Okay, thanks Pat. I actually would have gladly ceded my time to the other two speakers, because these are terrific presentations. I'm just going to try quickly to endorse, and perhaps augment to some extent, some of the good points that have been made so far.

The topic is Work Site Health Promotion and Disease Prevention – I should clarify that would, in my mind, also include injury prevention.
The Goal: Efficiency

• The goal, from an economics perspective, is consumption of an efficient level of worksite health promotion and disease prevention (HPDP) programs.
• The efficient level equates the marginal benefit of the next increment of the programs to the marginal cost.
• It is possible to have too much of a good thing.

I’m going to speak to this topic from the perspective of an economist, so I just want to get the “truth in advertising” out up front.

There are, of course, a lot of other perspectives that can be brought to the problem, but the goal (I think) from an economics perspective, is to find the efficient level of consumption of worksite health promotion and disease prevention programs, and that is the level at which we equate the marginal benefit of the next increment of health promotion and disease prevention programs with the marginal cost.

They don’t call economics “the dismal science” for nothing, and so it’s always important for economists to remind a general audience that is actually possible to have too much of a good thing. That is, to consume beyond the point at which the marginal benefits are equal to the marginal cost.
The Problem

• Matching the beneficiaries and the payers
• Who benefits from successful worksite health promotion and disease prevention program?
  – Employees
  – Employers
  – Health plans

There are some problems that we run into here, and that is when we’re trying to match benefits and costs. We kind of have to figure out who benefits and who pays, and then get the beneficiaries and the payers matched up.

And so, who benefits from successful work site health promotion and disease prevention programs? Well, as Nico told us earlier, it’s employers, employees, and health plans.
A topic that I would like to introduce here for your consideration is, what is the proper way to think about these programs? Should we think about them as investments, or should we think about them as benefits? And when I say benefits, I mean employee benefits like life insurance or health insurance or vacation pay or sabbaticals, or something like that?

In the broad, real world, there’s basically two kinds of investments that pay for themselves – that is, those that have a positive return on investment and those that don’t. In a perfect world, what we would expect is that the consumption of the former – that is, investments that have a positive ROI – the market will find the efficient level of consumption for those types of investments. The latter, however – that is, investments that don’t have a positive ROI – that’s sort of my operational definition of a benefit. In other words, that’s something that the employer can provide that the employees value, but that doesn’t have a positive return on investment for the employer.
Investment or Benefit?

• Are worksite HPDP programs an investment or a benefit?
• Two kinds of investment:
  – Those that pay for themselves (positive ROI)
  – Those that don’t
• In a perfect world, the consumption of the former will be efficient, and the latter will be benefits that must be considered in the context of total compensation
• But the world isn’t perfect.

So, for the benefit part of these activities, we really have to think about that in the context of a constraint on total compensation that we pay employees. But here’s a news flash… the world isn’t perfect, and so a lot of things get in the way of even the first example.
Barriers to Efficient Investment

- **Employee / Enrollee turnover**
  The individual may have left the firm or the health plan before the long-term benefits of HPDP program accrue.

- **Collective action problems**
  The *total* marginal benefits exceed the benefits to any single entity, e.g., employee, employer or health plan (possibly related to turnover). Introduces externalities and free-rider problem.

And so, here are some of the barriers (I think) to efficient investment in health promotion and disease prevention programs.

One is turnover. That is, the individual in whom we would like to invest may have left the firm or left the health plan before the long-term benefits of these programs accrue. The second (and somewhat related) problem is that the total marginal benefits of these programs may exceed the benefits to any single entity. That is, we have to add up the benefits across these three people to get the total benefits. At that point, the benefits may exceed the cost, but that might not be true for any individual entity. In other words, it may be necessary to add up the benefits across the entities in order to get total benefits that exceed costs.

What happens when we have these multiple entities all kind of talking about the same product is that we have a potential for spillover benefits and costs that is externalities, or some type of a free-rider problem.
Barriers to Efficient Investment

We need a careful accounting of:

• The benefits or willingness to pay (magnitude and timeline) that accrue to employees, employers and health plans; and

• The extent and timing of turnover.

