



PCE Deflators for Medical Care:
A Progress Report
BEA Advisory Committee
November 4, 2005

Discussion
by David Johnson

Main points

- Results from BLS work on CNSTAT: *At What Price?* recommendation
 - using MEDSTAT data and episode methodology
- CPI methodology for pricing prescription drugs
 - the treatment of brands and generics
- CPI plans for incorporating Medicare D
- Our next steps

Recommendations from CNSTAT report “At What Price?”

- Recommendation 6.1: Create an experimental index using the price changes of selected diagnoses.
 - “BLS should select about 15 to 40 diagnoses from the ICD (International Classification of Diseases), chosen randomly in proportion to their medical treatment expenditures and use information from retrospective claims databases to identify and quantify the inputs used in their treatment and to estimate their cost.”



Disease-Based Price Indexes

Data –

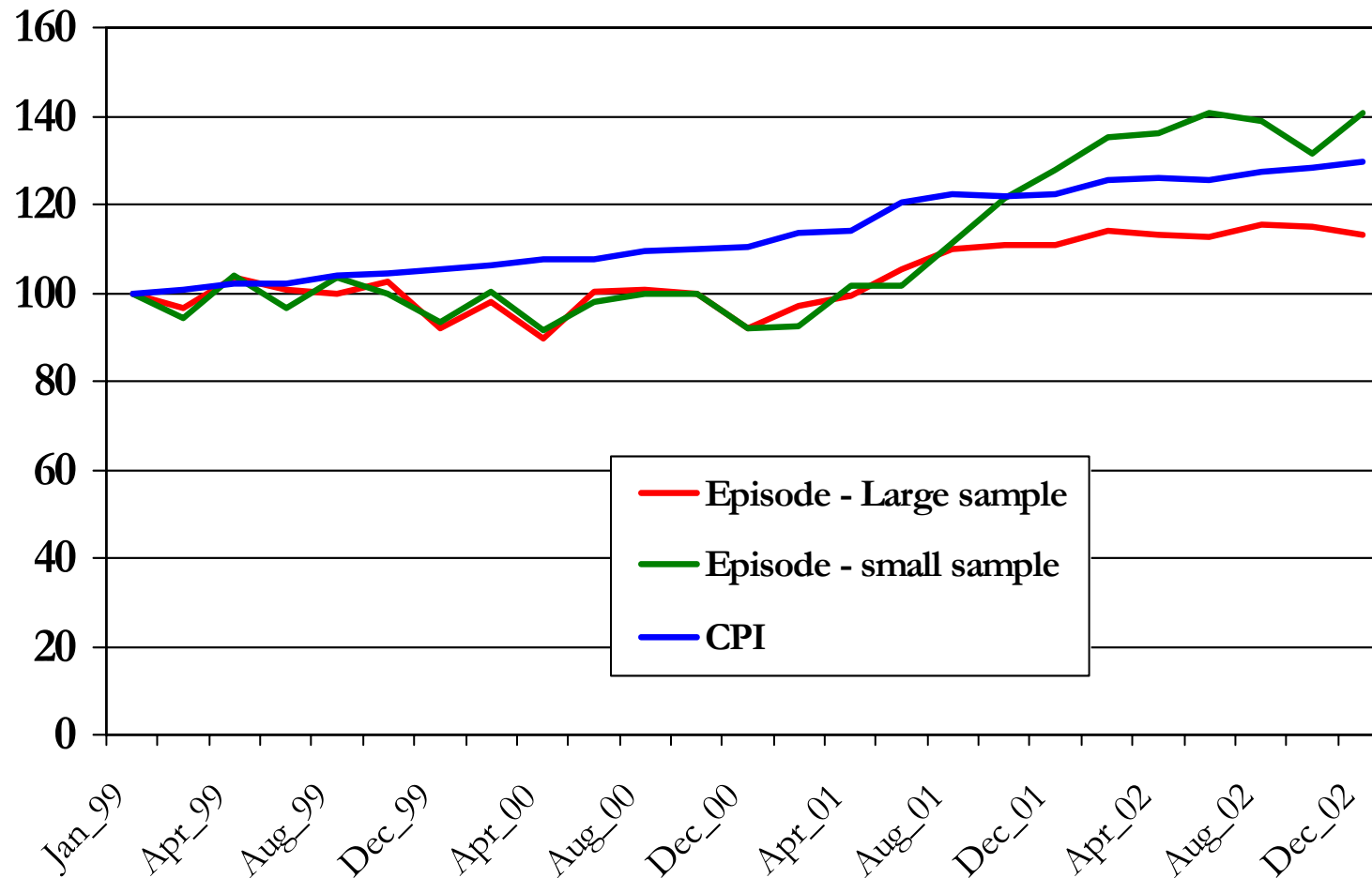
- MEDSTAT claims data for
- January 1998 – December 2002
- Three cities: New York, Boston, Philadelphia

