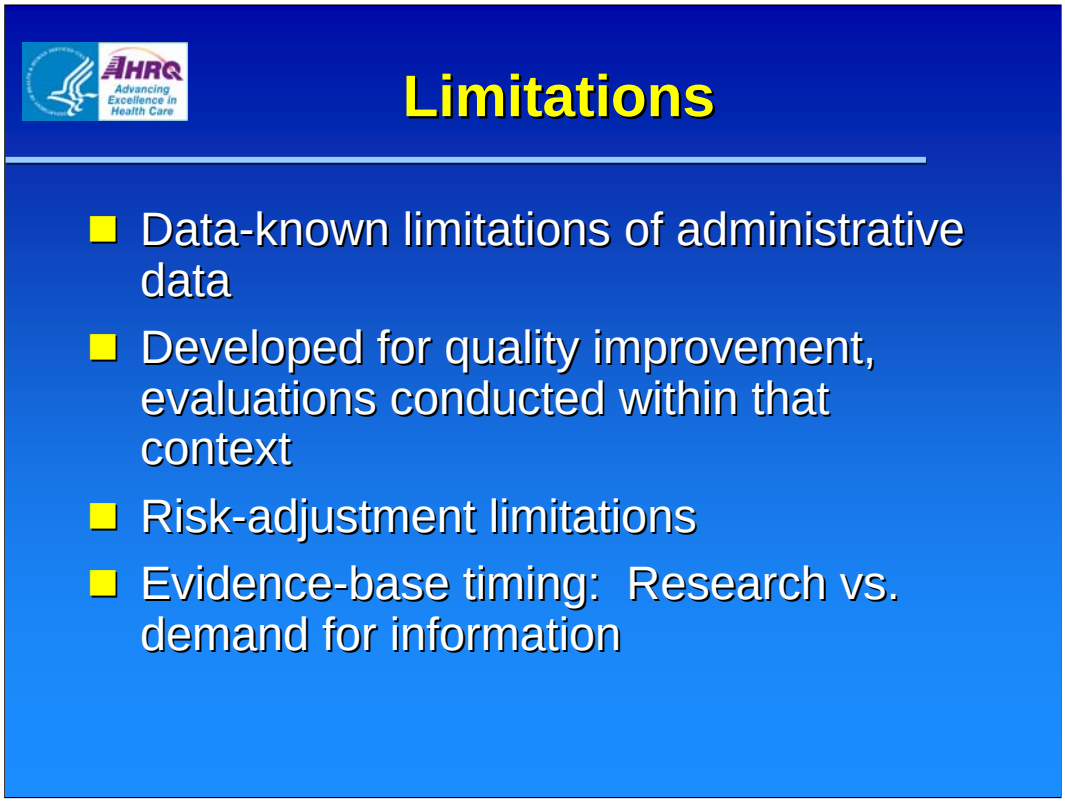
- Public Access
  - All development documentation and details on each indicator available on website www.qualityindicators.ahrq.gov
  - Software available to download at no cost
  - Standardized indicator definitions
  - Can be used with any administrative data: HCUP, MedPar, state datasets, payer data, hospital internal data



Strengths of Administrative data: readily available, politically feasible, low reporting burden, relative uniformity across providers, reflect provider reimbursement, can be enhanced with additional data.