And so I think what we need (and heard from several speakers this morning) is – we really need a very careful accounting of the benefits – or, that is, willingness to pay for these programs. That includes not just the magnitude of the benefits, but the timeline over which they accrue. Then we also need very good data on the extent and timing of turnover, which is, of course, going to be quite different in different kinds of industries.
Now this is a bald-faced assumption, or assertion, on my part, and that is that I am – the employee is – the main beneficiary of successful health promotion and disease prevention programs. If we’re talking about avoiding painful illness or untimely death, it just seems difficult for me to believe that my health plan or my employer is a bigger beneficiary of those activities than I am. The good news on that is that the benefits to me are 100 percent portable. I take them with me wherever I go. And so the turnover problem isn’t something we have to worry about – at least in my case.

The question, though, is how can we overcome this turnover problem, from the health plan and the employer perspective? About 22 years ago, I published an article in (I’m ashamed to admit it) “Inquiry” suggesting that perhaps there might be some kind of a certification process to help improve the portability of the benefits that accrue to the individual. And all I mean by that is, some way for me to take demonstrable and widely accepted proof with me that I am doing or engaging in whatever behavior, or have done whatever behavior it is that’s associated with putting me in a lower risk category.
Possible Approaches to Collective Action Problems

• Benefits from HPDP programs have some aspects of a “public good.” (Once provided, no entity can be excluded from enjoying the benefits of HPDP program, and one entity’s consumption doesn’t affect consumption by other entities).
• Private sector is unlikely to provide optimal level of HPDP programs.
• Consider price subsidy financed by corporate or premium tax to supplement employee contribution.

Beyond that, I think some of these benefits that accrue from my taking reasonable action to take care of myself have some aspects of what economists would call “a public good.” Now, public goods, in the economic context, don’t mean just good things that the public sector does. They actually have a technical definition and there are two characteristics of a public good. The first one is that, once the good is provided, you can’t keep anyone from consuming it; and the second is, my consumption of it doesn’t affect your consumption of it. The classic textbook example is defense against incoming ballistic missiles. But what we’re talking about here is the economic benefits that accrue to both the health plan and the employer from me engaging in health promoting behaviors.

What we know from the economic literature is that when we have these externalities or public good aspects of any commodity, it’s unlikely that the private sector alone will be able to provide the optimal level of that commodity.
Possible Approaches to Collective Action Problems

- Benefits from HPDP programs have some aspects of a “public good.” (Once provided, no entity can be excluded from enjoying the benefits of HPDP program, and one entity’s consumption doesn’t affect consumption by other entities).
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And so what I’d like to offer for your consideration – and actually, I think we’re already doing this to some extent – is that it might be necessary to structure some kind of a price subsidy to get the optimal level of investment in these activities. And because the other beneficiaries besides me are my health plan and my employer, then something that naturally comes to mind as a source of revenue for these needed price subsidies might be the corporate or premium taxes.
Here’s a diagram that shows the problem. The lower downward sloping line is my benefits – that’s the individual employee’s benefits – and you see the marginal cost line. If left to my own devices, I will consume this private level of health promotion and disease prevention programs. However, because there are other benefits accruing to other people besides me, the efficient level would be further out. It would be more quantity of these programs. But acting on my own incentives, I consume at the lower level.

And so the way that economists think about fixing that is with some kind of a price subsidy – that I still respond to my own private demand curve, but the price has been altered so that I shift out to the socially efficient level of consumption.
Okay. So that’s kind of that part of the investment decision and some things that can go wrong with it. Now let’s turn to this notion that health promotion and disease prevention programs might just simply be a benefit like life insurance or vacation. And so if that’s the case, how would economists think about that? Well, the way they think about it is, there’s a total compensation level that’s determined by two constraints. One is a competitive market for labor. That’s what keeps my employer from paying me too little. It’s the threat that I’ll go to work for a competitor. The other constraint on the total compensation is the competitive market for whatever it is the firm is selling. That’s what prevents my employer from paying me too much.
Determinants of Total Compensation

Competitive market level of total hourly compensation
= employee’s marginal revenue product
= effect of an additional hour of labor on the production of output times the price of a unit of output in the market

So if expenditures on benefits go up, taxable wages go down, e.g., the costs of “benefits” are borne by employees

So it’s these two balancing forces that determine my total compensation. The way that economists say that is that my competitive wage is determined by my marginal revenue product – well, it sounds very technical, but as in most of economics it’s a very simple idea – it’s the effect of me spending one more hour doing my job times the price of whatever it is I’m contributing toward the production of.