Project Results –

- No significant difference between:
 - BLS Medical Care Price Index and
 - Disease based price index.
- Large price indexes variances due to large variances in both
 - Prices
 - Utilization



Results of MEDSTAT/Episode methodology Philadelphia – Medical care



Results from MEDSTATS Report

		Small Sample Size: Replication	
		Percentage Change	SE
Philadelphia	Drugs	0.3283	0.0203
	Doctors	0.2860	0.7094
	Hospitals	0.2654	0.5761
	all-item	0.4054	0.3517
Boston	Drugs	0.1144	0.0234
	Doctors	-0.0115	0.3576
	Hospitals	0.3405	0.5411
	all-item	0.2441	0.2959
New York	Drugs	0.1719	0.1076
	Doctors	-0.3538	0.3809
	Hospitals	-0.0512	0.3734
	all-item	0.0417	0.2963

		BLS MCPI	
		Percentage Change	SE
Philadelphia	Drugs	0.1650	0.0525
	Doctors	0.2959	0.2003
	Hospitals	0.6486	0.1600
	all-item	0.3803	0.1002
Boston	Drugs	0.1893	0.0700
	Doctors	0.0400	0.0470
	Hospitals	0.5055	0.1832
	all-item	0.2291	0.0627
New York	Drugs	0.1294	0.0457
	Doctors	0.0178	0.0407
	Hospitals	0.1012	0.0666
	all-item	0.0701	0.0320



