



Future- Search Seminar

Studying Case-Mix

Conceptual Context :

The 'Algebra of Effectiveness'.

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Institute for Healthcare Quality.



**Directors
Forum**

**Diagnosis Related Groups [DRGs]:
Opportunities for Indian Healthcare.**

20th Oct 2017, Taj Lands End, Mumbai.

Disease Informatics

Disease:

Ancient /Modern/Post-modern.

Informatics:

Technology/Terminology/Ontology.



Classification as Science.

Coding Care.

Validation, Standardization,
Generalization, Stratification.

Comparing Apples:
Patient Differences and
Group Homogeneity.



Validation of Healthcare

Health: Individual / Population.

Health and Healthcare

The **Analytical Approach:**

Means-Ends.

Data- Driven.



Analysis of Purpose

Product of the Hospital:
Heterogeneity.

Health-Care: Sociology.

Ecology of Care.

Basic Question:

‘Who receives What from Whom
at What Cost with What Effect’



Value Chain

a. Providers:

Understand how well the system is working.

b. Payers:

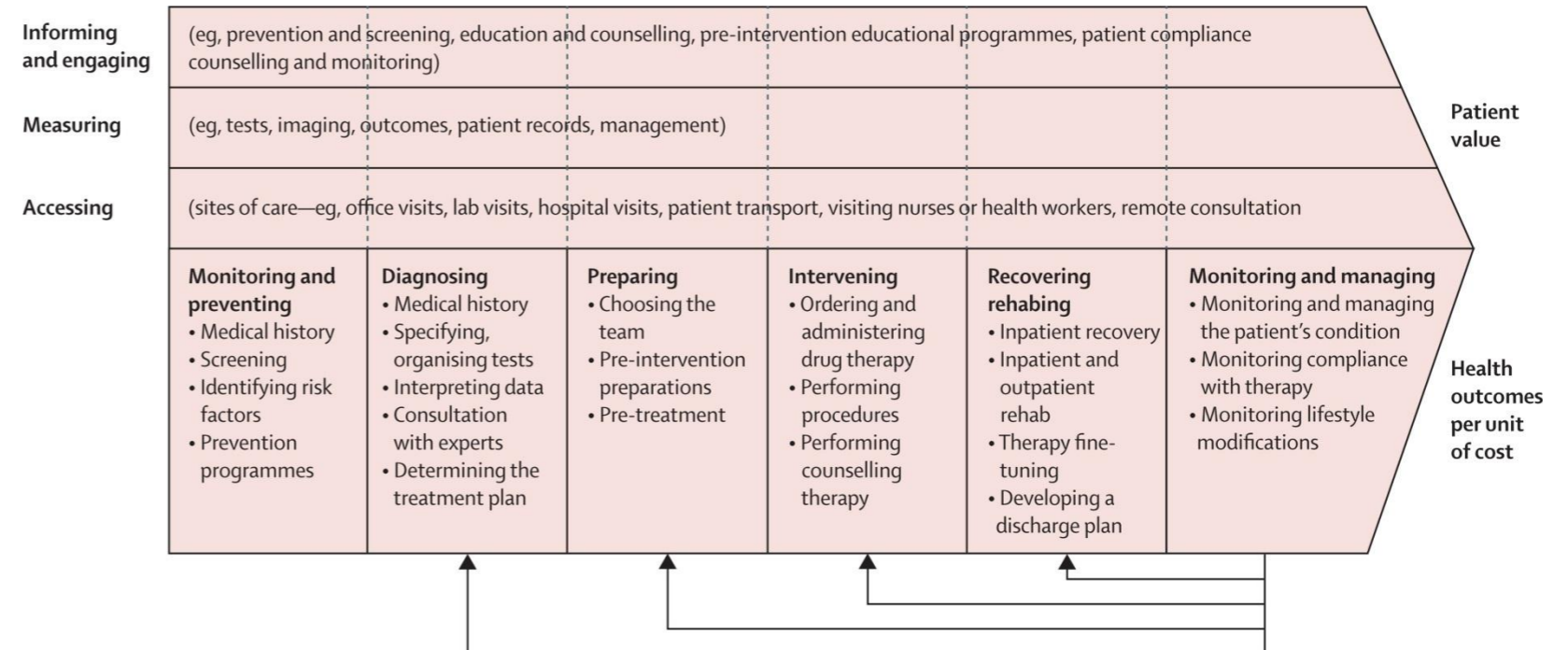
What they are paying for.

c. Public:

The appropriateness of care and transparency of cost.

d. Manufacturers:

Where future needs and opportunities lie.



