



Comparative Effectiveness Research Seminar Series



The 30% Solution? Challenging an Underlying Assumption of the ACA : Implications for successful Health Care reform

Richard S. Baker, MD
Executive Director, Center for Health Services Research
Chairman, Department of Ophthalmology
Charles R. Drew University of Medicine and Science
March 18 , 2014

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



The Enemy of Truth



- “What is needed today is a new , difficult but essential confrontation with reality
- - for the enemy of truth is very often not the lie- deliberate , contrived and dishonest
- -but the myth – persistent, persuasive and unrealistic”

John F. Kennedy

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Overview



- **Dartmouth Atlas : Evolution of the 30% solution**
- **Selling the 30% solution : Conversion to National Health Care Policy**
- **Challenges to the Underlying Assumption**
- **An Alternative Assumption : the Affluence Poverty Nexus**
- **Implications of ignoring the Alternative Assumption**

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)

EVOLUTION OF 30% SOLUTION

UCLA Center for Maximizing Outcomes and
Research on effectiveness (C-MORE)



Dartmouth Atlas Health Care



- Study of Medicare FFS spending (end of life care) across 306 hospital referral regions (HRR) in 1996
 - Effective care
 - Preference sensitive care
 - Supply sensitive care
- Greater than two fold difference across HRRs not due to differences in price of medical service or differences in average illness or SES (Miami \$8,414 versus Minneapolis \$3,341 per capita)
- Primarily attributed to physician overuse of “supply sensitive” specialty services

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Dartmouth Atlas Health Care



- Implications of Regional Variations in Medicare spending Part 1
 - Quality of care in higher spending regions no better on most measures and was worse for several preventive care measures
 - Access to care in higher spending regions was also no better or worse
- Implications of regional Variations in Medicare Spending Part 2
 - Medicare enrollees in higher spending regions receive more care than those in lower spending regions but do not have better health outcomes or satisfaction with care

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Evolution of 30% solution



■ Dartmouth group Conclusions

- Medicare spending varies more than two fold between regions
- Variations attributable to physician overuse of “supply sensitive” specialty services
- Nation already has enough physicians
- As much as 30% of health care spending is unnecessary

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Evolution of 30% solution



■ Remedies to Geographic Variation

- Fewer specialist and more primary care physicians
- Less fee for service and more managed care
- Less physician autonomy and more regulation
- More direct patient involvement in shared decision-making

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)

SELLING THE 30% SOLUTION

Conversion to National Healthcare
Reform Policy

UCLA Center for Maximizing Outcomes and
Research on effectiveness (C-MORE)



Why so Influential ?



- Right time , right timing and right type of message
- “Zombie” idea [Robert Evan]
 - Ideas that are neat and plausible
 - Ideas that strongly resonate in the popular imagination (and reinforce strongly held beliefs)
 - Because of above characteristics these ideas can move rapidly forward despite incomplete substantiation (and have great potential to be dangerously misleading)

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Why so Influential ?



- **Compelling notion that specialist are the cause of excess health care spending and that 30% could be readily saved**
 - Provided easy answer to the complex question of health care spending
 - Offered an avenue to controlling a specialty dominated health care system
 - Continuation of a belief that has been introduced and reintroduced for over a century
- **Appealed to a broad range of constituencies (medicine, economics, politics, public policy)**

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Timeline



- **1999 Dartmouth Atlas**
- **2002-2003 Dartmouth Thesis (three paper set – 30% solution)**
- **2003 MEDPAC brings 30% solution to Congress**
- **2005 Paul Krugman introduces to public (New York review of books)**
- **2007 Shannon Brownlee /New America “Overtreated” economic book of the year / Atlantic/ New York times**
- **2007 Obama Campaign**
- **2008 Peter Orzag Congressional budget Office \$600 billion**
- **2008 TOM Daschal, Max Baucus \$700 billion**

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)

CHALLENGES TO THE UNDERLYING ASSUMPTION

UCLA Center for Maximizing Outcomes and
Research on effectiveness (C-MORE)



Methodological Pitfalls



- **Unexplained Variation**
 - All unexplained attributed to practice variation
 - Inherent imprecision in measuring covariates (illness)

- **Adjusting for race and poverty**
 - “race has no impact” ???
 - Income poor proxy for wealth /past economic circumstance for seniors
 - Poor specification contributes to unexplained variation

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Methodological Pitfalls



- Medicare as the source of data
 - Medicare expenditures per enrollee poorly correlated with total spending per capita
 - Regions and ranking differ significantly for non Medicare revenues

- Differential status Medicare beneficiary
 - Employer coverage to Medicare
 - Disabled (and younger)
 - Uninsured/Medicaid to Medicare

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Methodological Pitfalls



- Employing death as an outcome (last 6 to 24 mos)
 - “focused only on patients who died so we could be sure that all patients were similarly ill”
 - More is More Alternate models (Ong et al, Bach et al, Silber et al etc.) consistently showed positive relationship between resource use and outcomes

