

# Choosing a Boston University Health Insurance Plan for 2016

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Alan Sager prepared this report at the request of the BUSPH Faculty Senate to help school employees choose between the two health insurance plans that the university is offering for 2016, and to provide background on changes in insurance options. As such, it is not an official document of, nor endorsed by, the school.

## **Introduction**

Open enrollment for BU's health insurance plans and other benefits for 2016 runs from 21 October to 18 November of 2015. This report aims to help inform your choice of health plans.

(Julie Appleby, writing in *Kaiser Health News*, calls this time of choosing a health insurance plan "open season."<sup>1</sup> Bad word choice. Open seasons are times when hunting wildlife is allowed.)

Several months ago, the BUSPH Faculty Senate asked me to summarize and analyze planned changes in Boston University's health insurance benefits for 2016<sup>2</sup> and also to discuss both the forces that motivated them and their possible effects.

This report reflects helpful comments from Les Boden, Sandy Bornstein, Mari-Lynn Drainoni, Rich Feely, Leonard Glantz, Nimet Gundogan, Jon Kingsdale, and Chris Paal. Any errors are my responsibility.

### **A. The Main Choices and Changes for 2016**

- ✓ One health insurance choice for 2016 is a preferred provider organization (PPO) plan. The other is a high-deductible health savings plan (HSP).
- ✓ The two cover the same services (though they pay for them in different ways).
- ✓ The two use the same network of caregivers (through Blue Cross's National PPO Network).
- ✓ The PPO has a much lower deductible, so it begins covering health costs sooner. The HSP's lower premium is associated with a much higher deductible, so patients pay more out-of-pocket (OOP) before insurance starts to help.
- ✓ As always, your dollar outlays for health care are the sum of premiums and OOPs you pay.
  - ➔ The 2016 PPO uses OOPs to cover a greater share of total outlays than the 2015 PPO.
  - ➔ If you can afford to use them, PPO's flexible savings account (FSA) and HSP's health savings account (HSA) allow you to pay OOPs with much cheaper before-tax dollars.
- ✓ The 2016 PPO plan will see much lower monthly premiums paid by families than in 2015.
  - ➔ But these are offset by the 2016 PPO plan's substantially higher out-of-pocket (OOP) payments for both deductibles and co-insurance than in 2015—
  - ➔ unless you seek care at Boston Medical Center (BMC), where total OOPs will be very low for most people.
- ✓ The 2016 HSP plan is unchanged from 2015. For most people, it calls for higher OOPs than does the 2016 PPO plan. Its premium remains lower than the PPO's.
- ✓ For simplicity, the PPO and HSP plans are compared only for families in this report. Comparisons for individual, couple, and adult-child coverage may yield somewhat different results. Please make those comparisons for the plans that fit your circumstances.<sup>3</sup>

### **B. Ways to Compare the Plans for 2016**

Which of the 2016 plans is better for you? That depends on your family's health, age, income/wealth, chance of using health care, attitudes toward financial risk, and other factors—and on how you weigh the factors that matter most to you. These factors and plan details are summarized in Exhibits 1 and 2. (Some readers prefer the two exhibits here; others prefer them to follow the details about PPO and HSP in Section C. So they appear in both places.)

Exhibit 1 compares the PPO and HSP on risk, attitudes, circumstances and other factors—

Do you use a lot of health care? Or use BMC caregivers? Do you prefer to pre-pay for more of your care through higher premiums? Will insurance that kicks in much sooner (through a small deductible) encourage you to use care when you need it? The PPO plan may be better for you.

Do you use little health care? Are you willing and able to save a substantial sum in your HSA? Or do you expect to use a lot of health services **and** several costly chronic-use meds? Will you use needed care even if you face high OOPs? The HSP plan may be better for you.

**Exhibit 1**

**Various factors bearing on health insurance plan choice for 2016**

	<b>PPO</b>	<b>HSP</b>
Flexible savings/Health savings account	University pays \$500 into your FSA if income under \$70K, \$250 if \$70-100K Maximum total FSA contribution = \$2,550 in 2015 (includes University \$s)	University pays \$1,000 into your HSA regardless of income. Maximum total contribution = \$6,650 in 2015 (includes University's \$1,000)
FSA/HSA mechanics	Are you likely to face OOP costs? Will you use your full FSA contribution? You forfeit any money not used by 15 March of following year.	Are you willing and able to allow your HSA contributions to accumulate, knowing you can use them only for health care expenses? (Pay income tax + 20% penalty if take out.)
Able/willing to contribute to FSA/HSA?	Can you afford to contribute to your FSA? Are you willing to lock up that money? Once you sign up, you're locked in to monthly payments for 1 year unless family jobs or other circumstances change.	Can you afford to contribute to your HSA? Are you willing to set aside those contributions? <b>NOTE-You can't contribute to an HSA if you are &gt;65 and enrolled in Medicare A</b>
Health status and predictable costs of care	If a family member has a costly illness <b>OR</b> takes costly long-term drugs, PPO may offer better financial protection by holding down OOP exposure. <b>BUT</b> if someone uses costly health services <b>AND</b> takes costly meds, PPO could mean higher OOPs in addition to its higher premium.	If your family members are generally younger and healthier, and no one is taking a costly long-term medication, the HSP may be financially advantageous to you, especially if you are able to fund your HSA and pay any OOP costs with cheaper pre-tax dollars.
Risk aversion	If you'd like to minimize financial worry the PPO plan offers better insurance coverage and less risk of high OOPs.	If you're healthy and OK with more financial risk or can afford to pay OOPs from savings, debt, or your HSA, the HSP may save.
Effects of OOPs on care-seeking	Will you seek needed health care, even knowing that you will face higher OOPs in the 2016 PPO than you did in the 2015 PPO—unless you use the BMC network?	If you switched to the HSP for 2016 from the HMO or PPO plan, would you seek needed health care, knowing that you will face substantially higher OOPs than in 2015?
Use low-OOP BMC?	Do you use BMC network or would you be willing to do so? <b>You'd pay little OOP.</b>	Not applicable
Attitude toward using health care	Are you fairly quick to use health care and don't want to change that? The PPO's lower OOPs might be better for you.	Are you slow to use health care and unlikely to change? The HSP's higher OOPs may matter less to you.
Do you know what care you need?	Advocates for higher OOPs say they will induce you to cut unneeded care. But it's hard to know what's needed. Are you clinically trained? Or do you have a clinically trained family member or friend—or access to a competent family doctor/NP/PA?	

Exhibit 2 compares the 2016 PPO and HSP plans financially on premiums and OOPs—

- The family-paid PPO premium, while much lower than in 2015, is 30% above the HSP premium.
- PPO's \$250 individual/\$500 family deductibles are 1/6 those of HSP's, so the PPO quickly helps to pay health care bills. HSP's high deductibles leave families financially exposed for longer.
- The PPO has 10% co-insurance (share of bill paid OOP after meeting deductible) for many services. This means much higher OOPs than in 2015, when there was no co-insurance.
- PPO has no co-insurance at BMC. Co-insurance is 20% for high-cost hospitals.<sup>4</sup>
- PPO's in-network OOP maximum, excluding meds, is \$2,500/\$5,000, almost as high as HSP's.
- PPO has separate \$4,000 OOP maximum for meds; meds are included in HSP's one maximum.

**Exhibit 2**  
**Financial summary of PPO and HSP plans for 2016**

	<b>PPO</b>	<b>HSP</b>
Care covered	No differences between the plans in covered services or in-network caregivers.	
Yearly family-paid premium	<b>\$5,445</b> (30% higher than HSP premium)	<b>\$4,189</b>
Family OOP payments in-network	<p><b>\$250 individual deductible/ \$500 family</b> (one-six those of the HSP)</p> <p><u>BMC Network</u> \$15/visit co-payment to doctor (co-pay) \$100/visit co-pay for ER <b>→ 0% co-insurance for other care</b></p> <p><u>Other PPO</u> \$30/visit co-pay for visits to low-cost doctors \$100/visit co-pay for ER <b>10% co-insurance</b> for most other services, after paying deductible <b>(20% co-insurance for high-cost hospitals)</b></p>	<p><b>\$1,500/\$3,000 deductible</b></p> <p>No separate provision for BMC</p> <p><b>10% co-insurance</b> after deductible for all services and all caregivers</p>
OOP payments out-of-network	\$500 individual/\$1,000 family deductibles 30% co-insurance after deductible	\$3,000/\$6,000 deductibles 30% co-insurance after deduct.
Out-of-network care is essentially uncapped owing to balance billing by out-of-network caregivers		
Payment per Rx, monthly supply	\$8 co-payment per generic Rx 20% co-ins. preferred brand-name (\$40-\$60) 30% co-ins. non-pref. brand-name (\$60-\$80)	10% co-insurance after deductible
OOP maximum	<u>In-network</u> <b>\$2,500 individual/\$5,000 family</b>	<b>\$3,000/\$6,000</b>
Separate Rx maximum?	<u>Out-of-network</u> \$5,000/\$10,000 <b>+ \$2,000/\$4,000 OOP maximum for meds</b>	\$6,000/\$12,000 Meds part of OOP maximum
Maximum net \$ exposure (OOP + premium)	\$10,145 in-network (+ \$4,000 Rx OOP max.) \$15,145+ out-of-network	\$9,189 in-network \$15,189+ out-of-network
All maximum \$ exposures are net of BU payments to Flexible Savings Account/Health Savings Account		

→ **Please refer to Appendix 1 for a short discussion of the six types of OOPs**

→ **And to Appendix 2 for the distinction between per-individual and per-family OOP caps**

### ***C. The Two Choices for 2016, with Emphasis on the Changed PPO Plan***

The university offers two health insurance choices for 2016, a ***preferred provider organization (PPO)*** plan and a health savings plan (HSP) with a health savings account option (HSA).

That's down from three choices in 2015. (The current HMO plan is being eliminated. Those in the 2015 HMO plan will need to choose between the PPO and HSP for 2016.)

The two 2016 plans cover the same services and include the same network of doctors and hospitals. But there are substantial differences between them for 2016.

The PPO for 2016 is changed considerably. It therefore receives much more attention in what follows than does the HSP.

#### **1. The first option for 2016 is a preferred provider organization or PPO**

The PPO plan is undergoing major changes from 2015.

The family-paid premium for the PPO will be much lower in 2016 than in 2015. But PPO patients who become ill and use substantial health care services will pay substantially higher actual OOPs than in 2016—unless they use BMC.

So, for most PPO patients, premiums will pay a lower share of health care costs in 2016 than in 2015, and OOPs will pay a higher share. A university task force concluded that this will promote more careful use of care. An alternative possibility is across-the-board reductions in use of care, with little regard to need for care, particularly for lower-income families.

PPO and HSP cover large numbers of in-network doctors and hospitals. Both plans impose higher OOPs when patients use out-of-network caregivers. Except in emergencies, when in-network OOPs apply.

##### **a. The 2016 PPO plan will have four tiers**

*The first tier is the Boston Medical Center (BMC) option.* Using BMC and its doctors will mean very low OOPs. That's because no co-insurance applies for inpatient or outpatient hospital labs, imaging, surgery, or other care. In practice, OOPs for BMC users will be very low even though the same formally higher OOPs appear on the surface to apply to all PPO enrollees. BMC users are highly unlikely to incur OOPs that come near the PPO's OOP maximum of \$2,500/\$5,000 in-network. This makes BMC a great option financially. Families who live farther from BMC or who already have networks of non-BMC caregivers will find it harder to use BMC.<sup>5</sup>

*The second tier is when using low-cost in-network hospitals.* This will mean a 10% co-insurance on most non-physician services after satisfying the PPO deductible of \$250/\$500.

*The third tier is using one of the eleven in-network hospitals designated by Blue Cross as high-cost.* In 2015, these are Baystate, Children's, Brigham, Cape Cod, Dana-Farber, Fairview, Mass General, North Shore, South Shore, Sturdy, and U. Mass – Memorial.<sup>6</sup> Families pay 20% co-insurance on hospital-billed services at these institutions after satisfying the \$250/\$500 deductible. They'd pay co-insurance on labs, imaging, outpatient surgery,

inpatient care, and other hospital-billed services. Please note that families pay only 10% co-insurance on physician-billed services at these hospitals.

*The fourth tier is using out-of-network caregivers.* Both PPO and HSP impose higher deductibles, co-insurance rates, and OOP maximums on out-of-network care. Blue Cross's network of caregivers is said to be very extensive. If you are unsure, check that a potential caregiver is in-network. In emergencies, all of your care should be considered in-network, but please phone Blue Cross, as soon as you can, to learn what care they see as "emergency."

Unfortunately, the maximums on out-of-network care are not real maximums, as most humans ordinarily understand that word.<sup>7</sup> That's because they exclude two types of costs that can be expensive for families.