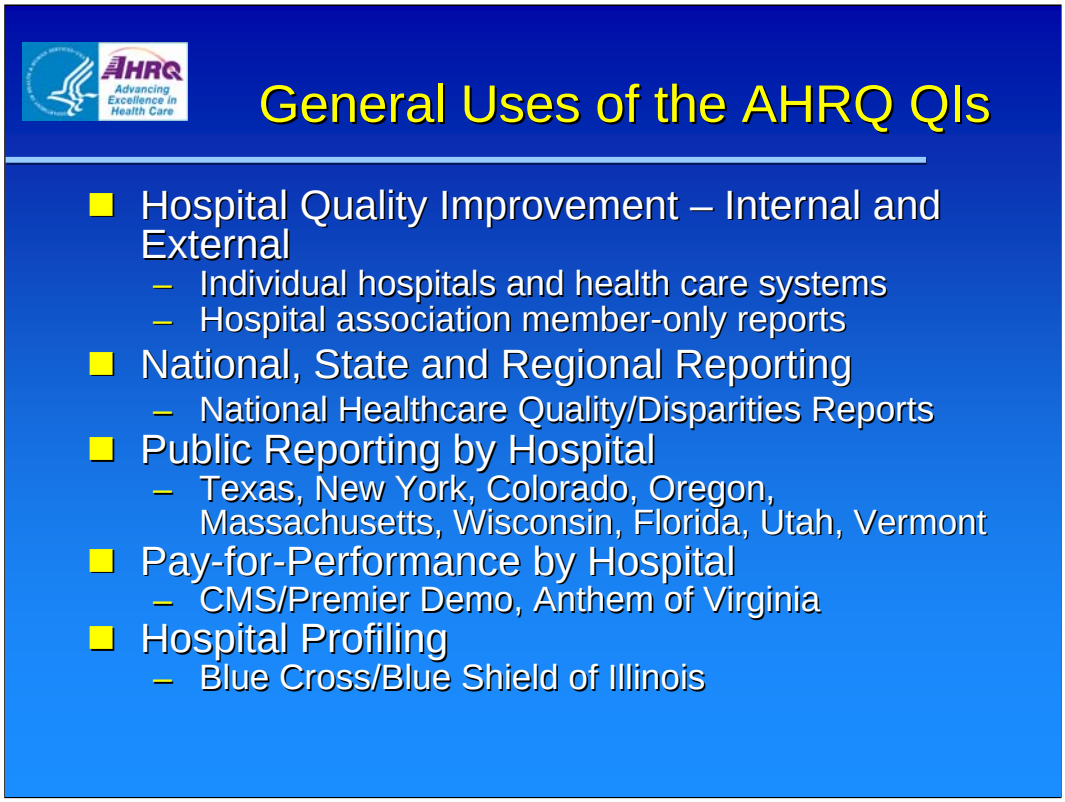
Advantages (cont'd)

- Indicator Maintenance
- National Benchmarks
  - National Healthcare Quality Report
  - National Healthcare Disparities Report
  - HCUPnet



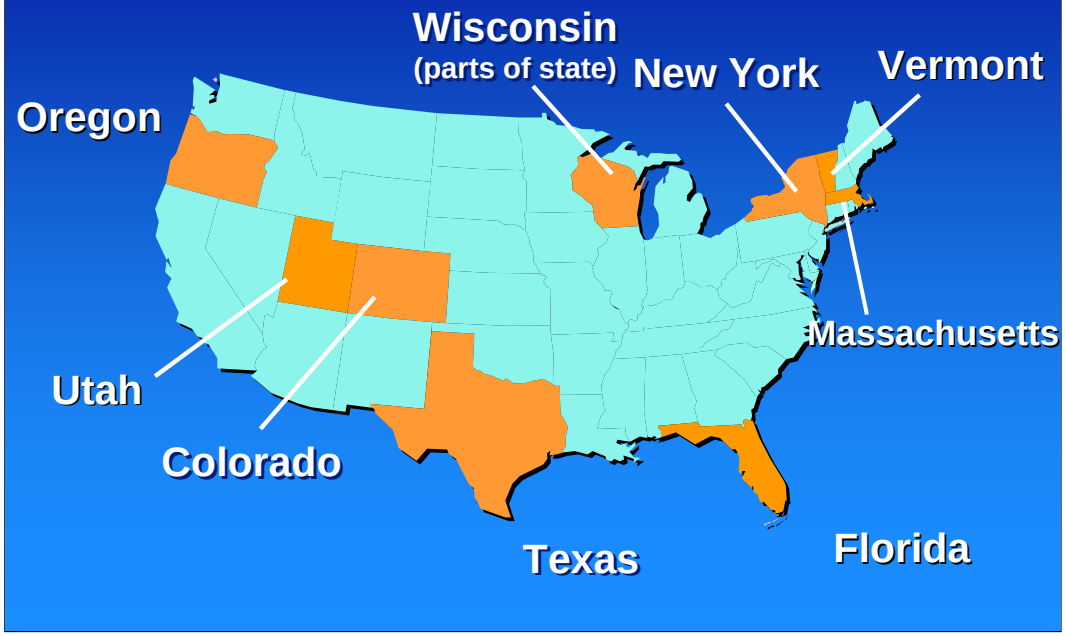
Variation in QI rates might be due to variation in data availability (e.g. number of diagnosis codes, admission type, condition present on admission, E-codes); documentation (ICD-9-CM and DRG coding) or performance (e.g., processes of care, staffing). E-Codes or external causes of injury and poisoning codes are intended to provide data for injury research and evaluation of injury prevention strategies. E codes capture how the injury or poisoning happened (cause), the intent (unintentional or accidental; or intentional, such as suicide or assault). And the place where the event occurred. Other limitations of administrative data include the lack of clinical detail, coding variation and bias, and lags in timeliness.

