

# Optimal Outcome

Person with worst acne at the far left is person 1, Beauty= $B_1=0$

Person with no acne at the far right is person N, Beauty= $B_N=1$

Greatest possible beauty is 1

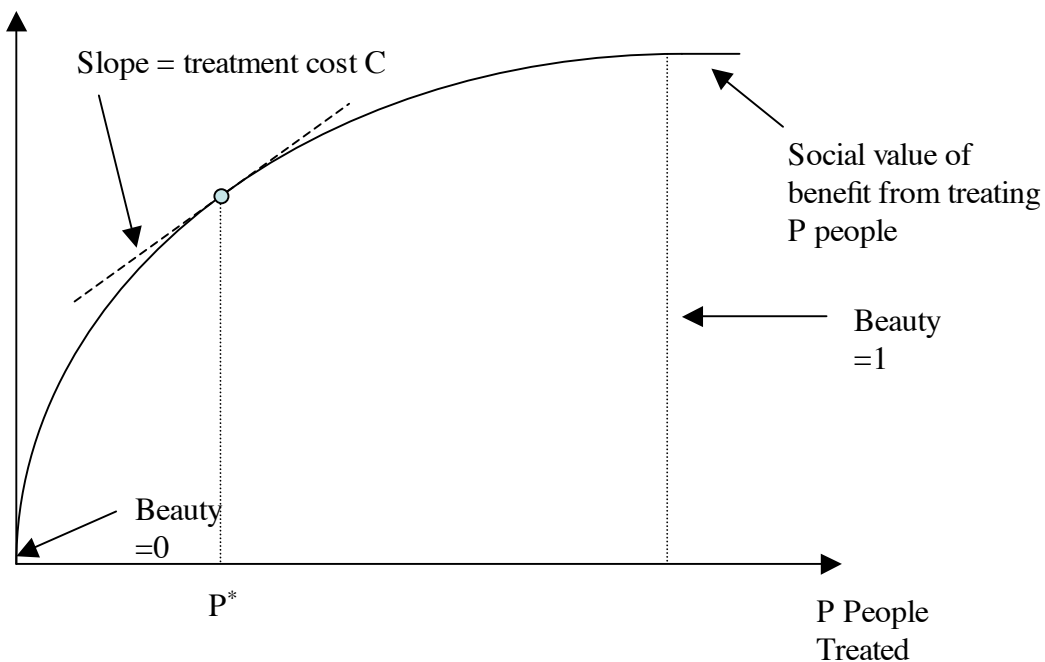
Improvement in beauty from acne treatment for person  $i$  is  $(1-B_i)$

Value of beauty, per unit, is  $V$

Value of *improvement* in beauty from treatment is  $\$M_i=(1-B_i)*V$

Social value of treating first two people is  $\$M_1+\$M_2$

Social optimum: treat everyone left of  $P^*$ , because for these people  $\$M_i = V*(1-B_i) > C$ , and treat nobody to right of  $P^*$ , for whom  $\$M_i < C$



# Health Care Provision Under Complete Insurance

If you have medical insurance that pays the full cost of treatment and charges you nothing, everybody who gets even the slightest positive value for the treatment will take it, no matter how expensive it is. Number of people treated will be  $\underline{P} \gg P^*$  but from a social point of view the treatments are not worth the cost for people between  $P^*$  and  $\underline{P}$ .