- ✓ One excluded cost is caregivers' balance billing on out-of-network charges for non-emergency covered services. This is the difference between the sum that an out-of-network doctor or hospital charges for a service and the sum that Massachusetts Blue Cross recognizes as an allowed charge. The family is usually liable for some of this difference—sometimes all of it. Possibly, BU employees use out-of-network care at low rates owing to the breadth of Blue Cross's participating in-network caregivers. To address this question, it would be helpful to learn how many BU families have been hit with high balance bills on out-of-network care. It would also be helpful to learn what can be done to protect them.
- ✓ Also excluded from the out-of-network maximum are the costs of services not covered by health insurance, such as most vision aids, hearing aids, and dental care.

b. The PPO has much higher OOPs in 2016 than in 2015—but lower OOPs than the HSP

- ✓ Deductible—The PPO's deductible is \$250 individual and \$500 family for all in-network caregivers. The deductible rises to \$500/\$1,000 for out-of-network caregivers.
  - ➔ ***Because PPO deductibles will be only one-sixth as great as HSP deductibles for 2016, PPO insurance will kick in at much lower levels of health care spending, helping families afford needed care.***
  - ➔ The deductible is what you have to pay OOP for most services before your insurance will kick in and begin to cover most of the cost of care. See Appendix 1.
    - ➔ PPO deductible doesn't apply to in-network doctor office visits, ER visits, or meds. For those, you make only fixed-dollar co-pays (such as \$15-30/doctor visit). The PPO helps cover your costs even before you satisfy its deductible.
    - ➔ Doctor office and ER visits don't count toward the annual deductible, but they do count toward the annual OOP maximum in the PPO plan.
- ✓ OOP maximum for most services—This maximum will be \$2,500 per individual and \$5,000 per family for all in-network care except for prescription drugs.
  - It will be \$5,000/\$10,000 out-of-network. In practice, there's no real ceiling on out-of-network OOPs.

- ✓ Co-insurance—For care other than visits to doctors' offices, ER visits, or prescription drugs, a 10% co-insurance will apply to all in-network care at low-cost caregivers (except at BMC, where no co-insurance applies). A 20% co-insurance will apply to high-cost caregivers. And a 30% co-insurance will apply to out-of-network care.
  - ➔ **Because most of the costly services—labs, imaging, outpatient surgery, inpatient care, and others—will be subject to co-insurance in the PPO for 2016, the practical risk of paying substantial sums OOP will be considerably greater than in 2015 (when patients faced no such co-insurance or other OOP).**
    - ➔ Co-insurance is the percentage of cost of care that you pay OOP—after satisfying your deductible and before you hit your annual OOP maximum.
- ✓ Co-payments—For doctor office visits, PPO patients will make \$15 co-payments at BMC and \$30 co-payments at all other in-network physicians' offices. Similarly, the co-payment for ER visits is \$100.
- ✓ For prescription drugs, the patients in the PPO will pay \$8 OOP for generics, \$40-60 for preferred brand name drugs, and \$60-80 for non-preferred brand name drugs. (Preferred brand name drugs tend to have lower costs to insurers.) OOPs are lower if drugs are sent by mail. A separate \$2,000/\$4,000 OOP maximum applies to prescription drugs.

Both PPO and HSP fully cover preventive services; there are no OOPs for preventive services.

#### c. PPO premiums for 2016

- ✓ The dollar premiums paid by families for the PPO plan are being cut by almost \$3,000 (35%)—from \$8,347 in 2015 to \$5,445 in 2016.
- ✓ This is because the total PPO premium (family plus university shares) is falling by \$2,769 (a cut of 11.3%), from \$24,549 in 2015 to \$21,780 in 2016. Since a one-year rise in premium of 5-6% from 2015 to 2016 might ordinarily be expected, the real cut in the PPO premium from 2015 to 2016 is actually close to 16%. **This is remarkable. It deserves scrutiny.**
- ✓ BU is raising its dollar payment toward the total PPO premium by about \$100 yearly. Still, the university is raising its share of premium costs from 66% of the total in 2015 to 75% of the total in 2016—because the total premium is expected to fall so rapidly—and all that projected drop is being used to cut family-paid premiums.
- ✓ Looking forward, **will the drop in family-paid premiums be sustainable?** Will the assumptions on which this cut of one-sixth in real premium rests be borne out in practice? If not, higher premiums, higher OOPs, or both might be expected for 2017 and subsequently.
- ✓ In particular, it is possible that the new PPO arrangements for containing costs—through higher OOPs—may fail to contain costs of insured care as much as their proponents hope.
- ✓ Looking ahead, an worrying but harder-to-spot-reason risk is that the PPO's higher OOPs may **contain total costs of insured care by inducing patients forego needed care.** **This is a particular risk for lower-income families** because OOPs will be a bigger share of their income. And they may find it harder to set aside money to pay OOPs with cheaper before-tax dollars. **This particular risk warrants careful monitoring by the university** since it could signal both serious unfairness and greater risk of preventable medical harm.

#### d. FSAs help to pay OOPs in the PPO

The typical family faces a choice between paying OOPs with before-tax or after-tax dollars. This matters.

***Paying with before-tax dollars is much cheaper.*** Paying OOPs with before-tax dollars places a much smaller burden on the family. ***So using before-tax dollars makes it easier for families to afford OOPs and use needed health care.***

- ✓ Families enrolled in the PPO plan without a flexible savings account (FSA) would have to pay all of their OOP medical costs with more expensive after-tax dollars.<sup>8</sup>
- ✓ Without an FSA, how much of its own earnings would a family enrolled in the university's PPO plan in 2015 have to devote of to paying \$1,000 in OOP medical costs in 2015?
  - Consider a Boston University employee who lives in Massachusetts and whose annual family income falls in the 25% marginal bracket for federal income tax purposes (\$73,801 to \$148,850 in 2015). The family would also face a Massachusetts income tax of 5.15%. These sum to a combined marginal tax rate of 30.15%.
  - ***The family would therefore have to start with \$1,431.64 in before-tax dollars to end up with \$1,000 after taxes. [ $\$1,431.64 - (30.15\% \text{ of } \$1,431.64) = \$1,000.00$ ]***
  - Again, to pay \$1,000 in OOP costs, the family could spend either \$1,000 in income before taxation or \$1,000 in income after taxation. But to end up with \$1,000 after taxation, the family would have to start with \$1,431.64 in income before taxation.
- ✓ Appendix 3 explains this in more detail.

PPO patients will pay for higher 2016 OOP expenses with much more expensive after-tax dollars unless they establish flexible savings accounts (FSAs). Total contributions to (BU plus employee) FSAs are expected to be capped at \$2,550 in 2016.

- ✓ The university will contribute \$500 to a family's FSA in 2016 if income is under \$70,000. It will contribute \$250 if income is between \$70,000 and \$100,000.
- ✓ The employee may contribute up to a total of \$2,550 (including the university's contribution).
- ✓ Contributions for 2016 must be scheduled during the open enrollment period and can't be changed subsequently unless family circumstances (employment, for example) change.
- ✓ Sums in the FSA that are not spent by 31 March of 2017 are forfeited—they do not roll over.
- ✓ The forfeiture provision makes contributing to FSAs much riskier than contributing to HSAs.
  - (The HSAs are vested and can't be forfeited if not used. HSA dollars roll over and even earn tax-free interest or other investment income.)
- ✓ The FSA cap is only about 38% of the HSA cap. Also, the university will contribute \$1,000 to a family's HSA in 2016 regardless of income.

e. Overall financial exposure in the PPO plan

The PPO's premiums for 2016 are substantially lower than in 2015, though still higher than the 2016 premiums for the HSP.

***For most people, the PPO's OOP costs for 2016 will be lower than the HSP's.***

***The PPO begins paying for most health care costs much sooner than does the HSP.***

- ✓ The main reason is that the PPO has much lower deductibles—only one-sixth as great as the HSP's—so PPO patients' insurance begins much sooner to pay most health costs.
- ✓ Another reason is that the PPO caps dollar payments for doctor office visits, ER visits, and meds.

***Still, the PPO's actual OOPs for 2016 will be considerably higher than they were in 2015's PPO plan.*** For most enrollees, the 2016 PPO will entail substantially higher OOP costs than did the 2015 PPO.

- ✓ That's because the PPO now has a 10% in-network co-insurance for costly services like imaging, labs, outpatient surgery, and inpatient care.

In practice, this change will mean that PPO patients who become ill and use these costly services in 2016 will face substantially higher OOPs than they would have in 2015.

It's worth repeating here that when families pay OOPs with costly after-tax dollars, those OOPs' real financial burden is much greater than when they are paid with cheaper before-tax dollars.

In 2016, when patients seek services from caregivers inside the network, as will the great majority, the PPO will have a deductible of \$250/year per individual, up to \$500 for an entire family. The OOP maximum will be capped at \$2,500 for each individual and \$5,000 for an entire family. A separate OOP maximum of \$2,000/\$4,000 applies to prescription drugs.

- ✓ PPO patients will make copayments of \$15-30 to see a doctor and \$100 to use the ER in 2016.
- ✓ But for other services, PPO patients pay 10% of allowed costs. That's called a 10% co-insurance.
- ✓ But for enrollees who use BMC's doctors and hospitals, OOPs are held down to very low levels—except for prescription drugs. BMC patients will pay no co-insurance!

In the PPO plan, if you use caregivers that are out-of-network in 2016, the deductibles and OOP maximums will be double the in-network levels. The coinsurance will be 30%. Because you may be balance-billed by out-of-network doctors and hospitals, there is really no maximum out-of-network OOP.

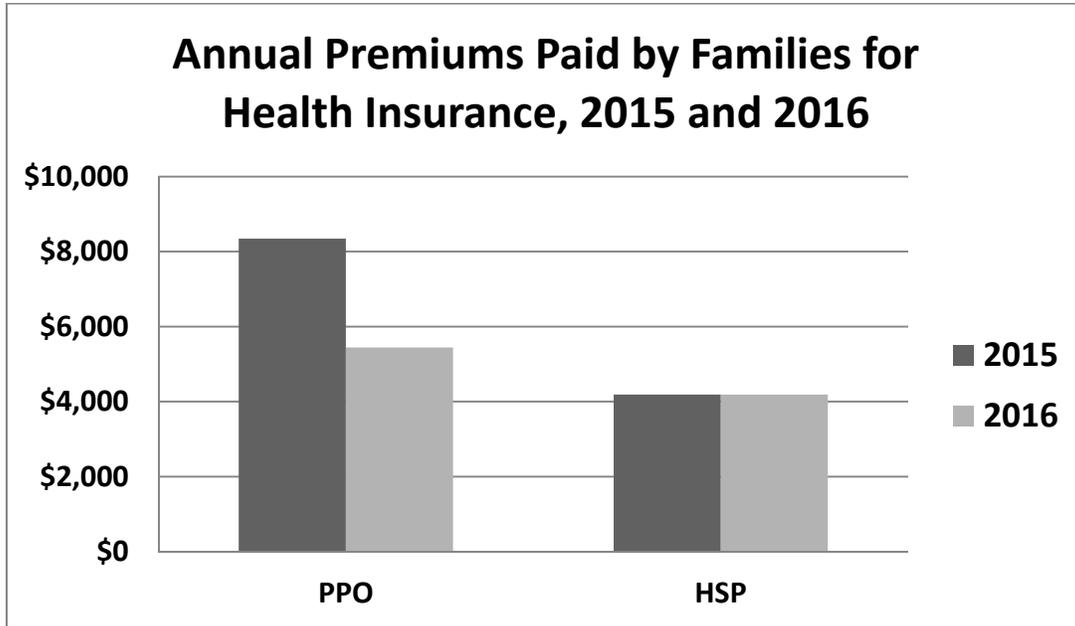
***Please note that emergency services provided by out-of-network caregivers are governed by in-network OOP rules. But it pays to check with Blue Cross as soon as you can to learn what's covered as an "emergency service," and under what circumstances.***

f. Summary of positive and negative changes in the PPO plan from 2015 to 2016

**Some of the changes in the Boston University PPO health insurance plan for families for 2016 appear strongly positive financially for employees.**

Exhibit 3 – A depicts the 2015 and 2016 family premium payments for the PPO and HSP plans. And Exhibit 3 – B presents family, university, and total premiums for both plans for 2015 and 2016, along with percentage break-downs in shares.

**Exhibit 3 – A**



**Exhibit 3 – B**

**Family, University, and Total Premiums for PPO and HSP for 2015 and 2016**

Dollar premiums for families, university, and total, 2015 and 2016						
	2015			2016		
	family	university	total	family	university	total
PPO	\$8,347	\$16,203	\$24,549	\$5,445	\$16,335	\$21,780
HSP	\$4,189	\$17,622	\$21,811	\$4,189	\$16,335	\$20,524
Percentage share of premiums, 2015 and 2016						
	2015			2016		
	family	university	total	family	university	total
PPO	34.0%	66.0%	100.0%	25.0%	75.0%	100.0%
HSP	19.2%	80.8%	100.0%	20.4%	79.6%	100.0%

The total premium for the PPO is dropping from \$24,549 in 2015 to \$21,780 in 2016, a fall of \$2,769 or 11.3 percent (or at least 16 percent, allowing for ordinary inflation in Massachusetts health costs from 2015 to 2016).