Uses of the Quality Indicators

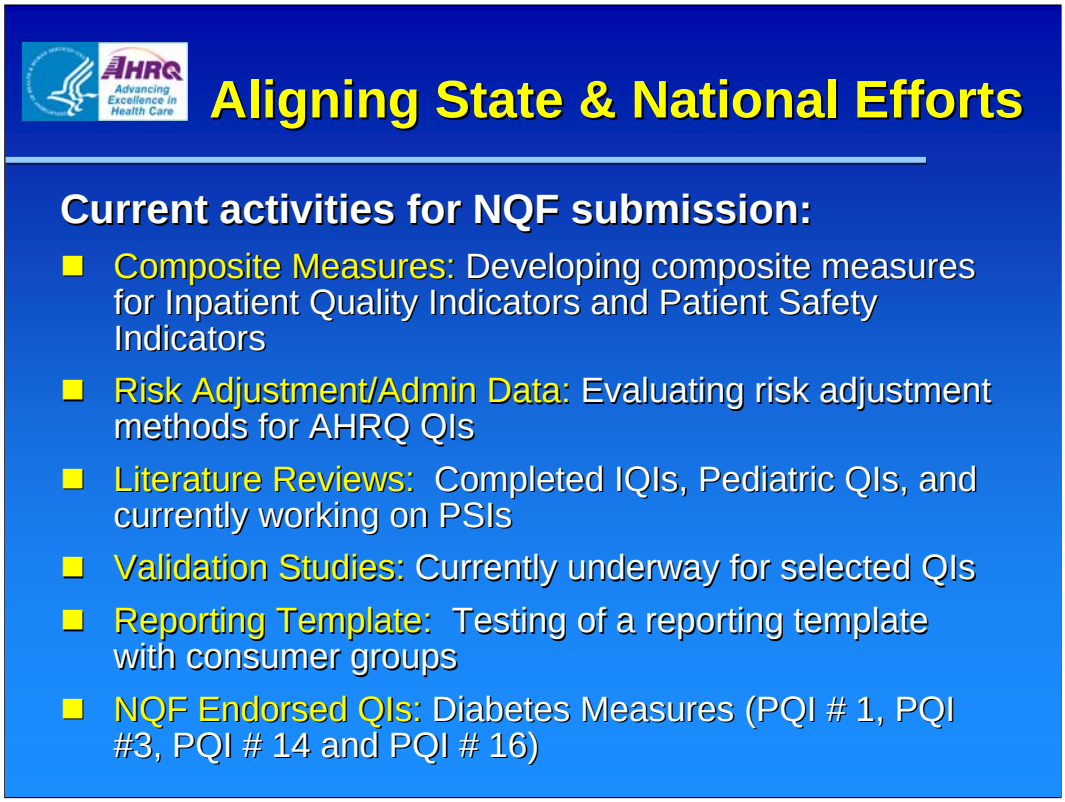


A recent NAHDO study indicated that states are moving to the model of administrative data fro data collection for reasons of cost and availability.