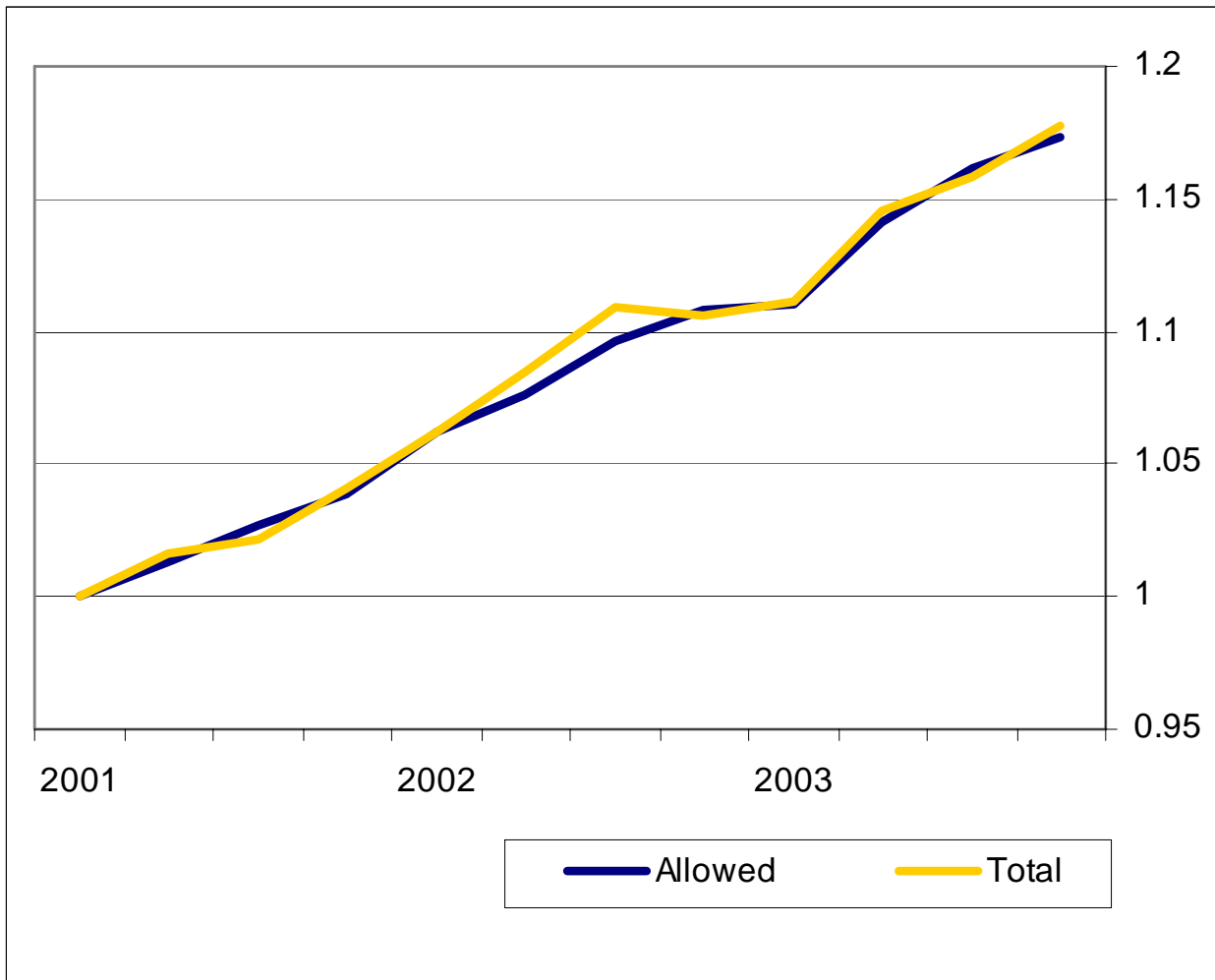
Unresolved Issues for Using Insurance Claims Data and Episode methodology

- We agree with Ana's concerns with episode-based indexes based on PHARMetrics data:
 - Are the PHARMetrics data representative for patients covered with Commercial insurance?
 - Is there a right-censoring problem in forming episodes?
 - How should we handle records that can't be grouped into episodes?
 - Do different groupers yield similar indexes?
- Our additional concerns
 - Diagnostic errors
 - Time lags and uncompleted claims
 - Multiple conditions for a patient
 - The uninsured are different

CPI Prescription Drugs - How CPI includes drugs in the sample

- ❑ Price both Rx drugs and Rx medical supplies
 - Mostly Rx drugs
- ❑ Quote characteristics for Rx drugs
 - Brand name, active ingredient, form, strength, quantity, NDC (National Drug Code), transaction price, and type of payer
 - Collected price – **total** amount received by the pharmacy (similar to Ana's **allowed** price)
 - Type of payer
 - ❑ Self-pay (cash) – **total price** (90% of sample)
 - ❑ Type of insurance
 - ❑ Medicare – up until now didn't really reimburse for retail prescriptions