What assumptions might underpin this projected drop in total PPO premium for 2016? A first factor might be **high use of BMC services**. Possibly, the university has negotiated lower payments to BMC for university PPO employees. A second factor is probably the expectation that higher real OOPs in the PPO for 2016 will **induce families to use less health care**.

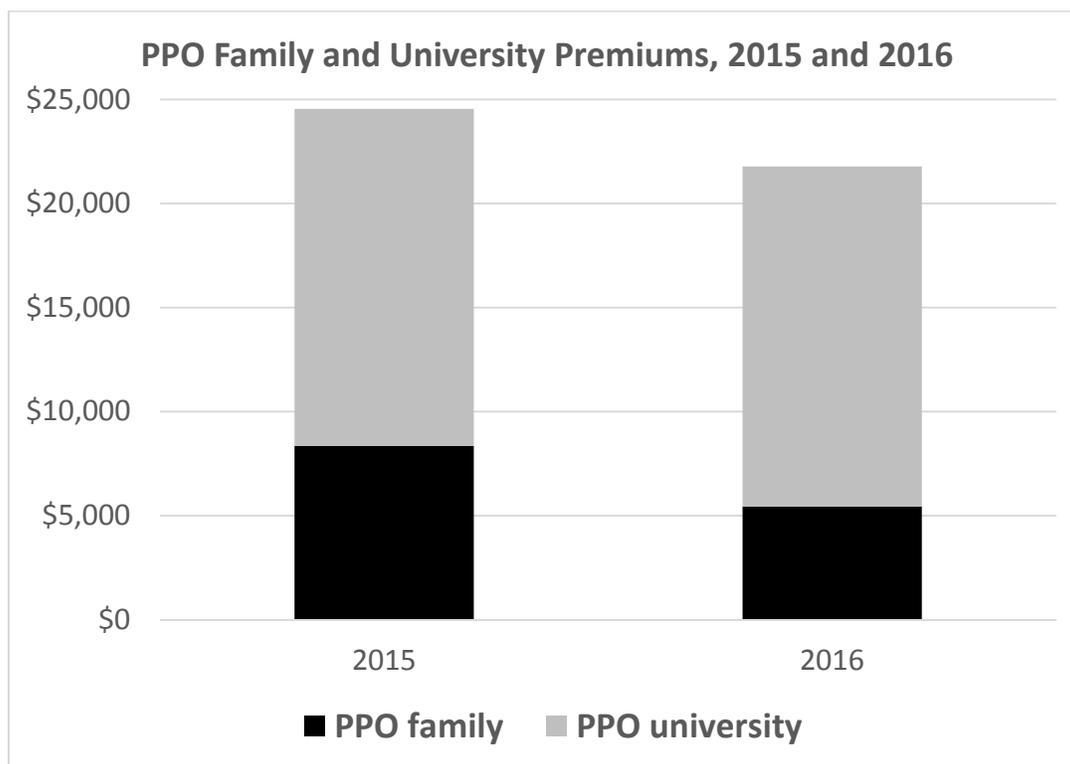
A third factor is Blue Cross's decision to **shift many of its PPO patients to a new contract**,<sup>9</sup> one that gives hospitals and doctors financial incentives to serve patients more carefully, more cheaply, or perhaps both. It is not clear that contracts like this have actually saved money.<sup>10</sup>

At the same time, the total premium for the HSP is dropping from \$21,811 in 2015 to \$20,524 in 2016, a fall of \$1,287 or 5.9% (or at least 12% after allowing for ordinary inflation in Massachusetts health costs from 2015 to 2016). Since the HSP is not changing, what assumptions might underpin this substantial drop in HSP premiums?

One possibility is that some younger and healthier patients may migrate from the 2015 PPO (or HMO) to the 2016 HSP. If so, that would tend to leave older and sicker patients in the 2016 PPO. But that would make the very large drop in the PPO's projected health costs and premiums even harder to understand.

Exhibit 3 – C summarizes the changes in the PPO plan's family, university, and total premiums between 2015 and 2016.

**Exhibit 3 – C**



**Other changes for 2016 in the PPO appear financially negative for employees.** The PPO premium will cover a smaller share of health costs. Therefore, in the event of illness, out-of-pocket (OOP) costs will rise substantially for those who remain in the PPO plan. This means a drop from 2015 to 2016 in the share of health costs that are insured.

It also means reduced risk-sharing between healthy and sick from 2015 to 2016.

Put another way, in 2016, a lower share of health care costs for the average person in the PPO plan will be covered by the insurance premium than was the case in 2015, and a higher share will be covered by OOPs.

In 2015, the family share of the PPO's annual insurance premium was \$8,347, or 64.0% of the maximum in-network financial exposure of \$13,047 (excluding prescription drugs).

In 2016, the family share of the PPO's annual insurance premium will be \$5,445, or 53.7% of the maximum in-network financial exposure of \$10,145 (excluding prescription drugs).

***The real-world drop in the nominal (dollar) share of costs (maximum in-network financial exposure) covered by insurance is much greater than these numbers suggest.***

That's because the chance of a family in the PPO actually incurring high OOP costs in 2016 will be much greater than in 2015. This is so even though the 2015 nominal dollar in-network OOP maximum of \$5,000 per family will not change for 2016.

Wait—doesn't \$5,000 equal \$5,000? Why will families enrolled in the PPO face a much greater risk of hitting 2016's \$5,000 OOP maximum than they did of hitting 2015's \$5,000 OOP maximum? What's going on here?

- ✓ In 2015, the annual family in-network OOP maximum was \$5,000 (excluding meds) but the typical family has had a very low chance of incurring such high OOPs.
- ✓ In part, this is because the 2015 PPO requires no deductible.
- ✓ And, at least as important, the 2015 PPO has no co-insurance requirements (except for meds—and those are actually capped in ways that make them function more like expensive co-payments, not as open-ended co-insurance). Patients do not now (in 2015) pay 10% of many bills after satisfying a deductible. Or 20% of bills from high-cost hospitals. Such co-insurance OOPs can rise quickly.
- ✓ Instead, modest dollar-copayments prevail in 2015
  - In 2015, patients typically pay \$20 co-payments for each doctor visit, \$20 co-payments for imaging studies, and \$100 co-payments for visiting the ER (if not admitted to the hospital).
  - In 2015, there are no co-payments or co-insurance for outpatient surgery or for an inpatient hospital stay—none to the doctor and none to the facility.
- ✓ But in 2016, all services used by families enrolled in the PPO—***labs, imaging, outpatient surgery, and inpatient care—except physician visits and ER visits—will be subject to a 10% co-insurance payment—after satisfying the new deductible of \$250 for individuals and \$500/family. And the co-insurance will be 20% at high-cost providers.***

For all these reasons, families in the PPO plan are much likelier to incur high OOPs in 2016 than in 2015. And they will be much likelier to hit the OOP cap of \$2,500/\$5,000 in the PPO plan in 2016.

So risk-sharing among families in the PPO through insurance will drop from 2015 to 2016 and families themselves bear greater unshared risk of paying high OOPs in 2016.

The drop in the premium share of health costs and the rise in the OOP share is important for three reasons.

- a. ***In the real world, OOPs can be much costlier to families than premiums.*** Families have long paid their shares of premiums with cheaper before-tax dollars. That's because our health insurance premiums aren't subject to federal or state taxation. But many families will pay OOPs with costly after-tax dollars—if, for example, they are unwilling or unable to fund a flexible savings account, or if the money in that FSA isn't adequate to pay a year's OOPs. This boosts OOPs' share of total health costs for PPO patients even faster than some data—such as that in Exhibit 4—may suggest.
- b. ***OOPs function as a tax on being older or sicker.*** By shifting costs from insurance premiums to OOPs, the university is moving toward imposing the equivalent of a tax on older and sicker employees and dependents. Premiums share risk among a group; OOPs fall on those who actually need and use health care.
- c. ***Inter-generational equity.*** As separate but related matter, for years or decades in the past, many of today's veteran (and typically older) BU employees and families paid higher premiums than their own circumstances warranted. In effect, when younger and healthier, they subsidized health care premiums for employees and families who were then older or sicker. Now, when today's older employees and families might benefit from having their own higher health costs subsidized by younger and healthier employees, they instead face higher OOPs and lower shares of costs covered by health insurance.

Proponents of this shift from insurance to OOP assert that they see it as desirable. That's because they see good insurance coverage as inducing "moral hazard," impelling or allowing people with good insurance to neglect their health or to use care recklessly. So they tend to see higher OOPs as a way of obliging people to use health services more carefully. They may also see it as the best (or only) tool now available to employers to hold down health costs. It is not at all clear that moral hazard is a substantial cause of high U.S. health costs or, if so, whether higher OOPs are a good way to combat those high costs. This topic is taken up in Appendix 4.

From a standpoint of fairness, for people with lower incomes who become sick, these higher OOP costs will be a bigger share of income than they will be for people with higher incomes. That makes the higher OOPs a greater financial burden for people with lower incomes—particularly if lower-income people are less likely to fund FSAs and are therefore obliged to pay OOPs with costly after-tax dollars. For these reasons, the higher OOPs may be expected to deter use of needed care for lower-income people particularly.

**2. The second option for 2016 is a higher-OOP health savings plan (HSP) with an attached health savings account (HSA)**

The HSP covers the same services and the same in-network caregivers as the PPO.

***Because the HSP is unchanged from 2015 to 2016, it will receive much less attention than has just been given to the PPO. Instead, differences between HSP and PPO will be highlighted.***

a. Tiers

The HSP is simpler than the PPO. It does not make the PPO's distinctions between BMC and other caregivers, or between low- and high-cost hospitals.

The HSP does maintain the distinction between in-network and out-of-network caregivers. The HSP's deductibles for out-of-network care are six times as great as those of the PPO (\$3,000/\$6,000 for the HSP versus \$500/\$1,000 for the PPO).

But the OOP out-of-network maximums for the HSP of \$6,000/\$12,000 are only slightly higher than those for the PPO (\$5,000/\$10,000). In any case, since both PPO and HSP patients are vulnerable to balance billing by out-of-network doctors and hospitals, the nominal OOP maximums may mean little in practice to many patients afflicted by out-of-network bills.

b. OOPs

The HSP's in-network deductibles are six times as great as those of the PPO. The PPO therefore starts paying for care much sooner than does the HSP. The HSP starts paying only after deductibles of \$1,500/\$3,000 are met. Families are entirely on their own financially for all services—including in-office doctor visits and medications—until the deductibles are met.

Once they are met, HSP patients pay 10% co-insurance on all in-network care, including meds.

They do so until the annual OOP in-network maximums of \$3,000/\$6,000 are met. Insurance then pays all.

Unlike the PPO, the HSP has no separate OOP maximums on medications.

HSP patients' OOP maximums are not much higher, in annual dollar amounts, than those of the PPO. Indeed, PPO OOPs can actually be higher than HSP OOPs—if a PPO patient incurs both high hospital/doctor inpatient/outpatient costs and high medication costs.

The main difference between the PPO and HSP on risk of exposure to OOPs is that the PPO patient must incur much higher total health care costs—than does the HSP patient—to reach the PPO maximums. So the PPO patient must face a substantially more serious and costly illness to reach the PPO's OOP maximums than does the HSP patient.

The HSP patient will reach those maximums more quickly. That's because the PPO patient's insurance pays only 10% of costs after satisfying the PPO's much lower deductibles.

c. Premiums

The HSP features lower premiums than the PPO but has much higher deductibles and somewhat higher OOP maximums. This means that insurance covers a smaller share of a typical family's 2016 maximum costs under the HSP than of that family's maximum costs under the PPO. This will be taken up in more detail shortly.

The family-paid premium for the HSP for 2016 will remain at the 2015 level of \$4,189. This is about one-fifth of the total 2016 HSP premium of \$20,524, as was shown in Exhibit 3 – B.

A family enrolled in the HSP in 2016 will pay \$1,256 less in premium annually than it would if enrolled in the PPO, even though the PPO premium will drop sharply to \$5,445 in 2016. The family's payment for HSP premium is 23 percent lower than its payment would be for the PPO.