Nine States Use AHRQ QIs for Public Hospital Reporting



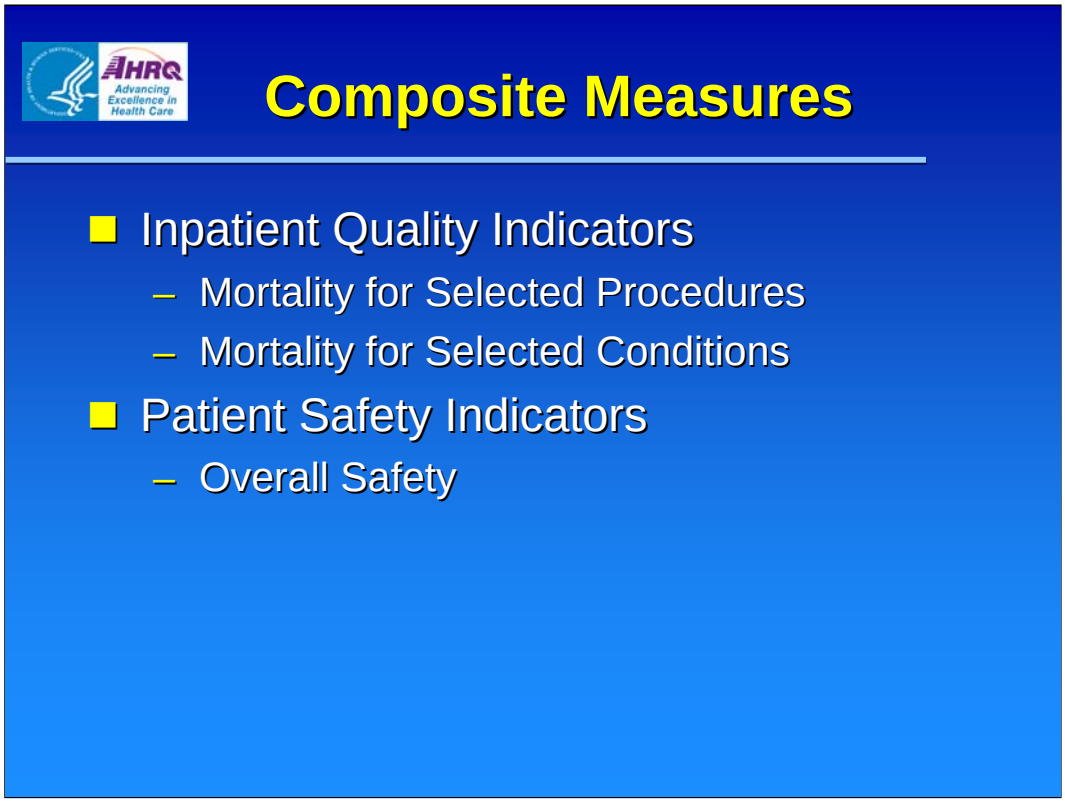
Current Activities



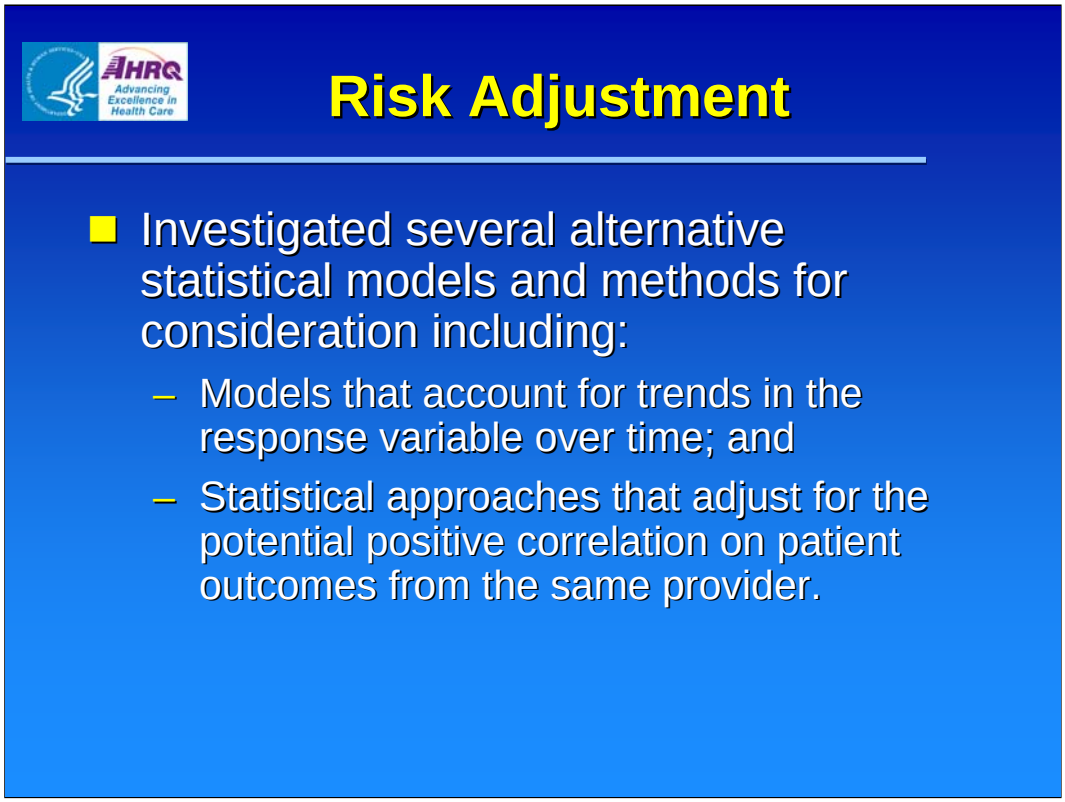
Admissions for uncontrolled diabetes or short-term complications per 100,000 population is based on PQI #1 - Diabetes Short-term Complication Admission Rate and PQI #14 - Uncontrolled Diabetes Admission Rate.

· Admissions for diabetes long-term complications per 100,000 population is based on PQI #3 - Diabetes Long-term Complication Admission Rate.