The point of this is, if expenditures on benefits go up – we’ve laid aside the investment model, we’re talking about just a pure benefit, now – if expenditures on benefits go up, then my taxable wages are going to go down. That is, the cost of these benefits – if they are to be thought of correctly as benefits – are really born by employees, not employers.
Factors that could change the optimal level of HPDP

- If HPDP programs have a fixed effect on utilization of health care services, and the cost of those services is rising more rapidly than the cost of HPDP programs, the demand for HPDP programs by health plans and employees – to the extent that the cost of care is paid out of pocket – will increase.

And so, what are the factors that are at work in the market today that could change this optimal level of health promotion and disease prevention programs?

I think there are a couple things to think about. Suppose that health promotion and disease prevention programs have what I could call “a fixed effect” on the utilization of services? That is, suppose if I go to one more weight loss class, it prevents two physician office visits? That’s what I mean by “a fixed effect.”

If that’s true and the cost of the physician office visits is going up faster than the cost of the weight loss program that I would be attending, then that will increase my demand and the demand by health plans who also benefit from the decreased utilization that I would enjoy from going to the weight loss program – will increase demand by those two entities for health promotion and disease prevention programs up to the point that the marginal benefits are once again equal to the marginal costs.
Factors that could change the optimal level of HPDP

If health insurance is a fixed cost per employee, then rising health insurance costs will create demand for greater employee productivity. (We’re already seeing more hours per employee, and productivity increases have been astonishingly high). If HPDP can increase employee productivity, then both employers and employees will demand more.

Another factor – and this one is attributable to David Cutler at Harvard – he has suggested that one of the problems with rising health insurance costs is that health insurance may be sort of like a fixed cost per employee. And so a single-coverage policy might be $5,000 bucks. You hire an employee and you’re $5,000 bucks out of pocket right off the bat, and in that case, as health insurance increases faster than inflation, there is going to be an incentive for the employer to try and figure out ways to get more productivity out of the employee.

The interesting thing about that is that there have been, over the past couple of years, astonishing rates of productivity increase in the American working public. The Bureau of Labor statistics – let me just mention here that rates of 2.5 to 3 percent are considered fairly average rates of productivity increase. The Bureau of Labor statistics recently reported numbers as high as 10 percent for manufacturing and 9.3 percent in other non-farm business in a 3-month period in 2002. They were so high that they thought they had made a mistake when they first saw the numbers.
Factors that could change the optimal level of HPDP

If health insurance is a fixed cost per employee, then rising health insurance costs will create demand for greater employee productivity. (We’re already seeing more hours per employee, and productivity increases have been astonishingly high). If HPDP can increase employee productivity, then both employers and employees will demand more.

The reason that I’m interested in that, in general, is because I’m curious about what’s going to happen as health insurance premiums continue to go up in double digits, and the interesting thing is that if productivity could keep up at that level, the working public that is enjoying that productivity increase actually could absorb the double digit health care premium increases over a surprisingly long period of time. Unfortunately, I don’t think it’s the entire working public that is able to affect those productivity increases of the long run. If these health promotion and disease prevention programs can increase employee productivity, then both employers and employees will have an interest in demanding more of these types of activities.
Factors that could change the optimal level of HPDP

High deductible health plans may convert health insurance into a variable cost per employee, but as deductibles increase, the economic returns to HPDP for employees will increase, resulting in greater demand for HPDP program by employees.

There’s sort of a counter story to that – to David Cutler’s story – and that is the introduction of the high deductible, or what some people call the consumer directed health plans. We’re offered Definity at the University of Minnesota. The sort of interesting thing about the high deductible plans is that they may actually convert the health insurance benefit from a lump sum fixed cost, as David Cutler has talked about it, into a variable cost. All you have to do is expand the deductible. You may end up with the only catastrophic care, but you’ll still have health insurance, in a sense.

So if that’s the trend – if we’re going to more toward those high deductible plans – well, that also has some good news for health promotion and disease prevention programs as well, because then the economic return to me from avoiding health care utilization goes up because I’m paying more of the expense out of my pocket.
Factors that could change the optimal level of HPDP

High deductible health plans may convert health insurance into a variable cost per employee, but as deductibles increase, the economic returns to HPDP for employees will increase, resulting in greater demand for HPDP program by employees.

So to conclude, I guess I would say that even though economics may be the dismal science, one thing that economics tells us is that the darker the cloud, the greater the economic returns to finding the silver lining. And so I think that, in some of these trends that we’re seeing in health insurance and the workforce, there actually may be some surprisingly good news for the future of these programs at the workplace.