Purpose of Analysis

What is Risk ? / Risk of What?

Prediction: Immediate vs Long Term.

Case-Mix Adjustment / Risk
Adjustment / Severity Adjustment.

Bottom Line:

‘Medical Meaningfulness’





Actionable Data.

Case-Mix as 'Information Innovation'

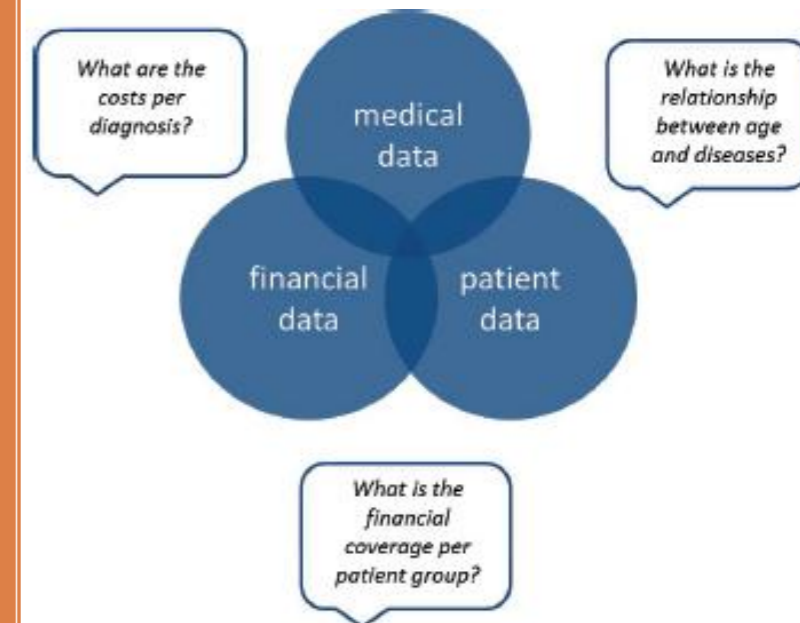
Case-Mix: New 'Type' of Information.

Reduce 'Analytical Burden': # of groups.

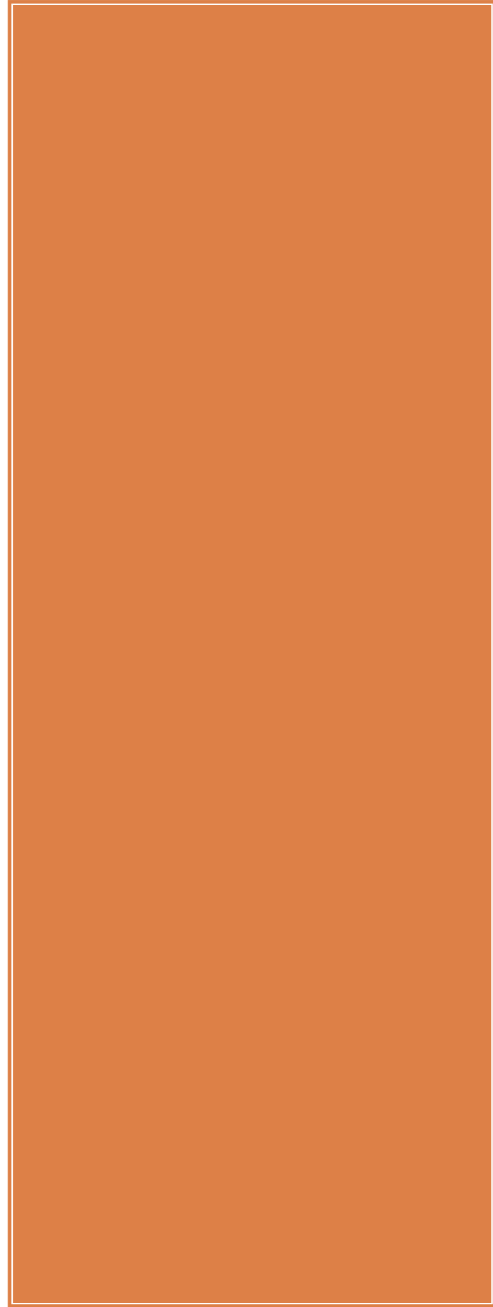
Reduce 'Action Thresholds'.