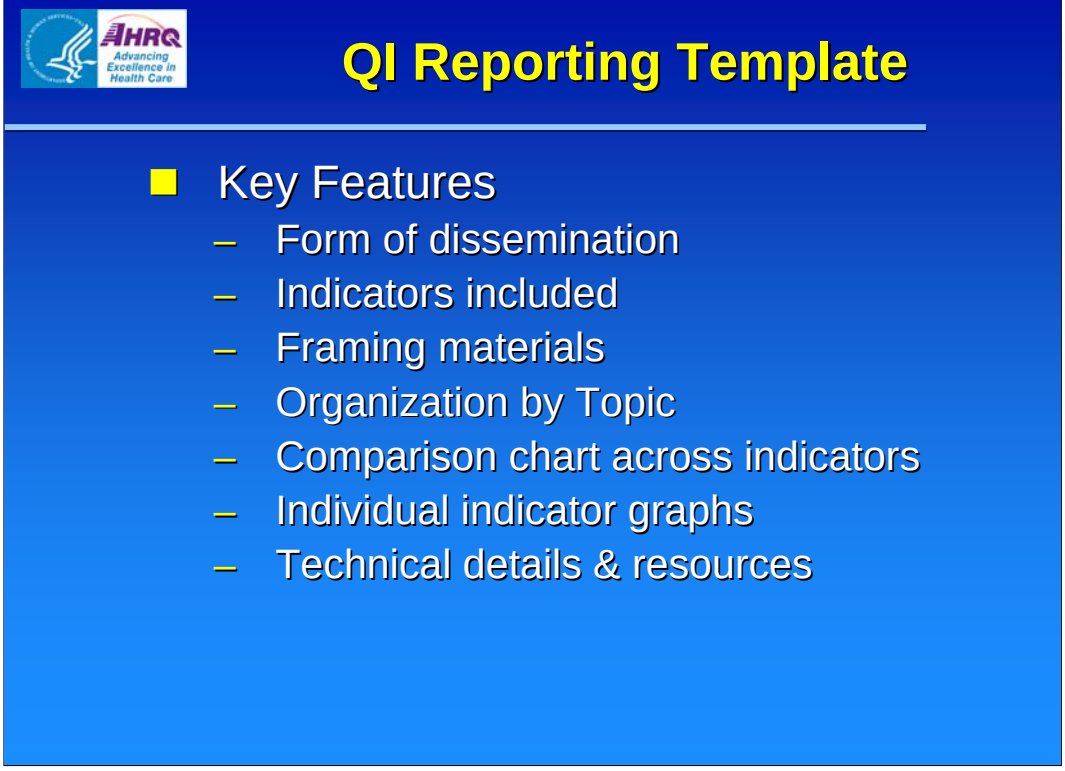
· Admissions for lower-extremity amputation among patients with diabetes per 100,000 population is based on PQI #16 - Rate of Lower-extremity Amputation among Patients with Diabetes.



Many QI users expressed interest in the development of composite measures. The goal of the effort was to develop a composite measure that might be used to monitor performance over time or across areas and populations using a methodology that could be applied at the national, regional, state or provider/area level.



Draft report provides an overview of how these proposed alternative statistical approaches will impact the fitting of risk-adjusted models to the reference population, and on the tools that are provided to users of the QI methodology. Final report is pending a public comment period.



Based on extensive research (literature reviews, interviews w/ experts, two focus groups of medical officers and/or quality managers, four focus groups with the public who had recently experienced a hospital admission; and two rounds of cognitive interviews (19 interviews) to test draft versions of report template.

•Form of dissemination: Assumes website dissemination of hospital quality data but can be adapted to a printed report.

•Indicators included: Includes all of the current IQIs and PSIs. Four of the indicators are included but not labeled as "quality indicators", and include four utilization rates for Caesarean sections and VBACs due to the controversy over the evidence and clarity about what is the "right" utilization rate for these procedures and directionality of the indicator. Is more or less better?