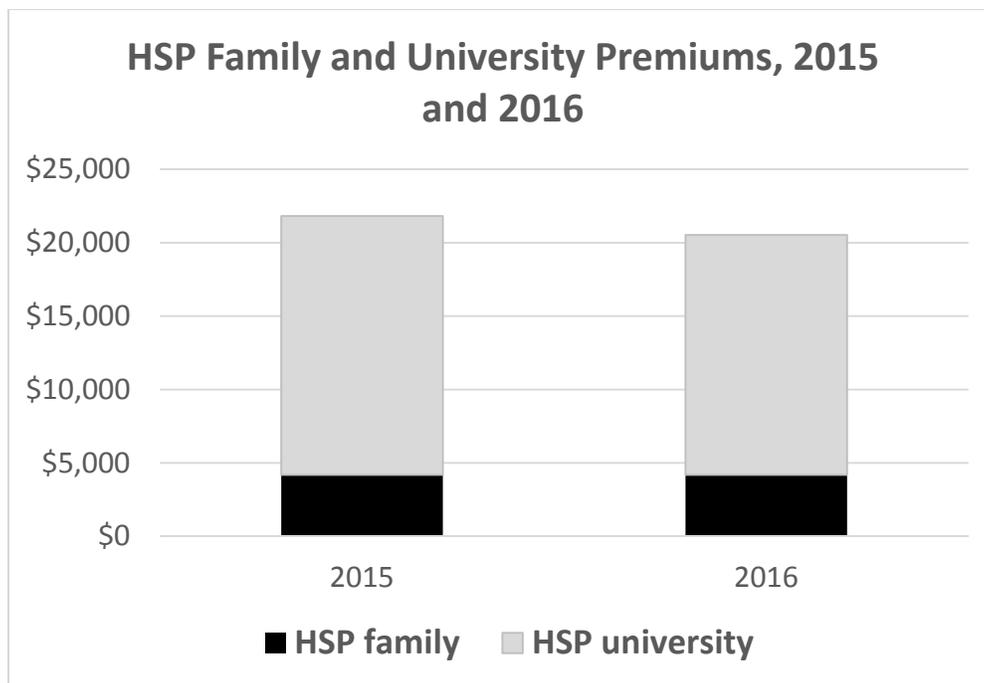
As noted earlier and as shown in Exhibit 3 – B, the total premium for the HSP is dropping from \$21,811 in 2015 to \$20,524 in 2016, a fall of \$1,287 or 5.9% (or at least 12% after allowing for ordinary inflation in Massachusetts health costs from 2015 to 2016). Since the HSP is not changing, what assumptions might underpin this substantial drop in HSP premiums?

One possible reason might be the shift of younger and healthier patients from the 2015 PPO (or HMO) to the 2016 HSP. But that would tend to leave older and sicker patients in the 2016 PPO, making the very large drop in the PPO's premiums for 2016 even harder to understand.

The family-paid HSP premium will be \$4,189 in both 2015 and 2016. The same \$4,189 payment, though, is a slightly larger share of the total HSP premium in 2016 (because the total HSP premium for 2016 is 5.9 percent lower than in 2015).

Exhibit 3 – D compares the family and university shares of HSP premiums for 2015 and 2016.

**Exhibit 3 – D**



#### d. Help paying OOPs

Federal law makes it much easier for HSP families to save for OOP costs and to pay for them with cheaper pre-tax dollars than it does for PPO families. ***Healthy people and people who are able and willing to set aside substantial pre-tax sums yearly in their health savings accounts (HSAs) will find the HSP offers reduced taxes and greater financial security.***

Families will certainly vary in their ability and willingness to set aside this money. Putting money in these HSAs is financially desirable because it allows people who become ill and use health care to pay their OOPs with much cheaper before-tax dollars.

It's true that the PPOs' flexible savings accounts (FSAs ) allow payment of OOPs with before-tax dollars. But when compared with HSAs, the FSAs suffer from reduced flexibility, lower university subsidy, and lower caps on annual contributions. These result from federal statutes that discriminate against FSAs and in favor of HSAs.

*Greater flexibility of HSAs:* Contributions to the HSAs are vested and so can be rolled over and accumulated from year to year. By contrast, sums contributed by the university or by the employee to the employee's PPO plan during 2016 must be used to pay health costs by 15 March of 2017 or they will be forfeited.

*Preferential taxation:* By federal law, the interest, dividends, or capital gains earned on HSA contributions also accumulate tax-free and can be withdrawn tax-free to pay health costs. (If withdrawn for other purposes, they generate both federal income taxes and a 20% penalty.)

*Higher university subsidy:* As noted earlier, the university will pay \$1,000 per family to an HSA regardless of family income. But it will contribute only half as much, or less, to an FSA, with university contributions to an FSA falling as income rises, and phased out entirely if income is above \$100,000 annually.

*Higher caps on annual contributions:* Similarly, those in the HSP will be able to contribute up to \$6,550 to health savings accounts (HSAs), including the university's \$1,000 contribution. But it is expected that total contributions to FSAs for 2016 will be only \$2,550.

Federal law does ***prohibit contributions to HSAs by those over age 65 and enrolled in Medicare Part A.*** This provision makes choosing the HSP substantially less desirable to these employees.

More generally, the financial benefits of contributing to HSAs are greater for higher-income families because they are in higher income tax brackets—so any tax deduction is more valuable to them.

At the same time, higher-income families will also typically be more able to afford to make these contributions.

***→ Again, please refer to Appendix 3 for a detailed analysis of the great value of paying OOPs with cheaper before-tax dollars.***

e. Overall financial exposure

The HSP's premiums paid by families and families maximum financial exposure in the HSP (family premiums plus OOPs) remain identical in 2016 and 2015.

In each year, premiums paid by families are \$4,189 and maximum financial exposure is \$9,189. That \$9,189 is calculated as the sum of premiums (\$4,189), family financial maximum (\$6,000), less the university's \$1,000 contribution to the family HSA itself.

Thus, in each year, the family-paid premium for the HSP covers only 45.6% of the family's maximum financial exposure.

By contrast, owing to the large drop in family-paid PPO premiums from 2014 to 2016, the premium's share of the maximum financial exposure is falling from 64.05 in 2015 to 53.7% in 2016.

Exhibit 4 summarizes the PPO's and the HSP's premium shares of nominal maximum financial exposure in 2015 and 2016.

**Exhibit 4**  
**PPO and HSP Family-paid Premiums as Share of Nominal Family Maximum Financial Exposure, 2015 and 2016**

	2015				2016			
	Premium	OOP	Total	Premium%	Premium	OOP	Total	Premium%
<b>PPO</b>	\$8,387	\$5,000	\$13,047	64.0%	\$5,454	\$5,000	\$10,145	53.7%
<b>HSP</b>	\$4,189	\$6,000	\$9,189	45.6%	\$4,189	\$6,000	\$9,189	45.6%

Notes

1. The PPO total in each year is sum of premium and OOP maximum, less \$300 in expected average weighted university contribution to FSA. Similarly, the HSP total in each year is sum of premium and OOP maximum, less \$1,000 in expected university contribution.
2. The PPO OOP maximums exclude the \$4,000 OOP maximum on prescription drugs.
3. Exhibit 4 lists the nominal \$5,000 family OOP maximum for each year. This understates the rise in practical risk of high OOPs in 2016. This has the effect of understating the drop in premium's share of a family's actual family maximum financial exposure from 2015 to 2016.
4. **Premiums are paid with cheaper before-tax dollars. Families must often pay OOPs with costly after-tax dollars. Because the real risk of paying higher OOPs rises substantially in the PPO from 2015 to 2016, many families will be obliged to pay them with costlier after-tax dollars. Exhibit 4 does not capture this source of rise in OOPs' share of family maximum financial exposure in the PPO.**

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The 2016 PPO plan will cover a smaller share of your health costs than it did in 2015

In 2015, the PPO plan's nominal maximum financial exposure of \$13,047 (excluding prescription drugs) was substantially greater (almost \$4,000 greater) than the HSP plan's nominal maximum financial exposure of \$9,189.

The PPO's higher premium and nominally similar OOP maximum meant a premium share of nominal maximum financial exposure that was almost 20 percentage points above HSP's.

But, as explained earlier, the PPO's nominal maximum would be very difficult to actually reach in 2015 and much easier to reach in 2016. This is the first reason why Exhibit 4 understates the drop in the PPO premium's share (and the rise in OOPs' share) of costs from 2015 to 2016.

And there's a second reason. If a family in the PPO in 2016 pays its higher OOPs with costly after-tax dollars—while saving on premiums paid in 2016 with cheaper before-tax dollars—its **actual financial burden rises faster** from 2015 to 2016 than is suggested by the figures presented in Exhibit 4. And it suffers an even greater **shift in actual financial burden from premium to OOP** than Exhibit 4 indicates.

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***Some readers of early versions of this report have said they preferred to see the summary Exhibits 1 and 2 after reading Section C's detailed discussions of the PPO and HSP. Accordingly, those two exhibits are now repeated.***

→ → **B. Ways to Compare the Plans for 2016—repeated here for your convenience**

Exhibit 1 compares the PPO and HSP on risk, attitudes, circumstances and other factors—

Do you use a lot of health care? Or use BMC caregivers? Do you prefer to pre-pay for more of your care through higher premiums? Will insurance that kicks in much sooner (through a small deductible) encourage you to use care when you need it? The PPO plan may be better for you.

Do you use little health care? Are you willing and able to save a substantial sum in your HSA? Or do you expect to use a lot of health services **and** several costly chronic-use meds? Will you use needed care even if you face high OOPs? The HSP plan may be better for you.

**Exhibit 1**

**Various factors bearing on health insurance plan choice for 2016**

	<b>PPO</b>	<b>HSP</b>
Flexible savings/Health savings account	University pays \$500 into your FSA if income under \$70K, \$250 if \$70-100K Maximum total FSA contribution = \$2,550 in 2015 (includes University \$s)	University pays \$1,000 into your HSA regardless of income. Maximum total contribution = \$6,650 in 2015 (includes University's \$1,000)
FSA/HSA mechanics	Are you likely to face OOP costs? Will you use your full FSA contribution? You forfeit any money not used by 15 March of following year.	Are you willing and able to allow your HSA contributions to accumulate, knowing you can use them only for health care expenses? (Pay income tax + 20% penalty if take out.)
Able/willing to contribute to FSA/HSA?	Can you afford to contribute to your FSA? Are you willing to lock up that money? Once you sign up, you're locked in to monthly payments for 1 year unless family jobs or other circumstances change.	Can you afford to contribute to your HSA? Are you willing to set aside those contributions? <b>NOTE-You can't contribute to an HSA if you are &gt;65 and enrolled in Medicare A</b>
Health status and predictable costs of care	If a family member has a costly illness <b>OR</b> takes costly long-term drugs, PPO may offer better financial protection by holding down OOP exposure. <b>BUT</b> if someone uses costly health services <b>AND</b> takes costly meds, PPO could mean higher OOPs in addition to its higher premium.	If your family members are generally younger and healthier, and no one is taking a costly long-term medication, the HSP may be financially advantageous to you, especially if you are able to fund your HSA and pay any OOP costs with cheaper pre-tax dollars.
Risk aversion	If you'd like to minimize financial worry the PPO plan offers better insurance coverage and less risk of high OOPs.	If you're healthy and OK with more financial risk or can afford to pay OOPs from savings, debt, or your HSA, the HSP may save.
Effects of OOPs on care-seeking	Will you seek needed health care, even knowing that you will face higher OOPs in the 2016 PPO than you did in the 2015 PPO—unless you use the BMC network?	If you switched to the HSP for 2016 from the HMO or PPO plan, would you seek needed health care, knowing that you will face substantially higher OOPs than in 2015?
Use low-OOP BMC?	Do you use BMC network or would you be willing to do so? <b>You'd pay little OOP.</b>	Not applicable
Attitude toward using health care	Are you fairly quick to use health care and don't want to change that? The PPO's lower OOPs might be better for you.	Are you slow to use health care and unlikely to change? The HSP's higher OOPs may matter less to you.
Do you know what care you need?	Advocates for higher OOPs say they will induce you to cut unneeded care. But it's hard to know what's needed. Are you clinically trained? Or do you have a clinically trained family member or friend—or access to a competent family doctor/NP/PA?	

Exhibit 2 compares the 2016 PPO and HSP plans financially on premiums and OOPs—

- The family-paid PPO premium, while much lower than in 2015, is 30% above the HSP premium.
- PPO's \$250 individual/\$500 family deductibles are 1/6 those of HSP's, so the PPO quickly helps to pay health care bills. HSP's high deductibles leave families financially exposed for longer.
- The PPO has 10% co-insurance (share of bill paid OOP after meeting deductible) for many services. This means much higher OOPs than in 2015, when there was no co-insurance.
- PPO has no co-insurance at BMC. Co-insurance is 20% for high-cost hospitals.<sup>11</sup>
- PPO's in-network OOP maximum, excluding meds, is \$2,500/\$5,000, almost as high as HSP's.
- PPO has separate \$4,000 OOP maximum for meds; meds are included in HSP's one maximum.

