.   ,
                         .
            (   )

5. From the employees point of view here are the three things that they are spending on their health care:

   A. The Premium (i.e the payroll deductions)

   B. The Deductible.

   C Total expense towards Co-Pay.

Please note that the above has to be interpreted in AGGREGATE. I may never get sick and just pay the premium while someone else might reach the Out of Pocket Maximum. Since ours is a self insured plan so in AGGREGATE the EMPLOYEES should pay 18% and in AGGREGATE the UNIVERSITY should pay 82%. *The employees share should include the PREMIUM they pay. I am getting the impression that the Premiums (i.e the pay-roll deductions) are not taken into account in determining employees share of the cost.*

6. I am attaching two files. The first one is called Suggested_Health_Care_Plan_for_UAA_Draft_1.pdf   This is a suggested health care plan for sharing the health care cost in AGGREGATE between the University and the employees. The second one is a mathematical model and is not essential to the discussion. It is called Model of Health Care Plan_Note 1.pdf   This model just establishes that in a self insured system with splitting of costs the Premium (i.e the payroll deductions) will be zero. It is included here for completeness.

7. Whenever I have talked about my proposed plan, I have had two queries.

   A: Who is going to fund the initial fluctuation reserve?

   B. I am healthy and I take care of myself. Why should I pay for someone not responsible enough to take care of his/her health?

Regarding the first concern, the fluctuation reserve can be a budget item with an authorization limit of sJ ET Q/F2.0 1 Wthorizaessn ao72 408(e)3nc (Re)0.2 (e) 0 0.2 (nt) 0.2 (i) 0 (e) 0.2 (rve) 0 0 Tm /F bu

Recently Time had published an article called "Bitter Pill: Why Medical Bills Are Killing Us" by
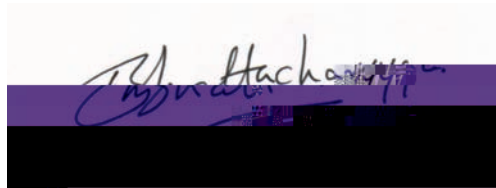
September 6, 2012

A Suggested Health Care Plan for the UA System- Note 1
Preliminary and Incomplete. Do not cite without permission

1. **Broad Features of the Suggested Plan**

   (a) There shall be one plan for all employees of the University.

   (b) In the first year of the proposed plan (Year 1), the University will establish a *Fluctuation Reserve F* of say $5 Million. This amount is stated just for ease of exposition. The exact amount of this reserve shall be determined after due deliberation and will be subject to revision.

   (c) In the First year of the Insurance Plan the features will be as below.

   - Premium = 0
   - Deductible = 0
   - Co pay = 20% will be paid by Employees and 80% by the University.
   - Out of Pocket Maximum = *M.* Say $ 11000. (I have arrived at this figure by adding the current figures for Family Deductible and Family Out of Pocket Maximum under the HDHP plan.)

   (d) In the first year whatever health care costs are not recovered through Co-pays will be paid out of the *Fluctuation Reserve*. From the second 11.9N1(Deduc21g((d))-50(th)-250(t)-250(will)

3. **Other Comments.** Employees will be required to give one year's notice in order to opt out of the program. This is required so that employees cannot take advantage of the zero premium in the first year and quit the plan in the second year. Exceptions to this policy shall be made in the event of the death or retirement of the employee or the termination of the employment relationship.

With best wishes

Nalinaksha Bhattacharyya
        PhD(Calcutta), PhD(UBC), CGA
Professor
College of Business and Public Policy
University of Alaska Anchorage

UNIVE

May 22, 2012

A Model for Designing a Health Care Plan for the UA System- Note 1
Preliminary and Incomplete. Do not cite without permission

1. **Notations**

   P   Per Capita Premium
   d   Per Capita Deductible
   M   Per Capita Out of Pocket Maximum Cost.
   $\tilde{x}$ Per Capita Health Care Cost- A continuous random variable over a support of 0 and ¥.
   $f(\tilde{x})$ Probability density function for $\tilde{x}$.
   ϕ Co-Pay percentage.

2. **The Principle.** The model is based upon the principle that UA is a self insured system. Therefore the total *expected* payment should be equal to the *Expected Health Care Cost Per Capita* or *E*

$$P + \int_0^d x\,f(x)\,dx + \phi \int_d^M x\,f(x)\,dx + (1 \quad \phi) \int_d^M x\,f(x)\,dx + \int_M^¥ x\,f(x)\,dx = E(\bar{x})$$

$$P + \int_0^d x\,f(x)\,dx + \int_d^M x\,f(x)\,dx + \int_M^¥ x\,f(x)\,dx = E(\bar{x})$$

$$P + \int_0^¥ x\,f(x)\,dx = E(\bar{x})$$

$P + E(\bar{x}) = E(\bar{x})$ because $E(\bar{x}) = \int_0^¥ x\,f(x)\,dx$ by definition of the Expectation operator.

$$P = 0$$

4. **The Implication**