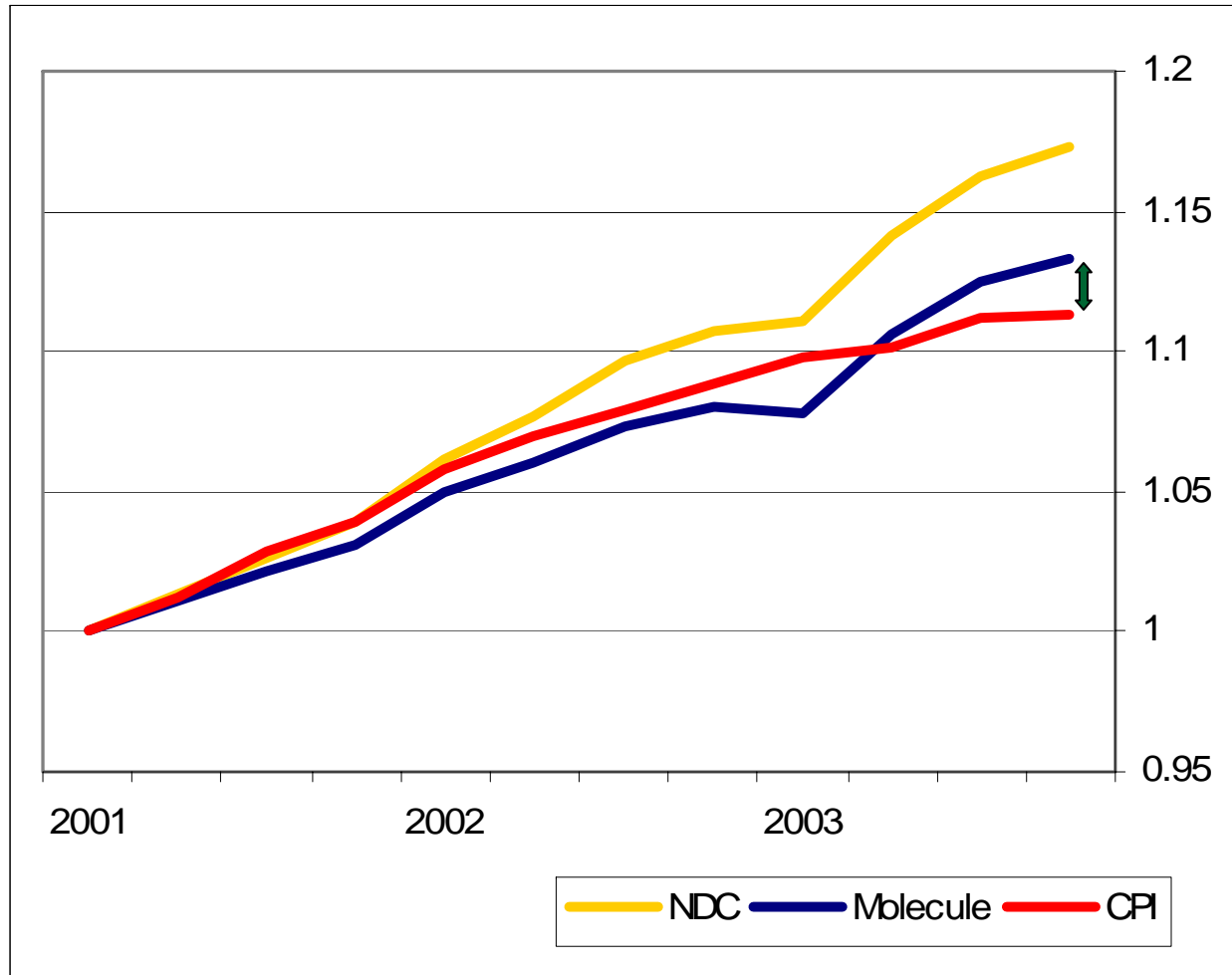
BEA Chained Fisher Indexes for Prescription Drugs



Allowed and total charges show similar growth rates

BLS/MEDSTAT study showed similar results - Cash (total) prices have increased slightly more than prices using contingent claims data (allowed)