**Exhibit 2**  
**Financial summary of PPO and HSP plans for 2016**

	<b>PPO</b>	<b>HSP</b>
Care covered	No differences between the plans in covered services or in-network caregivers.	
Yearly family-paid premium	<b>\$5,445</b> (30% higher than HSP premium)	<b>\$4,189</b>
Family OOP payments in-network	<p><b>\$250 individual deductible/ \$500 family</b> (one-six those of the HSP)</p> <p><u>BMC Network</u> \$15/visit co-payment to doctor (co-pay) \$100/visit co-pay for ER <b>→ 0% co-insurance for other care</b></p> <p><u>Other PPO</u> \$30/visit co-pay for visits to low-cost doctors \$100/visit co-pay for ER <b>10% co-insurance</b> for most other services, after paying deductible <b>(20% co-insurance for high-cost hospitals)</b></p>	<p><b>\$1,500/\$3,000 deductible</b></p> <p>No separate provision for BMC</p> <p><b>10% co-insurance</b> after deductible for all services and all caregivers</p>
OOP payments out-of-network	\$500 individual/\$1,000 family deductibles 30% co-insurance after deductible	\$3,000/\$6,000 deductibles 30% co-insurance after deduct.
Out-of-network care is essentially uncapped owing to balance billing by out-of-network caregivers		
Payment per Rx, monthly supply	\$8 co-payment per generic Rx 20% co-ins. preferred brand-name (\$40-\$60) 30% co-ins. non-pref. brand-name (\$60-\$80)	10% co-insurance after deductible
OOP maximum	<u>In-network</u> <b>\$2,500 individual/\$5,000 family</b>	<b>\$3,000/\$6,000</b>
Separate Rx maximum?	<u>Out-of-network</u> \$5,000/\$10,000 <b>+ \$2,000/\$4,000 OOP maximum for meds</b>	\$6,000/\$12,000 Meds part of OOP maximum
Maximum net \$ exposure (OOP + premium)	\$10,145 in-network (+ \$4,000 Rx OOP max.) \$15,145+ out-of-network	\$9,189 in-network \$15,189+ out-of-network
All maximum \$ exposures are net of BU payments to Flexible Savings Account/Health Savings Account		

- Please refer to Appendix 1 for a short discussion of the six types of OOPs
- And to Appendix 2 for the distinction between per-individual and per-family OOP caps

#### ***D. Looking Backward and then Forward***

##### Why are these changes in the PPO plan being made?

The task force chaired by former-Dean Meenan sought to slow the rate of increase in total health insurance premiums. Overall, it projected that its recommended changes in health insurance would cut annual increases from 6% if the 2015 health benefits were simply continued unchanged, to 5% under its plan for 2016 and forward.<sup>12</sup> Since no changes in the HSP plan are being made, the savings would have to be won by some combination of squeezing costs from the PPO plan through higher out-of-pocket payments (OOPs) and by cutting prices or volumes of insured services, or by shifting employees and families from the PPO to the HSP. Strikingly, the 2016 premiums for PPO and HSP are actually falling sharply.

Two of the task force's most prominent avowed motives for slowing premium increases were a) avoiding imposition of the Affordable Care Act's 40% Cadillac Excise Tax on the value of insurance premiums exceeding certain ceilings, and b) slowing the rise in health insurance costs to liberate university funds so they could be used to improve the fairness of retirement benefits.<sup>13</sup> The first is said to be the chief consideration.

The task force's main tool to slow the rise in premiums is to require payment of higher out-of-pocket (OOP) costs when people become sick and need to use health care. The task force's report expressed the hope is that higher OOPs will induce employees and their families to become smarter consumers, shopping by price and quality, and weeding out unnecessary health care. This hope is probably not realistic. Higher OOPs may deter use of both needed and unneeded care. And lower-income families may be much more likely to cut use of care.

**→ Appendix 4 takes up this question in considerably greater detail.**

##### Will these changes work?

It is probably not realistic to expect many positive results from imposing higher OOPs. Those who hope that higher OOPs will save money safely emphasize the importance of good price and quality data. One reason it's hard to shop for health care by price and quality is that relevant and accurate and timely information about price and quality are largely unavailable.

Were those data somehow made available—and used—they would not be particularly helpful in informing patients. To contain health costs safely and fairly, the key challenges are to identify which care is actually needed to diagnose and treat illness, and to weed out what's not needed. It's hard for patients to do either. That's because few are trained clinically.

If university employees and their families facing higher OOPs are not able to better shop by price and quality, to identify care needed to diagnose and treat their problems, or to weed out unnecessary health care services, they may well respond to higher OOPs by cutting use of care across the board—with little heed to need. Especially if they often must pay OOPs with costly after-tax dollars. Lower-income patients may be especially likely to do this.<sup>14</sup> That will reduce use of health care but it is likely to also harm health. It is likely to save money in the short run but might increase spending in the long run.

Financing health care by lower reliance on insurance and higher reliance on OOPs means that people who are sick pay more and people who are healthy pay less. This means that higher OOP burdens are likely to fall relatively heavily on older employees and their families, and on others who face acute or chronic health problems.

It is therefore reasonable to compare how people with costly illnesses—typically those requiring expensive emergency room or inpatient care or medications—would fare under the 2016 arrangements—compared to those of 2015. Would families be more or less able to afford 2016's higher OOPs? How many might be obliged for financial reasons to cut use of needed health care services? Of those who obtain needed care, how many will face heavy debt?

The task force's aims to slow the rise in health care costs and to finance more equitable retirement benefits are laudable. In one sense, it is hard to fault the task force for proposing higher OOPs. After all, U.S. employers increasingly rely on them. One reason is that they are a tool that employers can use to hold down their financial obligations to finance health care. A second reason is that other tools—that have been successfully used in other rich democracies to constrain health care costs—are politically unavailable in the U.S.

***Still, it is reasonable to distinguish between actions spurred by good intentions and by absence of alternatives, and actions actually likely to safely contain costs—or to operate in fair ways.***

Looking forward, if the higher OOPs for the PPO plan for 2016 do not effectively constrain the rise in health costs and premiums, would the university—citing the lack of acceptable alternatives—opt to continue to increase those OOPs? Or raise premiums? Or both? That might be a slippery slope. There may even be pressure to curtail use of FSAs, as they count toward triggering imposition of the Cadillac tax—if it remains on the books in 2018.<sup>15</sup>

→ ***Appendix 5 takes up these questions in greater detail.***

Two related suggestions <sup>16</sup>

**1. Monitoring and reporting.** The university is relying on higher OOPs to hold down health care costs. The task force report said this would happen through more careful shopping. Some evidence shows it happens through across-the-board reductions in use of care.

The SPH Faculty Senate has been considering urging evaluation of the effects of the changes in the PPO plan on use of care and the burden of medical costs on university employees, taking income, age, and zip code of residence into consideration.<sup>17</sup>

The university should monitor any changes of use of care from 2015 to 2016 by individuals enrolled in the PPO plan in both years. And it should report on those changes to faculty and staff. Use and cost of care should be monitored and reported by ages of employee and other family members, by gender, by income, by race/ethnicity, and by zip code of residence.

If this is considered research (not managerial program monitoring and improvement), it will require IRB approval. Research or not, it will require careful protection of confidentiality.

**2. *Public discussion of assumptions.*** The university should reveal to employees the assumptions on which the substantial cuts in both PPO and HSP premiums from 2015 to 2016 rest. It should report from time to time on the evidence on whether or to what degree to which these assumptions are borne out in practice.

## **Appendix 1 – Six types of out-of-pocket costs (OOPs)**

**a. Deductibles** are one important type of OOP cost. They are the dollar sums that the patient must pay before the insurance begins to pay anything for most care during a given calendar year.

- ✓ In the PPO plan, the deductible doesn't apply to in-office doctor visits, ER visits, or meds. BU health insurance helps to pay for these from the beginning, even before you satisfy your annual deductible. (But doctor visit and ER co-payments don't count toward the deductible—though they do count toward your annual OOP maximum.)
- ✓ In the PPO, no OOPs apply to in-network preventive care. Such care is fully covered by BU insurance.
- ✓ In the HSP, the deductible applies to all services (except in-network preventive care, which is never subject to OOPs).

**b. Co-insurance**, the other important type of OOP cost, is a percentage of the allowed charges that remain after satisfying the deductible. Allowed charges are prices negotiated by Blue Cross with individual caregivers. (Blue Cross administers all Boston University health plans.)

- ✓ For 2016, the PPO is adding 10% co-insurance for most in-network care after the deductible is satisfied. This makes the risk of incurring high OOPs in the PPO plan much greater in 2016 than it was in 2015.
  - PPO members pay no co-insurance at BMC.
  - PPO members pay 20% co-insurance if they use high-cost hospitals.
- ✓ Co-insurance in both PPO and HSP is 30% for out-of-network care.
- ✓ In the HSP plan, patients pay all costs OOP (except those for preventive care, which have no OOPs) until they satisfy their annual \$1,500/\$3,000 annual deductible. This includes doctor visits, ER visits, and medications.

**c. Co-payments (also called co-pays)** are a third type of OOP cost; they are usually small fixed-dollar sums that the patient pays at time of care, such as \$20 for an office visit or \$8 for a month's supply of a generic medication.

- ✓ In the PPO plan, patients pay only co-payments for doctor visits, ER visits, and medications even if they have not satisfied their deductible.
- ✓ The PPO plan specifies three tiers of drugs, generic, preferred brand-name, and non-preferred brand name.
  - The \$8/prescription OOP for generics is clearly a co-payment.

- The university descriptions of the PPO call the OOPs for the two types of brand-name drugs “co-insurance—20% for preferred brand-name drugs and 30% for non-preferred brand-name drugs.
- But since these OOPs are actually fixed in the range of \$40-60 for preferred brand-name drugs and \$60-80 for non-preferred brand-name drugs, these are really closer to co-payments than co-insurance.

**d. Uncovered costs**—Additionally, most families face health costs that are entirely uninsured. These include items like eyeglasses or contacts, hearing aids, and over-the-counter meds. These costs do not count toward an annual OOP maximum under insurance plans.

**e. Balance billing.** If patients are served by an out-of-network hospital or doctor, they may face balance billing, which is prohibited in-network. Balance billing means that an out-of-network hospital or doctor is permitted to bill you for the balance of its/his/her charges, above any sums your insurance may pay for out-of-network care. These balance bills can be very costly to you. Sometimes, your insurer is able to intervene on your behalf to persuade the hospital or doctor to reduce its balance billing. Balance billing you pay out-of-network may not apply to satisfying your out-of-network deductible or your annual OOP maximum.

The university’s materials on choosing health plans don’t really address balance billing. It’s hard for any employer to do so. There ought to be a law. New York has passed such a law.<sup>18</sup> (Unfortunately, balance billing of patients covered by large employers that “self-insure” can’t be regulated by states. Only Congress can do that. Unfortunately, some doctors’ groups lobby Congress to preserve balance billing.) Other states are considering doing so.

The Blue Cross network is said to include a very wide range of caregivers. But it pays to check with Blue Cross if you are not sure if a caregiver is in-network. Some caregivers say they “work with” a certain insurer or “accept” a certain insurer, but this may not be the same as being in-network.<sup>19</sup>

**f. Out-of-pocket annual maximum.** Both the PPO and HSP have annual OOP maximums. In network, the PPO OOP maximum is \$2,500/\$5,000 for most services.

The PPO has a separate annual OOP maximum for prescription drugs of \$2,000/\$4,000.

In the PPO, all in-network OOPs count toward satisfying the \$2,500/\$5,000 PPO OOP maximum except medications (because they have their own, separate, OOP maximum).

Co-payments for doctor office visits and ER visits count toward the annual PPO OOP maximum even though they don’t count toward the PPO deductible.

Since neither the PPO nor the HSP covers eyeglasses, contact lenses, hearing aids, most dental care, and certain other goods and services, families’ OOP payments for these things do not apply toward the annual OOP maximum.

***But—your FSA or HSA can be used to pay for these items with cheaper before-tax dollars in most cases.***

The HSP has a \$3,000/\$6,000 OOP maximum for all in-network services, including prescription drugs.

The two plans' OOP maximums for out-of-network care are a little more complicated. That's because any balance billing by out-of-network caregivers does not usually count toward the out-of-network OOP maximums.

Also, the in- and out-of-network OOP deductibles and maximums must be satisfied separately.

***→ Deductibles and co-insurance are generally the two big sources of high OOP costs. They therefore constitute the much greater potential threats to a family's financial well-being. For most patients, co-payments—except those for costly meds—do not add up to high financial burdens over the course of a year.***

## Appendix 2 – Individual and family caps on OOPs

*A very useful protection involves the distinction between individual and family caps.*

An important but subtle aspect of plan design limits families' deductibles and OOP annual maximum payments under both PPO and HSP plans.

This is the provision for separate deductibles and separate OOP annual maximum payments per individual and per family in the family plans.<sup>20</sup>

An example will help distinguish the two. The 2016 PPO OOP annual in-network maximum (excluding prescription drugs) is \$5,000 for families. But there is a separate \$2,500 annual cap for each individual.

This means that if one individual becomes ill and reaches their \$2,500 OOP cap, the ***PPO insurance covers all subsequent in-network non-prescription expenses for that individual.*** This holds true even if the family, as a whole, has not yet reached the family's \$5,000 annual non-prescription in-network OOP PPO cap.

The separate individual and family caps in the PPO plan operate for the general OOP maximum and also for the distinct prescription drug OOP maximum.

They also operate for the HSA plan's OOP maximums. (The same holds for the separate operation of deductibles under each plan.)