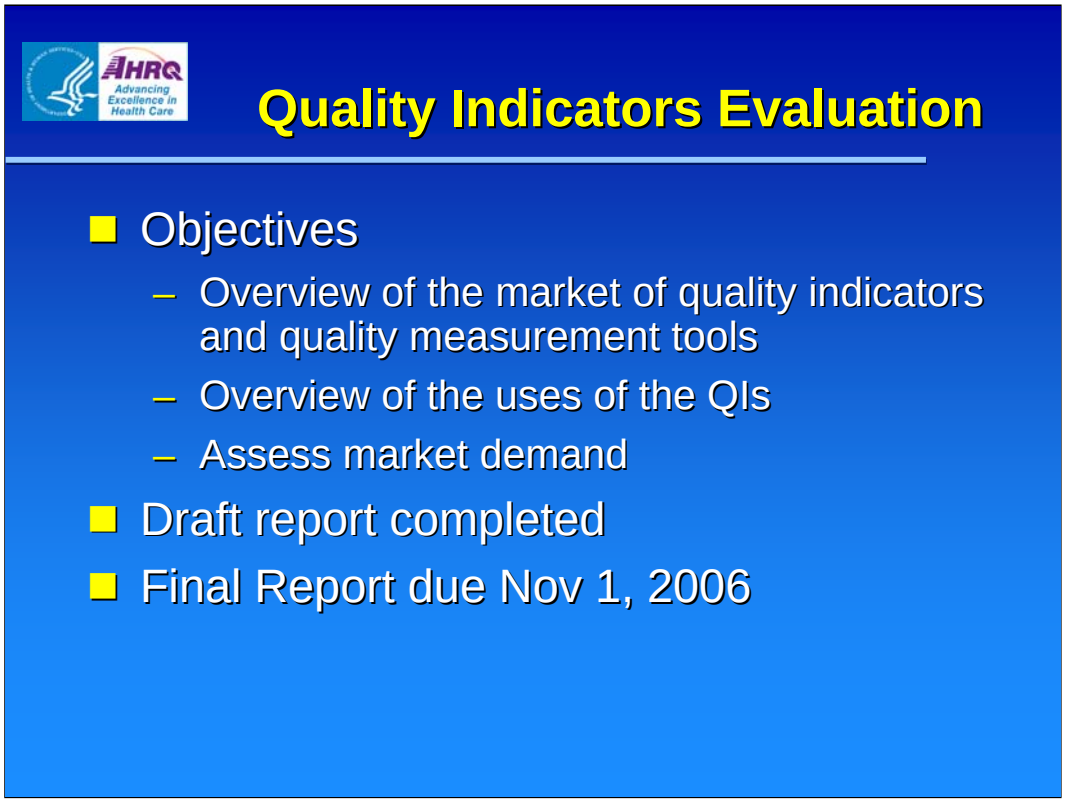
•Framing materials: A few easy to read materials that introduce key concepts such as elements of health care quality, how to use the report, what are the quality indicators, etc.

•Organized by topic: Organized into nine topic areas. The template permits users to select areas of interest to them as well as the indicators that they want to look at. They can look at only one topic at a time, but are able to choose as many hospitals to include in the report as they would like.

•Comparison chart across indicators: Users can select certain indicators of interest for inclusion of the comparison chart. This chart is based on extensively tested in recent lab studies conducted as part of the CHAPS project. Their research demonstrated that this kind of presentation of comparative data is far superior to other approaches—specifically people are much more likely to be able to identify high and low performances accurately and much more likely to use the information in making a decision.

•Individual indicator graphs: The comparison chart is constructed so that once a selection is made, it takes the user to a horizontal bar graph which shows the absolute scores for each of the hospital's selected on a given indicator. Special features include—the hospitals are ordered by performance, graphs covering volume and mortality for the same procedure are paired; the bar graph was designed to maximize comprehension of the bar showing the state or other average; graphs are structured to ensure that the numbers were always at least a whole integer

•Technical details & resources: This provides links to existing pages of the AHRQ QI website and has been included because testing indicates that even if people do not look at this kind of material, they want to know that it is there because it indicates that the sponsor is willing to be "transparent" about their methods.



Extensive literature review; interviews with key informants (approximately 65); in-depth case studies (Boston and Texas)

•Uses of the QIs-research; public reporting, then followed by quality improvement activities.