Treatment of generic drugs and Rx to over-the-counter (OTC) switches



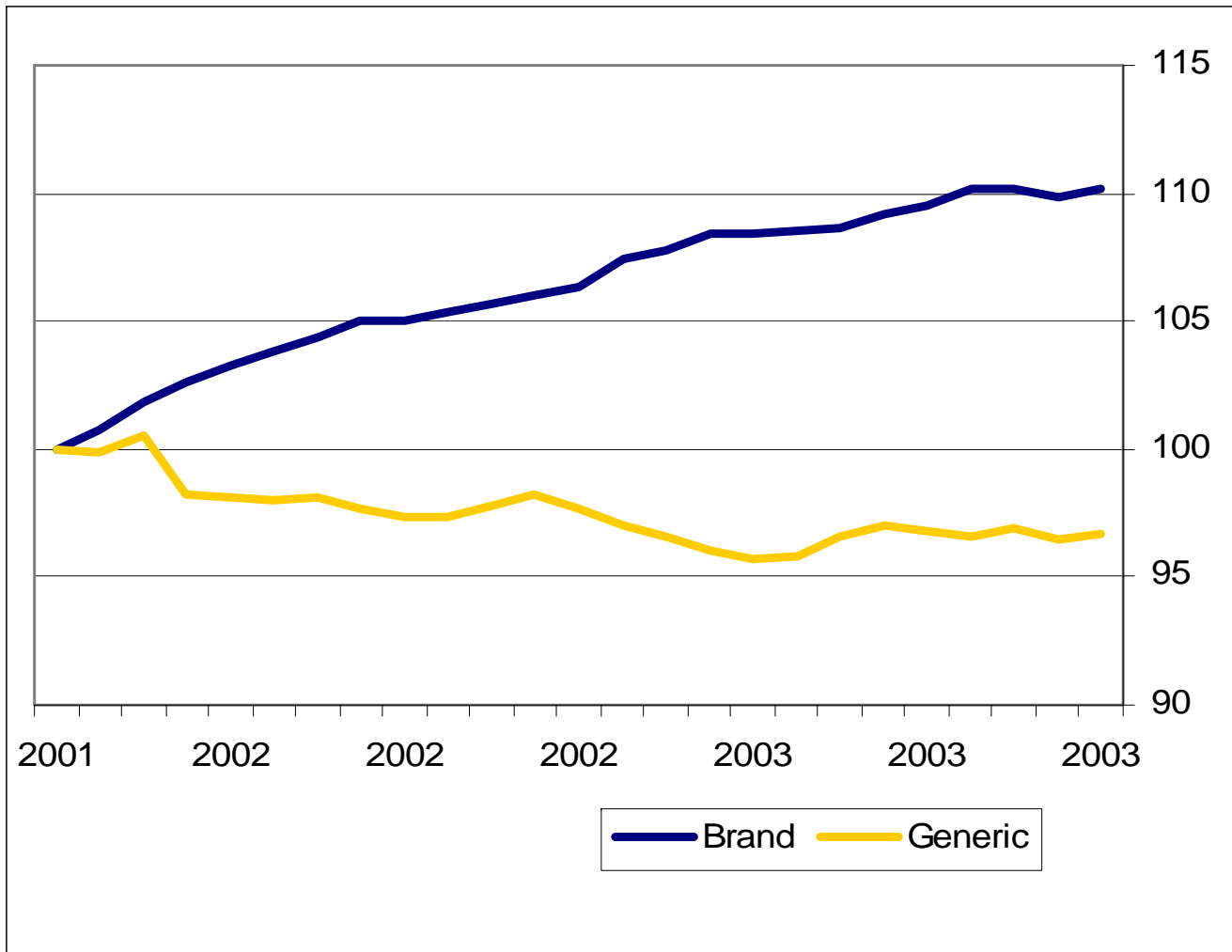
CAGR, 2001-2003

NDC	6.0
Molecule	4.7
BLS	4.0
<u>BLS (w/o OTC)</u>	<u>4.7</u>

PHARMetrics only covers the insured population and OTC switches drop out of sample



CPI for Brand and Generic drugs, Dec 2001 to Dec 2003



Percent change

Generic 10.2

Brand -3.2

25% of sample are generic drugs (and 9% of weighted sample using prices as weights)

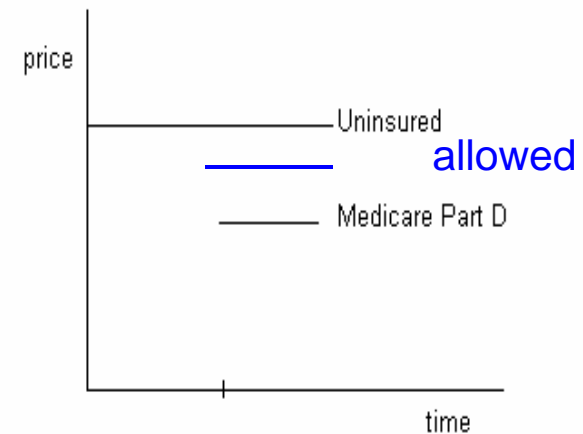
Less than 5% of the drug sample are drugs for which we price both the Brand and Generic forms