In both text and exhibits, the shorthand \$2,500/\$5,000 (and similar) refers to the PPO's \$2,500 individual maximum for in-network OOPs and to the PPO's \$5,000 family maximum for in-network OOPs.

### **Appendix 3 – Using cheaper before-tax dollars or costlier after-tax dollars to pay OOPs**

It's worth noting that families pay their shares of health insurance premiums with cheaper before-tax dollars. That is, money used to buy health insurance through an employer is not subject to federal or state income taxes. By contrast, imagine that a family had to pay its share of the premium for the 2016 family premium of \$5,445 for the PPO plan with costly after-tax dollars. That would require before-tax dollars equal to \$7,792—an increase of 43.1% for a Massachusetts family in a 25% federal income tax bracket.

This consideration is important. PPO plans have flexible savings accounts or FSAs and HSP plans have health savings accounts. Both of these are vehicles that allow families to pay OOP costs with before-tax dollars. But the HSP plans allow families to put aside much more money to pay OOP health costs with cheaper before-tax dollars. And that money is not subjected to the PPO's FSA use-it-or-lose-it requirement under federal law.

*Paying for OOPs in the PPO.* In 2016, the PPO plan will rely much less on premiums and much more on OOPs to finance health care costs. This means we should pay much closer attention to how we pay for those OOPs.

PPO patients will be paying for these higher OOP expenses with much more expensive after-tax dollars unless they establish flexible savings accounts (FSAs).

Annual contributions to FSAs are expected to be capped at \$2,550 in 2016, about 38% of the 2016 cap on contributions to HSAs. Sums contributed to an HSA in 2016 but not spent by 31 March of 2017 are forfeited—they do not roll over. The forfeiture provision makes contributing to FSAs much riskier than contributing to HSAs.

A practical example will help. Consider a Boston University employee whose annual family income falls in the 25% marginal bracket for federal income tax purposes (\$73,801 to \$148,850 in 2015). The marginal tax bracket of 25% is the share of the next dollar in income that would be paid in federal income taxes. If this employee's family resides in Massachusetts, it would also face a Massachusetts income tax of 5.15%. These sum to a combined marginal tax rate of 30.15%.

Families enrolled in the PPO plan without a flexible savings account (FSA) would have to pay much or all of their OOP medical costs with more expensive after-tax dollars.<sup>21</sup> How much of its own earnings would a family enrolled in the university's PPO plan in 2015 have to devote of to paying \$1,000 in OOP medical costs in 2015? It would have to use \$1,431.64 in before-tax dollars to pay \$1,000 in after-tax dollars for OOP medical costs. (\$1,431.64 in marginal earnings would be taxed at 30.15%, or \$431.64, leaving the family with \$1,000 in after-tax dollars with which to pay OOP medical costs.

This assumes that the family's OOP total plus family-paid health insurance premiums does not exceed 10% of adjusted gross income in 2015 and that the family itemizes deductions on its income tax return. OOP and premium costs in excess of 10% of adjusted gross income can be deducted from income subject to federal and Massachusetts income taxes.

*Paying for OOPs in the HSP plan.* Suppose this family enrolled in the university's HSP in 2015 and contributed \$1,000 of its own earnings to its health savings account (HSA). This reduces income subject to federal and state income taxes by \$1,000. Suppose further that this family takes this \$1,000 from its health savings account and uses it to pay OOP medical costs in 2015. It is paying OOPs with inexpensive before-tax dollars. These are inexpensive because they constitute earned income, paid by BU to the employee, that has not been taxed.

In 2016, families enrolled in the HSP plan may contribute up to an annual cap of \$6,750 in pre-tax dollars to their health savings accounts (less the university's \$1,000 payment). Contributions and earnings (interest and dividends) on contributions accumulate tax-free and are not taxed when withdrawn to pay for qualified medical expenses—whether while working or after retirement.<sup>22</sup>

Unspent HSA funds are vested and roll over tax-free from year to year. This means that families that can afford year after year to contribute sums well in excess of their average yearly OOP costs can use health savings accounts to shelter income from taxation and accumulate substantial untaxed wealth. HSA accumulations can be bequeathed tax-free to a spouse. On the passing of both spouses, money remaining in the HSA is taxed as ordinary income to beneficiaries of the estate.

Consequently, HSP enrollees who are willing and able to contribute or accumulate sums in their health savings accounts that are equal to or greater than their annual OOP exposure will be paying for all OOP expenses with before-tax dollars. They are also saving in a tax-sheltered vehicle to pay medical costs in later years of employment—or post-retirement.

Against this, it is vital to note that higher-income employees are likelier to be able to afford to contribute substantial sums to their HSAs (or FSAs), and therefore to enjoy the benefits of paying for OOPs with cheaper before-tax dollars.<sup>23</sup>

Further, higher-income employees are likely to face higher federal tax rates on their next \$1,000 of income. This is called the marginal tax rate.

It means that a higher-income person benefits more than does a lower-income person by deducting money from taxable income and by placing that money in an HSA or FSA. Why is that?

Consider this example.

- ✓ The marginal federal income tax rate for a family earning between \$18,451 and \$74,900 is 15%. So if such a family is willing and able to put \$1,000 of their earned income in an FSA or HSA in 2015, it **saves \$150 on federal income taxes in 2015.**
- ✓ The marginal federal income tax rate for a family earning between \$151,201 and \$230,450 is 28%. If such a family is willing and able to put \$1,000 of their earned income in an FSA or HSA in 2015, **it saves \$280 in federal income taxes in 2015—almost twice as much** in federal income taxes as the family earning \$18,451 to \$74,900.

Money contributed to FSAs or HSAs can be particularly valuable because it can be used to pay for eyeglasses/contact lenses, hearing aids, dental care, long-term care, and other items not covered under BU's health insurance plan.

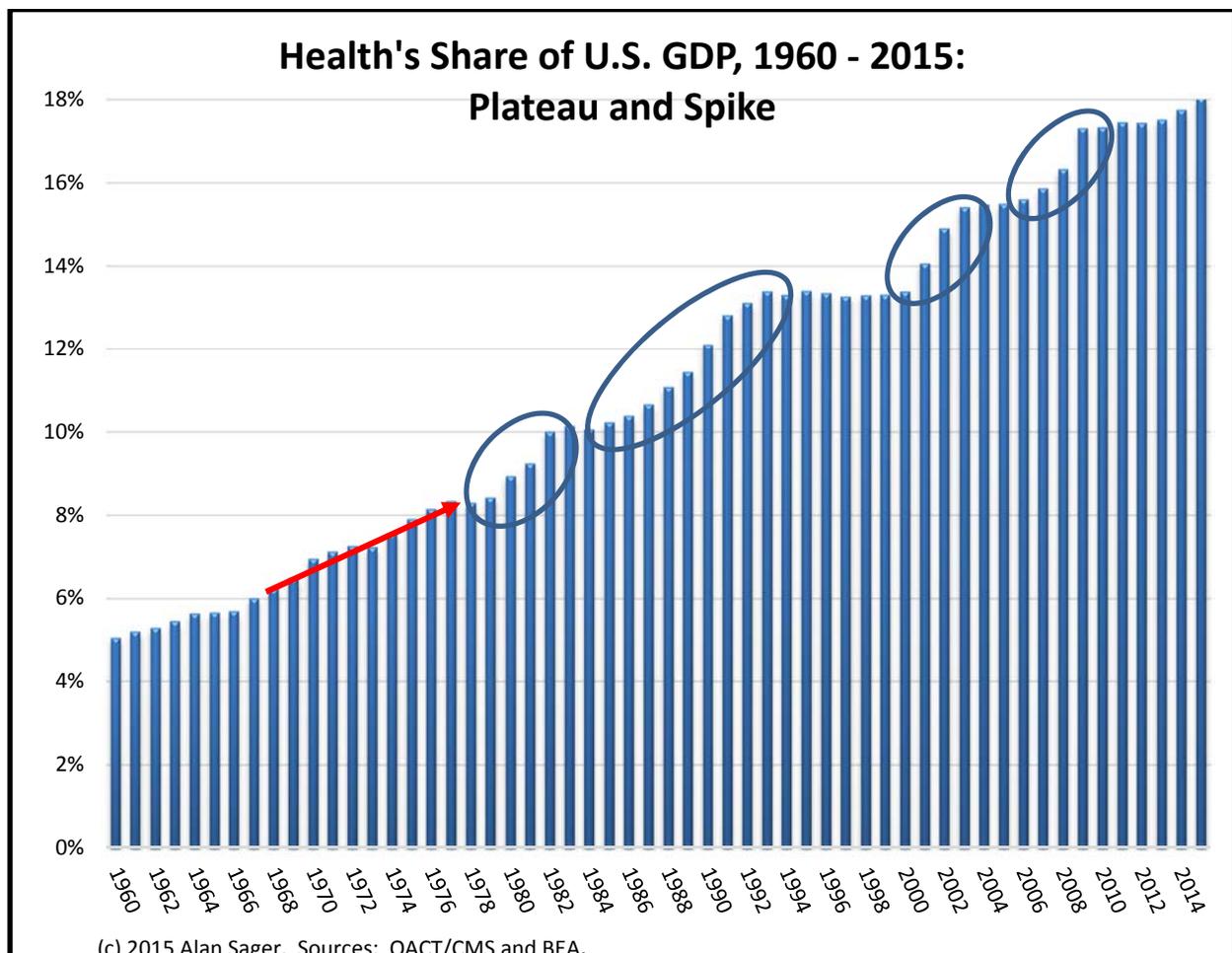
#### Appendix 4 – Why: Reasons for the Changes

Massachusetts has the world's most expensive health care. (U.S. health care costs are highest in the world and Massachusetts costs are highest in the U.S.)

This year, health costs nationally will be very close to \$10,000 per American.<sup>24</sup> In 2009, the most recent year for which comprehensive state-level data are available, Massachusetts personal health spending per capita was roughly 36% above the U.S. average.<sup>25</sup> If that excess continues to 2015, our state's health spending per person will be about \$13,600. With 2015 state population projected at about 6,782,000, health spending in Massachusetts will be about \$92.2 billion in 2015. That seems like a substantial sum. As one comparison, is equal to about 23.9% of projected personal income in Massachusetts in 2015.<sup>26</sup>

Over the years, many market/competitive and public/regulatory efforts have been made to slow the rise in U.S. health costs. Some have been hailed to work, for a time, but not one has been durably effective. As shown in Exhibit 5, U.S. health spending as a share of GDP has shown a pattern of plateaus and spikes for decades.

Exhibit 5



For a number of years after the start of the great recession of 2008, the rate of rise in health care spending fell below the average of recent decades. This was probably due to a combination of reduced insurance coverage, reductions in care-seeking by insured people owing to economic uncertainty, and reductions in care-seeking stemming from higher out-of-pocket payments. Some observers point to early effects of notional changes in methods of paying hospitals and doctors—from those rewarding higher volume to those rewarding higher value. But Drew Altman has recently pointed to new data suggesting an upward swing in health spending owing to a combination of economic recovery and improved coverage through the ACA's Medicaid expansions in many states and the subsidized individual purchases of coverage through marketplaces.<sup>27</sup>

In almost all other rich democracies, concentrated payer power (by all payers united or by single payers) helps to constrain health care spending by capping hospital budgets, limiting spending on doctors, regulating drug prices, and similar techniques. This reflects political consensus about the need to balance health spending against all other spending while covering all people and providing effective care. This constellation of approaches is not now politically feasible in the U.S.

As a way to contain costs, higher OOPs appeal both to those who prefer what they choose to call “competitive free markets” over government action and to those who fear that higher OOPs are the only politically acceptable tool to constrain cost increases.

Four additional reasons help to explain the growing reliance on higher OOPs to contain health care costs. These are the ACA's Cadillac tax, the growing belief that imposing higher OOPs is essential to slowing cost increases, the race-to-the-bottom factor, and—at Boston University—the desire to hold down increases in its own health costs in order to improve the equity of retirement benefits.

### 1. Cadillac excise tax

The ACA provides for a 40% tax on the value of health insurance benefits exceeding \$27,500 for family or two-spouse coverage in 2018. Mechanically, for example, Boston University health insurance benefits valued at \$30,000 in 2018 would exceed the cap by \$2,500 and would therefore trigger an excise tax payment of \$1,000 per family from the university to the federal government.

Health insurance benefits are not subject to federal personal or corporate income taxation today. These benefits include premiums paid by employers and employees, and also employee contributions to both flexible savings accounts associated with PPO and similar plans, and to health savings accounts associated with high-deductible plans like the university's HSP.<sup>28</sup> OOP payments financed by after-tax dollars (not made with before-tax dollars FSAs or HSAs) are not included in health insurance benefits.

After 2018, more and more families' health costs would become subject to the tax owing to the way in which its inflation provisions are designed. For the first two years, the \$27,500 trigger would be raised by overall inflation, measured by consumer price index (CPI) plus 1.0%. Subsequently, it would be raised by the CPI alone. But, for decades, health care costs have risen substantially faster than CPI prices.