Data Value- Chain:

Data-Information-Knowledge-Action.



End Result System



Quality as a Theory of Practice

Structure-Process-Outcome.

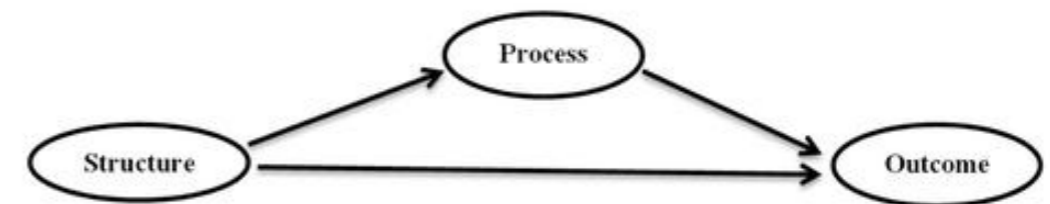
Input-Output model.

Relation between Structure
and Outcomes.

Relation between Process and
Outcomes.



A Unidirectional path



B Mediation path



C Non-recursive (reciprocal) path



Care 'Bill of Materials'

Flow : Lean/ Six -Sigma/
Optimization.

Activity- Based Analysis and Patient
Level Data.

Patient 'Burden of illness'.

Episode Definition: " 'Business' Rules"

Data – Dictionaries and Data Quality.



Volume to Value

Caring about 'Cost' and 'Efficiency'.

Cost Behavior of Healthcare Organizations:
Retrospective Payment vs. Prospective Payment.

Accounting and Accountability.

Transparency is precondition for Accountability.