- Quintiles Model
 - quintile based upon average Medicare spending
 - Extremely heterogeneous, geographically dispersed

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)

AN ALTERNATIVE ASSUMPTION

The Affluence – Poverty Nexus

UCLA Center for Maximizing Outcomes and
Research on effectiveness (C-MORE)



Affluence Poverty Nexus State Level Analyses



- More = More
- More total spending (more clinical resources) correlates with better access to care, better quality of care, better attainment of process benchmarks
- Strong relationship between per capita income, healthcare spending, size of healthcare labor force and per capita physicians
- Wealthier states display other measures of economic advantage (better social determinants), lower poverty, less uninsured, larger investment in public services

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Affluence Poverty Nexus State Level Analyses



- More = Less?
- Confining state analyses to Medicare expenditures produces misleading results
- Many Southern states display high per capita Medicare expenditures but Total Healthcare expenditures are low
- Use of per capita Medicare expenditures instead of Total expenditures for these states provides anomalous results and a reverse relationship (high expenditures poor outcomes)

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Affluence Poverty Nexus Zip code Level Analyses



- Steep, inverse relationship between household income and hospital utilization (high rates readmission, ASCH ,and increased LOS)
- Relationship strongest among working age adults
 - Income proxy for personal wealth/residence reflects past economic circumstance
 - Supported by MEPS data and consistent with host of studies
 - Demonstrated 50 – 100% increased utilization in lowest income group compared to highest in both U.S. and other developed countries
- Seniors (Medicare group) display much weaker relationship between household income and healthcare utilization
 - Income and residence poor proxy for current wealth and prior economic circumstance

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Affluence Poverty Nexus Zip code Level Analyses



- Cooper et al performed a zip code level analysis on two high utilizing HRRs to identify the influence of poverty and urbanization on the geographic variation reported by the Dartmouth
- Utilization rates were 3 times higher in poorest zip code deciles compared to wealthiest deciles
- Difference between high utilizing HRRs and other HRRs was due to the presence of a “poverty core” (greater proportion and increased density of low income zip codes)

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Affluence Poverty Nexus Zip code Level Analyses



- HRRs demonstrated little variation in utilization between HRRs when high income zip codes were compared
- HRRs demonstrated significant variation in healthcare utilization between HRRs when low income zip codes were compared
- Zip code analyses were statistically stronger and demonstrated greater impact for working age adults versus seniors
- If high income zip code utilization rates were replicated in other zip codes than health care utilization would be 35% less among working age adults, 20% less among seniors and 30% less overall

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



Affluence Poverty Nexus Zip code Level Analyses



- Based on these analyses ,Total health Care spending/utilization would be expected to be highest in urban centers with dense poverty ghettos (such as New York, Philadelphia, Chicago, Los Angeles)
- Total health care spending would be expected to be lowest in smaller communities where poverty is less frequent and less concentrated (e.g. Rochester Minnesota, Lebanon New Hampshire)
- Much of the unexplained variation observed in Dartmouth group analyses simply reflects the inability to adequately measure the contribution of low income to healthcare utilization in the Medicare population even at the zip code level and especially at the level of an HRR

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)

IMPLICATIONS AND POTENTIAL CONSEQUENCES OF IGNORING THE ALTERNATIVE ASSUMPTION

UCLA Center for Maximizing Outcomes and
Research on effectiveness (C-MORE)



CONSIDERATIONS



- The 30% solution provides the underlying assumptions and is the basis for current national policy related to health care reform
- Currently it appears that even if assumptions related to root cause of geographic variations in healthcare spending are correct initially projected savings and efficiencies were overestimated

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



CONSIDERATIONS



- Although underlying assumptions are consistent with strongly held beliefs and resonate across multiple constituencies, several methodological challenges raise questions relative to confirmation of the validity and interpretation of results
- Blindly continuing current reform policies without clear validation could waste resources or even exacerbate issues that reform is meant to address

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



CONSIDERATIONS



- Alternative hypotheses exist relative to the root causes of geographic variation (Affluence Poverty Nexus) that would indicate a different focus and a different set of strategies to achieve successful reform
- Ignoring the possibility of an alternative root cause for geographic variation of resource utilization could undermine the ability to enact true reform

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



The Enemy of Truth



- “What is needed today is a new , difficult but essential confrontation with reality
- - for the enemy of truth is very often not the lie-deliberate , contrived and dishonest
- -but the myth – persistent, persuasive and unrealistic”

John F. Kennedy

UCLA Center for Maximizing Outcomes and Research on effectiveness (C-MORE)



TAKE HOME



- Clear indication that poverty may be a major determinant of geographic variation in health care resource expenditure
- Elimination of poverty is not considered a politically or financially viable solution for health equity or health care reform
- The ability to identify mediating factors amenable to targeted interventions remains an option if we choose to address reality rather than rely upon the comfort of myths and strongly held beliefs