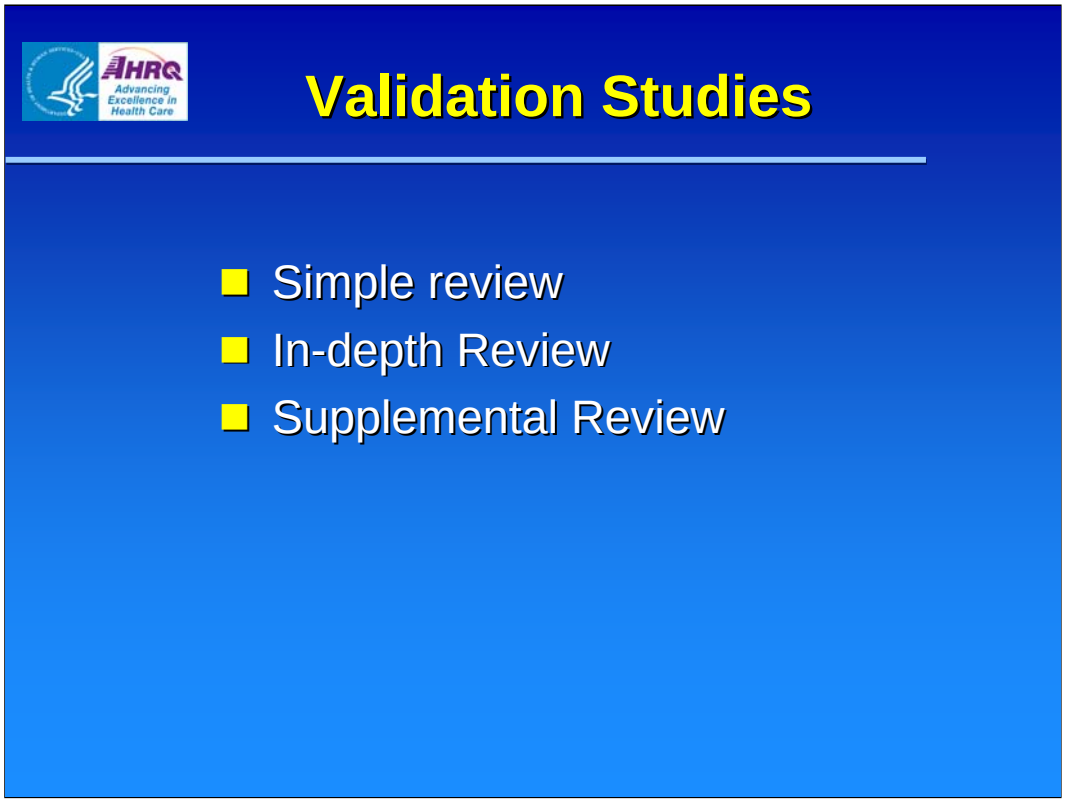
•Users stated very strongly that they relay on AHRQ as the only source for publicly available, transparent indicators based on readily available data.

•The scientific soundness of the QIs was highly regarded, as was the transparency of the QI evidence review and validation that was conducted during the development process.

•Major advantages consistently emphasized by users included ease of implementation and clearly defined and publicly available specifications.

•Future directions included refinement of the current products, the development of new products followed by improving service and outreach.

•QIs have gained a dominant role not just within the US but also increasingly in other countries.



Focus on selected PSIs and includes neonate, pediatric and adult populations.

•Simple review would address the question of whether cases flagged by eh AHRQ PSI did or did not have the clinical event.

•In-depth Review would further address the potential preventability of the clinical event. Data collection would focus on the process of care that either led to the event or might have prevented the event.

•Supplemental Review would augment either of the previous levels, and focus on the AHRQ PSI inclusion and exclusion criteria and risk factors that might be important for improving indicator specifications and for interpreting and using the rates.

•Thus far we have 36 organizations that have expressed an interest in participating in these studies.

AHRQ QI Development

- Development of Pediatric QIs (PedQIs):
  - Scheduled for release in Winter 2007
  - Topic Areas
    - Intraventricular hemorrhage
    - Retinopathy of prematurity
    - Meconium aspiration syndrome
    - Necrotizing enterocolitis
    - Nosocomial infection in neonates
    - Neonatal mortality

Future Research Proposals

- Additional Validations Studies
- Linking the QIs to Clinical Data Elements
- Linking the QIs to other data sets
- Development of New QIs

For More Information on AHRQ QIs

Additional information and assistance

- E-mail: support@qualityindicators.ahrq.gov
- Website: http://qualityindicators.ahrq.gov/
  - QI documentation and software is available
- Support Phone: (888) 512-6090 (voice mail)
- Marybeth Farquhar, RN, MSN
  - Marybeth.Farquhar@AHRQ.hhs.gov
  - 301-427-1317