Congress was motivated to include the Cadillac tax in the ACA for three reasons. One motive was to finance a small part of the cost of the ACA's access expansions. The Congressional Budget Office originally estimated that the Cadillac excise would raise some \$32 billion between 2010 and 2019, or some \$16 billion per year during the two years it would be in effect during that decade. This was about 3.6% of the projected costs of the law's access expansions.<sup>29</sup>

The second motive is to cap the value of health benefits not subject to federal personal or corporate income taxation. This was spurred in part by recognition that higher-income families and individuals benefit disproportionately from the tax-deductibility of money spent on health benefits—since they are in higher marginal tax brackets, are more likely to be insured against health costs, and enjoy more comprehensive health insurance benefits on average.

The third motive stemmed from a belief that the tax would help contain health care costs in a safe and fair manner. This was probably the main reason for including it in the ACA. The motive rested on a belief that high insurance premiums stemmed in large part from extensive health insurance benefits, and that such generous or over-generous benefits spurred humans to over-use health care (see “moral hazard” discussion in following section).

*But would the tax help to contain costs in a safe manner?* An analysis by Gabel and colleagues, though, found that “Only 3.7% of the variation in the cost of family coverage can be explained by benefit design (actuarial value).” And only 6.1% of variation can be explained by plan type (HMO - PPO – HSP) *combined* with benefit design.<sup>30</sup> This suggests that regional caregiver configuration, caregiver leverage over commercial payers, physician practice patterns, input prices, and demography are substantially more important than health insurance benefits or health insurance plan design in explaining cost of family coverage.

*More important, would the university's changes in health plans for 2016 even do much to help it avoid or reduce its Cadillac excise tax penalties?* Answering this question has several elements. First, which health care payments—in addition to health insurance premiums—count toward the Cadillac excise tax threshold?

- ✓ It is clear that university's sliding scale contributions to both flexible savings accounts (FSAs) and its rigid \$1,000 contribution to family HSAs would count toward the Cadillac tax calculation.
- ✓ Employee contributions of pre-tax dollars to FSAs would certainly count as well.
- ✓ Perhaps most important, at this writing, the IRS anticipates that “pre-tax employee contributions to health savings accounts [would] be counted in determining the cost of coverage.”<sup>31</sup>

But looking beyond the legal categorization of dollars that count toward the Cadillac excise tax threshold, we see the practical question of how much money will families actually contribute to their FSAs and HSAs. The more families contribute, the closer the university comes to paying the tax.

These elements of calculating all the health benefits subject to Cadillac tax penalties make it appreciably more difficult for employers to try to escape the Cadillac tax penalties by shifting health insurance burdens from premium to pre-tax FSA or HSA contributions. Reducing insurance premiums rests on reducing insurance coverage and increasing OOPs themselves. In response, families are expected to do two things. One is to shift from PPO to HSP coverage.

The other is to put dollars in FSAs and HSAs to pay for rising OOPs with cheaper pre-tax dollars. But the more families respond rationally to their reduced insurance coverage, the closer the university comes to triggering imposition of the Cadillac tax.

In other words, to the extent that families are willing and able to act in their own financial self-interest by using much cheaper before-tax dollars to pay OOPs—funding HSAs (and FSAs as well)—the university's plan to avoid imposition of the Cadillac tax will be undermined.

Interestingly, it is higher-income families or those with greater discretionary incomes that are likely to continue, year after year, to contribute the maximum tax-exempt sums to their HSAs. If many families do this, the university will be more likely to face imposition of the Cadillac Excise Tax. But this might spur the university to further raise OOPs—which are likelier to harm lower-income families, as discussed shortly.

Many might see all this as somewhat perverse.

Thus, just as the Cadillac tax may do little to contain health costs, the university's redesign of health benefits may not be very effective in helping to attain its aim of avoiding the tax's penalty through greater reliance on HSP plans.

## 2. Endorsement of value of higher OOPs

In the U.S., belief has grown in recent decades that competitive free markets can exist in health care and that they can contain health care costs safely and effectively. This growth has rested on some analysis, some ideology, and some assessment that the main alternative cost control techniques that have been effective in other nations are simply not available politically in the U.S.

Analysis includes some of the assessments of the results of the Health Insurance Experiment of the mid-1970s. It was found, unsurprisingly, that people with better insurance coverage (and fewer OOP obligations) used more care. Some analysts concluded that the higher OOPs did not discourage use of needed care, but others found that lower-income people and those in worse health who faced higher OOPs did suffer inferior health outcomes by some measures. Older people and people with serious disabilities precluding work were not included in the experiment.

Ideology includes the view that a functioning competitive free market can be created in health care—or at least something close to such a market. If so, efficiency would be enhanced, as would satisfaction of consumer demand expressed through purchasing power. Sovereign consumers would independently choose how to spend their own money. Solid insurance coverage—especially first-dollar insurance without OOPs—would no longer insulate notional consumers from spending their money on health care much more carefully.

In this view, comprehensive or first-dollar health insurance coverage leads some people to neglect their health and induces others to over-use health care.<sup>32</sup>

The main purpose of the Medicare Modernization Act of 2003 was to create the Medicare Part D prescription drug program. But it also enacted the first federal endorsement of high-deductible health insurance, combined with health savings accounts that would allow people to pay for

OOPs with before-tax dollars. These may be particularly attractive to younger and healthier people, especially those with higher incomes, because (subject to annual ceilings) dollars deposited in HSAs are exempt from federal (and most states') income taxes, earnings accumulate tax-free, withdrawals to pay medical costs are tax-free. The accounts are vested, just like 401 retirement accounts.

The 2010 ACA further endorses higher OOPs. It provides for 2015 OOP maximums of \$6,600 for individuals and \$13,200 for families in the subsidized individual health insurance plans sold through federal or state marketplaces.<sup>33</sup> These OOPs are, though, substantially reduced for people with incomes under 250% of the federal poverty level who buy silver plans.<sup>34</sup>

Hoping to hold down growth in insurance premiums, more and more employers have been resorting to high-deductible health plans plus health savings accounts. Fully 82% of employers offer high-deductible health plans (HDHP) currently. In 2015, 30% of employers offer “only an HDHP (up from 16% in 2014).”<sup>35</sup> In 2015, HDHPs must require annual family deductibles of at least \$2,600.

Reliance on higher OOPs to contain costs safely appears to be well-intentioned (why should we doubt others' intentions?), desperate (reflecting the absence of other politically feasible methods of containing costs), but wrong-headed (since they don't seem to be a safe or effective or fair way to contain health costs).

Opponents of higher OOPs might assert that comprehensive insurance coverage makes it easier for all people to use needed health care. And most people have better things to do with their time than seek care unnecessarily, even if it has zero price when sought.<sup>36</sup> (Still others would be reluctant to use needed care even if it were free; they might need to be bribed to obtain medically appropriate care by seeing a doctor or going to an ER.) Most rich democracies find that comprehensive insurance coverage with lower OOPs than prevail in the U.S. is compatible with spending levels much lower than in the U.S.<sup>37</sup>

Some might imagine that a combination of generous insurance coverage and payment methods that have for many decades rewarded volume over value has resulted in high volumes of care in the U.S. Examination of OECD data indicates otherwise: U.S. rates of physician visits and hospital discharges are well below OECD medians.<sup>38</sup> Some have argued, fairly persuasively, that U.S. high costs stem more from higher prices than from higher use rates.<sup>39</sup> If price is indeed a bigger source of high U.S. costs than volume, and if higher OOPs are more effective in inducing cuts in volume—as may well be the case—then boosting OOPs to high levels would constitute shooting at the wrong target.

Those who credit the moral hazard problem tend to favor forcing people to shop by price and quality in hopes of reducing unnecessary care and of saving money. To do so, it is essential to take several steps: a) increasing OOPs; b) making available better information about where to seek care—information on price and quality of care; and c) making available better information on whether to seek care.

In practice, it has proven easy to boost OOPs. Annual deductibles, co-insurance shares, and annual ceilings on OOPs have been rising and more employers are relying on them to hold down premiums.<sup>40</sup>

Unfortunately, despite considerable effort, it has proven unexpectedly difficult to provide valid and relevant information about prices people would actually pay for various types of health care.

The complexity of pricing and the unpredictability of health care use have slowed progress.<sup>41</sup> Also, some insurers prefer to keep secret the prices they pay various caregivers, fearing that public disclosure might lead lower-paid caregivers to demand that their prices be leveled upward.

It has proven even harder to compile and disseminate valid and relevant information about quality of care. Available data about hospitals' quality are hard to use. They often provide many discrete measures but few valid summary measures. One indication of their weak validity is their unreliability: Various quality evaluations disagree about which hospitals are better.<sup>42</sup>

Trustworthy data about physicians' quality are even harder to obtain. One reason is that physicians have not yet been enthusiastic even about providing data that Medicare could employ to try to modulate doctors' fees by the value of their care. Another is that it is difficult to obtain valid measures of quality for almost one million U.S. physicians. (There are, by contrast, only about 5,000 hospitals.)<sup>43</sup>

Perhaps most important, even if better information about price and better information about quality could be assembled, the vast majority of patients would still find it hard to do the two things that would be essential to safely containing health costs: first, to compare price and quality of various caregivers and second, to assess whether various individual services were actually needed.



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Swartz's 2010 synthesis of "Cost-sharing: Effects on Spending and Outcomes" concluded that

- ✓ "Cost-sharing may not be an effective tool to reduce the rate of growth of health care costs. . . .
- ✓ "Patients do not accurately discriminate between essential and nonessential services when responding to changes in cost-sharing. . . .
- ✓ "Cost-sharing increases are associated with adverse outcomes for vulnerable populations."<sup>44</sup>

Brot-Goldman and colleagues recently reported on changes in health care use and costs by employees of a firm that shifted all employees to a high-deductible health plan with health savings accounts. They found that spending on care dropped by 19%. There was little price-shopping by patients. Instead, patients simply cut volume—they used less care. And they did so across-the-board. Imaging was down by 22%, inpatient care by 14%, ER use by 27%, and preventive care dropped by 15%.<sup>45</sup> The last is somewhat surprising since preventive services

are usually treated preferentially when OOPs are hiked. They are often—as at BU—not subjected to any cost-sharing.

Deductibles, co-insurance, and co-payments for health care are fixed-dollar costs in the sense that they almost never vary with family income. They therefore constitute higher shares of the incomes of lower-income people than of higher-income people. This means that they act more strongly to inhibit lower income people's use of care.

Since higher OOPs are supposed by their proponents to make people smarter consumers and to deter use of unneeded care, they would do so much more equitably if they were income-conditioned—that is, if they were substantially higher for people with higher incomes. But this would add a second layer of administrative complexity to the already complex job of tracking of out-of-pocket costs. And it might be politically unattractive to higher income people, who are more likely to vote.

Higher OOPs undermine use of needed care by lower-income Americans. Collins and colleagues examine the growing problem of under-insurance.<sup>46 47</sup> The share of people insured year-round who were under-insured grew from 12% in 2003 to 23% in 2014. Under-insured adults were twice as likely to report problems with medical bills as those who were not under-insured. They suffered lower credit ratings, were more likely to use all of their savings, and other financial problems. And they were twice as likely as people not under-insured to report failure to see a doctor about a health problem, to fill a prescription, or to obtain a recommended treatment.

It seems unlikely that higher OOPs will succeed in improving American patients' abilities to shop—as sovereign and competent consumers—for health care by price and quality.

It seems unlikely that higher OOPs will lead patients to discriminating by weeding out unneeded care and by cherishing needed care.

Instead of making Americans into wiser consumers, higher OOPs may be undermining patients' ability and willingness to comply with the diagnoses and treatments offered by people with actual clinical training—graduates of medical and osteopathic schools.

It also seems unlikely that higher OOPs can be administered in a way that is fair to all Americans across the widening spectra of income and wealth.

Still, we can expect OOPs to grow in the years ahead. The university's plan for 2016 puts the university on course to boost OOPs, not because they work to safely and effectively and fairly restrain health cost growth, but because they seem to be—or are believed to be—the most powerful tool the university can wield to hold down premium growth and also, perhaps, growth in health benefits subject to the Cadillac excise tax.

### 3. Other factors

A race-to-the bottom factor may also be at work, though this is probably less important than the two just discussed. At a time when many other employers are boosting their health plans' deductibles, co-insurance, and maximum OOP limits, the university may worry that failure to imitate those others may cause more employees and families to sign up for B.U. health

insurance. Couples who work for separate employers generally have the choice of obtaining health insurance together from either employer or separately from both employers. If B.U. health insurance provides better coverage for the money (and with lower OOPs) than do other employers, more couples will opt for health insurance through B.U. This could cause the university to pay a disproportionate share of the health costs of its employees and their families.

Similarly, the university may be concerned that, if it continues to offer a low-OOP health insurance option, people with chronic health problems may gravitate to faculty and non-faculty jobs here, thereby accelerating the rise in costs of health insurance to the university. In another view, though, the university might thereby attract potential employees who value good health and prefer to work at a university that provides more financially secure health insurance—coverage with less financial risk and worry.