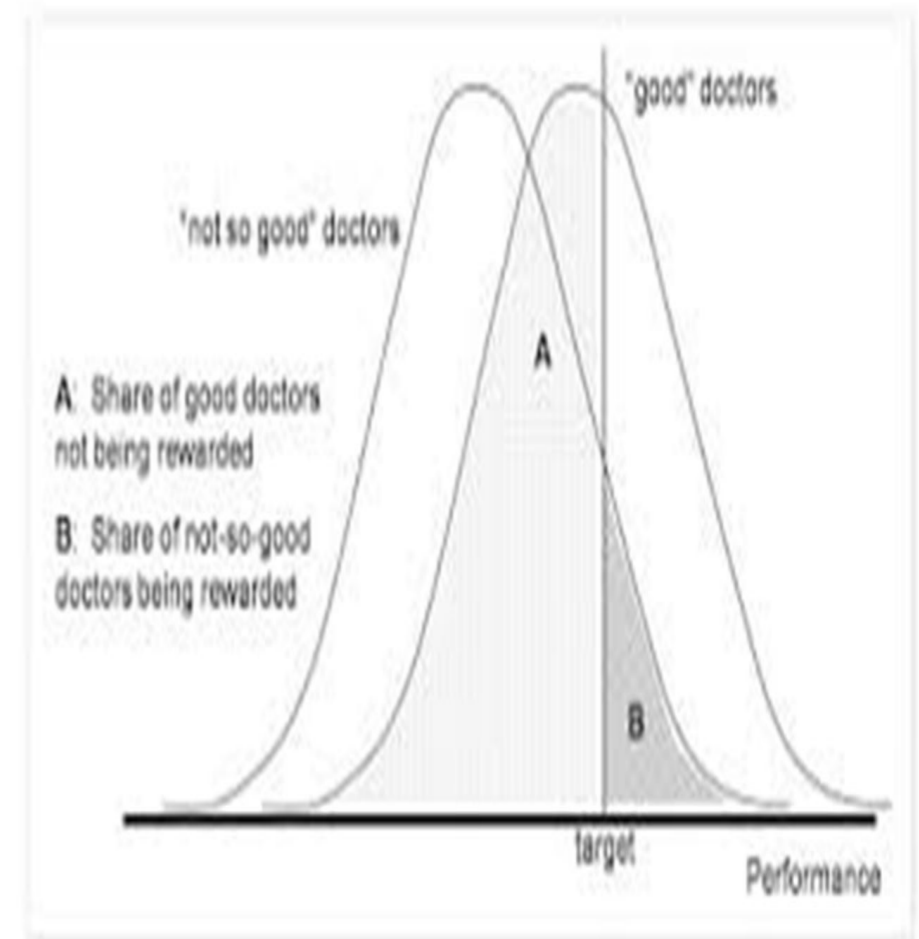


Deming's Prescription: Tools not Rules

Common Currency : **Variation.**

Risk/Cost/Flow/Quality in
the Language of Data.

New Economics



Value of 'Value'

$$\text{Value} = \text{Quality} / \text{Cost}$$



Goals Era: Accountability for Improvement.

Processual Agenda:
Co-operation of Professions.

Re-defining the
'Purpose of Healthcare'.

Triple Aim:

Quality- Cost -Health.

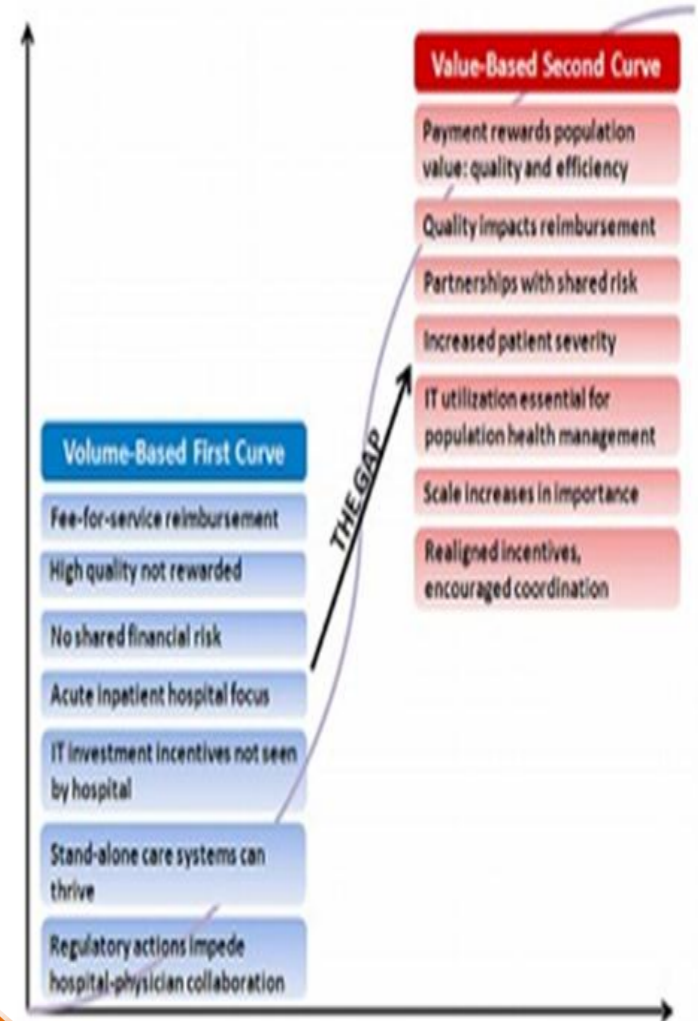


Goals Era: Improvement of Accountability.

Structuralist Agenda:
Competition on Outcomes.

Re-defining the
'Nature of Healthcare'.

Value Based Health Care
Value Based Hospital.



End Result System: 100 years



We will campaign for recognition of Case-Mix Methodologies by **2020 Budget, GOI.**





Be the Change You want to See : See the Change You want to Be.

PLATFORMS FOR CHANGE :

Platform No 1: **Process to Outcomes.**

Platform No 2: **Individual to Population.**

Platform No 3: **Fee- for- Service to Prospective Payment.**

Platform No 4: **'What is the Matter with You' to 'What Matters to You.'**Ms.Bisognano.

Platform No 5: **'What can I do for You' to ' What can I be a part of '.** Don Berwick

