#### **Testimony**

#### before the

National Committee on Vital and Health Statistics Ad Hoc Workgroup for Secondary Uses of Health Data



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**Blue Health Intelligence** 

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Better knowledge for healthier lives



### **Overview of BHI**

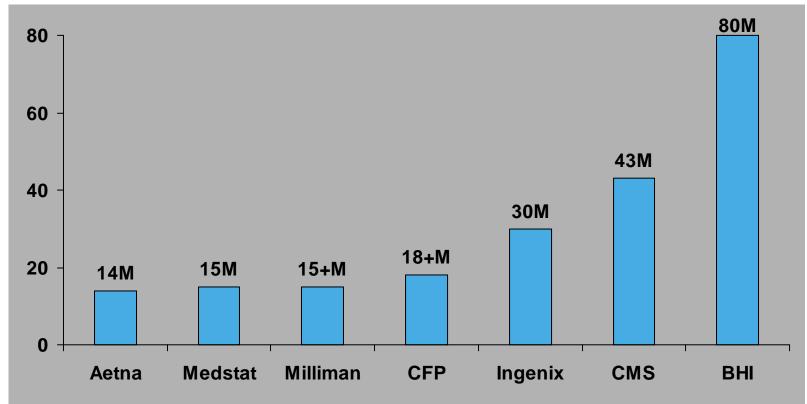


- Positioned to be the largest-ever healthcare data warehouse, bringing together the claims experience of 80 million Blue Cross Blue Shield members nationwide
- Produces national, regional and metropolitan statistical area (MSA) benchmarks for the following major utilization and cost categories: 1) Inpatient, 2) Outpatient, 3) Professional, 4) DCG, 5) Mental Health/Chemical dependency, 6) Combined services
- Data certified to meet strictest quality standards
  - The data set provided by a given Blue Plan is statistically reliable and data integrity has been maintained
  - The data from each participating Plan is standardized and consistent with the entire BHI data set, thus ensuring meaningful comparisons and answers to queries
- Data produced by BHI are de-identified, and available only to participating Blue Plans and their employer purchasers
  - No third-party sales

# BHI Compared with other Data Warehouses



**BHI** will house the largest population sample of any known health data warehouse



Source: Aetna size based on article "Wealth of Data Helping Employers Control Costs," Business Insurance, 10/31/05. Medstat size based on "Health Research Data for the Real World" The MarketScan Databases" by Adamson, D. et al, January 2006. Milliman size based on the Milliman Medical Index, 2005. Care Focused Purchasing (CFP), Consortium Health Plans Presentation. Ingenix size based on www.ingenix.com. CMS Office of Actuary, 2006

#### Uses of BHI: Benchmarks



Currently, BHI provides data for reporting and development of benchmarks to support both local and national accounts

#### Benchmark Extracts Created for...

- Combined Services
  - Inpatient Facility
  - Outpatient Facility
  - Professional Services
  - Other Services
- Diagnostic Cost Group (DCG) Sets
- Inpatient Facility
- Outpatient Facility
- Professional Services
- Other Services
- Mental Health / Chemical Dependency

#### Aggregated at...

- National level
- Regional level
- BHI Metropolitan statistical area

#### Adjusted by...

- SIC code
- DRG code
- DRG MDC code
- Product category
- Age group
- Gender
- Diagnosis group codes
- Type of service code
- Place of service code
- BETOS code
- BHI network facility
- BHI network professional

Dependency Note: (1) Benchmarks are not aggregated at the state-level per direction of BHI Plans. (2) Adjustment factors highlighted in purple are unique to BHI; those highlighted in green are unique to the Blues.



#### Other Uses of BHI Data

BHI data will enhance the analytics offered by participating Blue Cross and Blue Shield Plans, enabling them to:

- identify evidence-based approaches for the long-term improvement of provider network quality and efficiency
- work with employers to improve the overall health of their workforce while better managing costs
- help consumers get more engaged in their healthcare decisions
- provide physicians and hospitals with powerful insights into emerging medical trends and treatment options
- create opportunities for medical experts and researchers to expand their knowledge
- give policy makers accurate evidence on issues like drug safety and efficacy and the impact of new technologies and procedures

## Oversight of Data: Legal and Operational Constraints

- Through normal business operations, Plans generate medical and drug claims, membership, provider and other "raw" data
- BHI enters into Business Associate agreements with Plans to collect, standardize, aggregate, and de-identify those data
  - HIPAA defines business associate as a "person" that performs on behalf of the covered entity any function or activity involving the use or disclosure of protected health information
- Business Associate agreements impose strict privacy rules
  - Per the BHI Business Associate agreements, BHI may not disclose a Participating Plan's raw data to any party other than the submitting Participating Plan.
- Data ownership and stewardship
  - Plans own their medical and drug claims, membership, provider and other "raw" data
  - BCBSA owns the aggregated, de-identified data generated by BHI



#### Protecting the Identify of Data BHI Uses/Shares

- BHI outputs contain only aggregated or averaged values of a variable
  - The variable is aggregated by geographic region, age groups, or a combination
  - The geographic region is never smaller than the MSA level
  - The value of the aggregate or average for an age group/region is suppressed if n < 5
- BHI output and extracts remove all 18 elements enumerated in the HIPAA privacy rule that could be used to identify the individual or the individual's relatives, employers, or household members. (45 C.F.R. 164.514(b)(2))
- In addition, BHI commissioned an independent statistician who concluded that the risk was "very small" (the HIPAA standard for de-identification) that BHI outputs and extracts could be used alone or in combination with other reasonably available information to identify an individual. (45 C.F.R. 164.514(b)(1))
- The BHI warehouse infrastructure is extremely secure because it is connected to a private, secure Blue network ("Blues Net") through an SSL portal not through the internet
  - Blues Net security continually checks for and mitigates potential vulnerabilities.



#### Establishing Trust throughout the Chain

- As covered entities, Plans disclose to their members through privacy notices that they may use medical information for such purposes as conducting quality assessment and improvement activities; and to authorize business associates to perform data aggregation service
- Members' individually identifiable information will not be released by BHI – BHI is designed such that outputs are always de-identified
  - BHI could not release information, for example, identifying "a 55-year-old person who had a CT scan at Seton Hospital in Austin on April 15, 2007"
  - BHI could report the average cost for five or more males aged 55 to 59 who had inpatient services for diseases of the digestive system in the Austin-San Marcos MSA in 2006. No one person could be re-identified
- BHI does not and has no plans to sell data (even aggregated, deidentified data) to non-Blue third-parties



#### BHI as a Quality Tool/Research Tool

- BHI has features that will be invaluable for quality improvement efforts
  - Performance measurement and identification of trends
  - Unprecedented size, providing depth, breadth and accuracy
  - Every BHI record has an encrypted tag allowing claims to be grouped into episodes of care (using the Medstat Episodes Grouper)
  - Standard formats with a common data dictionary
  - Standard Industrial Classification (SIC codes)
- These same attributes make BHI a potentially robust research tool.
  - Recently formed employer and physician advisory groups will be responsible for contributing research-based insights into issues critical to the public's health
  - However, outside researchers would never have direct access to data in the system in order to protect privacy
  - BHI would run queries for researchers, and provide them with reports that aggregate de-identified data

#### Questions?



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Better Knowledge Drives Better and More Affordable Care for Consumers