Treatment of Insurance Coverage by BLS

Example: Uninsured seniors switch to Medicare Part D coverage in January 2006 and begin to pay lower prices

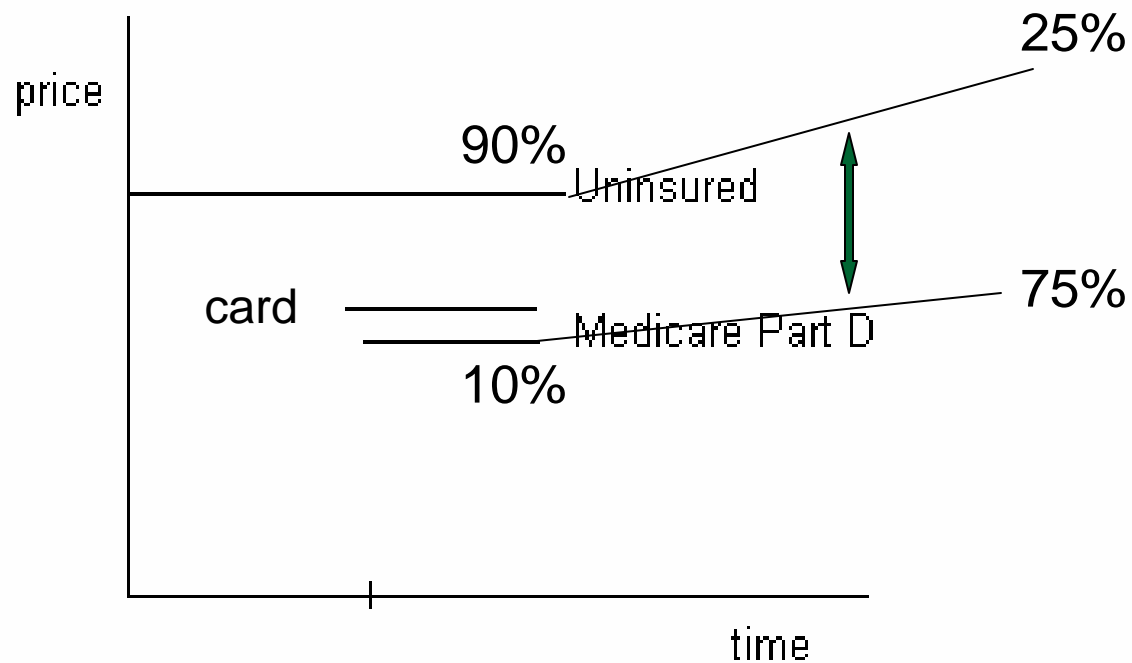
- As seniors switch, nominal expenditures fall
 - **Uninsured seniors who switch to Medicare Part D will pay lower out-of-pocket prices, the effect on allowed prices is not clear**
 - **Total expenditures could increase if seniors were not purchasing drugs while uninsured**
- Usual price index shows no price change
 - **The assumption is that different insurance coverage implies a different commodity**
- Real expenditures fall even if quantities did not



CPI Full Medicare benefit - Medicare Part D

- Only a potential price change for existing sample of Medicare discount cards
 - Potential price moves
 - Could be a chance the “undiscounted” price will be higher than card discount, especially since the price we collect is the insurance portion **and** the patient copay portion.
 - Methodologically the CPI could be recording price **increases** for these Medicare card to Part D switches whereas the real Medicare population will be experiencing *out of pocket* price **decreases**.
 - Otherwise full Part D observations eligible to rotate in w/ January 2006 TPOPS and Item Rotation like normal

Treatment of Insurance Coverage by BLS



Next Steps

- Continue to work with BEA to evaluate episode methodology
- Evaluate Kaiser Health Insurance Data and the MEPS data
- Evaluate Medicare D and current drug card sample
- Continue frequent conversations with CMS