One added important reason the university would like to slow the rise in its costs of health insurance stems from its stated desire to selectively increase its payments for retirement benefits in order to boost the equity of its retirement plans across the income spectrum.

## ***Appendix 5 – What Might Be the Possible Effects of These Changes? Will They Work?***

### 1. Short-term

What will be the effects of the changes—on various people, on health care use, on health care outcomes, and on health care costs?

In 2016, total premiums for both PPO and HSP plans are falling dramatically from their 2015 levels.

Annual premiums paid by families are falling rapidly for the PPO plan but remain essentially unchanged for the HSP plan.

The rise in the deductible and the introduction of comprehensive co-insurance for most services in the PPO plan for 2016 may persuade some people to shift to the HSP plan because its annual premium will remain well below those of the PPO plan.

The changes in the PPO plan initiate a very substantial shift in health care costs from insurance premiums to OOP payments.

This will reduce the degree of risk-sharing that accompanies group health insurance through the job. This means that people with chronic illness or who suffer costly acute illnesses will pay more OOP when they use health care starting in 2016 than they paid previously. They will still benefit from lower family-paid PPO premiums in 2016—but will suffer a large rise in offsetting OOP costs.

Especially if they are unable or unwilling to channel money saved through the lower PPO premium into their FSA.

PPO enrollees who use less care in 2016 will pay less in total in 2016 because they will enjoy the benefits of lower total premiums without big offsetting rises in OOPs.

More generally, this is likely to mean that younger and healthier people employed by the university, and their dependents will pay less while older and sicker people will pay more.

This signals an attenuation of a long-standing inter-generational income transfer through health insurance. (Boden calls this not an inter-generational transfer but as a “within-individual lifetime smoothing of health care costs. That is, I pay more than expected costs while young but less while older.”<sup>48</sup>)

In past years and decades, younger and healthier university employees and families effectively subsidized older and sicker people through group insurance. That’s because all generally paid the same premiums even though younger/healthier people used less care, on average, while older/sicker people used more.

This cross-subsidy is being attenuated by the shifting of costs from premiums to OOPs in the university’s PPO plan for 2016. If younger and healthier people were to gradually switch from the PPO to the HSP plan over time, this cross-subsidization from younger/healthier to older/sicker would decline even faster.

This means that those long-term university employees now in their mid-40s through mid-60s—who paid a combination of premiums and OOPs that were higher than those warranted by their own individual or family circumstances in past years or decades—will probably enjoy less chance of paying a combination of premiums and OOPs that will be lower than those warranted by their own individual or family circumstances in their remaining time on university health insurance. They gave but they will not get in return.

Finally, different people seek different things from their health insurance and health care. Health, wealth and income, health costs in recent years, expected future costs, age, attitudes toward risk and uncertainty, willingness and ability to decide what care to use, desire for insulation from financial calculations when using care, and other factors all help to shape our objectives.

B.U. employees and families who prefer greater predictability and financial security by paying higher premiums and lower OOPs will have less chance of realizing that preference in the years ahead.

## 2. Longer term

Unless health costs are somehow brought under control in the years ahead, the university may be led to steadily increase its shift of employee health care costs from premiums to OOPs. This could be reinforced by instability in the higher-premium PPO plan—if, for example, it suffers a gradual underwriting death spiral as rising premiums relative to those of the HSP plan (and higher OOPs relative to past years' PPO plan) steadily drive away the less ill, less costly, or less risk-averse patients.

Some employers are eliminating insurance options with low OOPs entirely. Brot-Goldman and colleagues note that 82% of employers offer high-deductible health plans currently. In 2015, 30% of employers offer “only an HDHP (up from 16% in 2014).”<sup>49</sup>

This would make for reduced risk-sharing through insurance and increased financial burdens on people suffering from costly acute or chronic illnesses. One consequence of this might be reduced care-seeking by some people with costly illnesses, along with higher medical debt for people with costly illnesses who continue to seek care.

Were these trends to continue, the level of insecurity associated with health and medical care could rise steadily in the decades ahead. Of course, these trends might be interrupted by public demands for greater medical security, disenchantment with the high burden and low efficacy of high-OOP plans, changes in the nation's economy or politics, or other factors.

In the years ahead, people who live, work, or use health care in Massachusetts deserve greater medical security, not less. Our highest-in-the-world health costs should make greater medical security possible. There is therefore great reason for optimism.

## Endnotes

<sup>1</sup> Julie Appleby, “Workplace Wellness Programs: Early Alarm for Workers’ Health or a Recipe for Over-testing?” *Kaiser Health News*, 5 October 2015.

<sup>2</sup> Boston University Employee Benefits Task Force, *Report and Recommendations*, 22 December 2014, p. 20; Boston University, *Benefits 2016: Guide to Recommended Changes*, <http://www.bu.edu/benefitstaskforce/files/2015/02/Recommended-Changes-Guide.pdf>

<sup>3</sup> Boston University, *2016 Medical Plan Options*, <http://www.bu.edu/hr/oe/>.

<sup>4</sup> In 2015, the eleven high-cost Massachusetts hospitals designated by Blue Cross are Baystate, Children’s, Brigham, Cape Cod, Dana-Farber, Fairview, Mass General, North Shore, South Shore, Sturdy, and U. Mass – Memorial. See Boston University, “Blue Cross Blue Shield List of High-cost and Low-cost Providers in Massachusetts,” n.d.

<sup>5</sup> Another consideration is that of privacy. Some BU employees may interact professionally with BMC employees, including clinical staff, and it has been suggested that some may feel a loss of privacy if they use BMC. But against this, professional contacts with BMC clinicians may be associated with speedier or more personal care. Some patients may welcome seeing familiar faces.

<sup>6</sup> See Boston University, “Blue Cross Blue Shield List of High-cost and Low-cost Providers in Massachusetts,” n.d.

<sup>7</sup> In the same spirit, Voltaire wrote that the Holy Roman Empire was neither holy, nor Roman, nor an Empire.

<sup>8</sup> Contributions to a flexible savings account are capped at \$2,550 yearly in 2015. FSAs are far less flexible than HSAs because 2015 FSA contributions not used to pay for allowed medical expenses by 31 March of 2016 are forfeited.

<sup>9</sup> See Priyanka Dayal McCluskey, “Blue Cross Extends Revised Contracts for Care,” *Boston Globe*, 5 October 2015, <http://www.bostonglobe.com/business/2015/10/05/big-hospital-operators-adopt-new-payment-system-aimed-controlling-costs/Uz2Coc0RzP5EYIWfWt5YoM/story.html>.

<sup>10</sup> Will PPO patients facing higher OOPs choose or be obliged to use less care? Will any assumptions about higher use of BMC by patients seeking to avoid expensive co-insurance burdens be borne out? Will any lower prices negotiated with BMC persist?

Will Blue Cross’s recently expanded alternative quality contract spur some doctors or hospitals to spend money more carefully? If so, will substantial net savings materialize—savings net of bonuses paid by BC to doctors or hospitals that cut use and cost of care? See Priyanka Dayal McCluskey, “Blue Cross Extends Revised Contracts for Care,” *Boston Globe*, 5 October 2015, <http://www.bostonglobe.com/business/2015/10/05/big-hospital-operators-adopt-new-payment-system-aimed-controlling-costs/Uz2Coc0RzP5EYIWfWt5YoM/story.html>.

See, for example, Zirui Song and others, “The ‘Alternative Quality Contract,’ Based on a Global Budget, Lowered Medical Spending and Improved Quality,” *Health Affairs*, Vol. 31, No. 8 (August 2012), pp. 1-10. But see Kip Sullivan, “Misleading Title and Abstract,” *Health Affairs*,

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letter, 14 November 2012, [http://content.healthaffairs.org/content/31/8/1885.full/reply#healthaff\\_el\\_475857](http://content.healthaffairs.org/content/31/8/1885.full/reply#healthaff_el_475857). See also, Jordan Rau and Jenny Gold, "Medicare Fails to Save Money So Far on Cooperative Care Experiment," *KHN, NPR*, 14 September 2015, <http://www.npr.org/sections/health-shots/2015/09/14/440240225/medicare-fails-to-save-money-so-far-on-cooperative-care-experiment>.

<sup>11</sup> In 2015, the eleven high-cost Massachusetts hospitals designated by Blue Cross are Baystate, Children's, Brigham, Cape Cod, Dana-Farber, Fairview, Mass General, North Shore, South Shore, Sturdy, and U. Mass – Memorial. See Boston University, "Blue Cross Blue Shield List of High-cost and Low-cost Providers in Massachusetts," n.d.

<sup>12</sup> Boston University Employee Benefits Task Force, *Report and Recommendations*, 22 December 2014, p. 20.

<sup>13</sup> Improving the fairness of retirement benefits has been deferred until at least 2017.

<sup>14</sup> Sara R. Collins and others, *The Problem of Underinsurance and How Rising Deductibles Will Make It Worse*, Commonwealth Fund Publication No. 1817, Vol. 13, May 2015, <http://www.commonwealthfund.org/publications/issue-briefs/2015/may/problem-of-underinsurance>.

<sup>15</sup> Brian Faler, "'Cadillac Tax' Could Wreck Popular Medicare Accounts," *Politico*, 31 August 2015.

<sup>16</sup> Please refer also to the BUSPH Faculty Senate's October 2016 letter to the university administration about the 2016 health insurance choices, <http://www.bu.edu/sph/faculty-staff/faculty-senate/>.

<sup>17</sup> Les Boden, Personal Communication.

<sup>18</sup> "New York's 'No Surprises' Law Takes Hold to End Balance Billing," *KHN*, <http://www.healthcarefinancenews.com/news/new-yorks-no-surprises-law-takes-hold-end-balance-billing>.

<sup>19</sup> Julie Appleby, "N.Y. Attorney General Reaches Agreement With Urgent Care Clinics In First 'Surprise Medical Bill' Action," *KHN*, 16 October 2015.

<sup>20</sup> Thanks to Nimet Gundogan for pointing out this important protection.

<sup>21</sup> Contributions to a flexible savings account are capped at \$2,550 yearly in 2015. FSAs are far less flexible than HSAs because 2015 FSA contributions not used to pay for allowed medical expenses by 31 March of 2016 are forfeited.

<sup>22</sup> In practice, the annual maximum family contribution would be \$5,650, since the university's contribution of \$1,000 to a family's health savings account would count toward the annual ceiling on pre-tax dollar contributions.

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<sup>23</sup> Lorens A. Helmchen and others, "Health Savings Accounts: Growth Concentrated among High-income Households and Large Employers," *Health Affairs*, Vol. 34, No. 9 (September 2015), pp. 1594-1598.

<sup>24</sup> More accurately, the author estimates CY2015 health spending per person at \$9,984. This reflects national health expenditures of \$3,207,300,000,000 in 2015 (Andrea M. Sisko and others, "National Health Expenditure Projections, 2013-23: Faster Growth Expected with Expanded Coverage and Improving Economy," *Health Affairs*, Vol. 33, No. 10 (October 2014), pp. 1841-1850, <http://content.healthaffairs.org/content/33/10/1841.full.pdf+html>. Projected U.S. population on 1 July 2015 is 321,234,172, calculated by taking the Census Bureau's 1 July 2014 estimate and raising it by the rate of increase from 2013 to 2014.

<sup>25</sup> For CMS estimates of health spending by state of residence from 1991 to 2009, see CMS health statistics, <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsStateHealthAccountsResidence.html>.

<sup>26</sup> Massachusetts personal income in 2014 was some \$399,204 million. Increasing this by the 4.1894% rate of rise from 2013 to 2014 yields an estimated personal income of \$415,928 million in the state in 2015. Dividing \$92.2 billion in projected health care spending by this sum yields a share of 23.852%. For personal income data, see BEA, "State Personal Income, 2014," News Release with Tables, BEA 15-12, 25 March 2015, <http://www.bea.gov/newsreleases/regional/spi/2015/pdf/spi0315.pdf>.

<sup>27</sup> Drew Altman, "New Evidence Health Spending Is Growing Faster Again," *WSJ Washington Wire*, 12 June 2015, [http://blogs.wsj.com/washwire/2015/06/11/new-evidence-health-spending-is-growing-faster-again/?utm\\_campaign=KFF%3A+Drew%27s+Columns&utm\\_source=hs\\_email&utm\\_medium=email&utm\\_content=18295944&hsenc=p2ANqtz-xL6Ksj869FD4wvcZzXMcPkdMCsRyesCvgdBAZoJ-RsJxnzTxbRQcxKmaa-dH1oa7KJgVgjnIDdA6NIJkn7fTXexT3IQ&hsmi=18295944](http://blogs.wsj.com/washwire/2015/06/11/new-evidence-health-spending-is-growing-faster-again/?utm_campaign=KFF%3A+Drew%27s+Columns&utm_source=hs_email&utm_medium=email&utm_content=18295944&hsenc=p2ANqtz-xL6Ksj869FD4wvcZzXMcPkdMCsRyesCvgdBAZoJ-RsJxnzTxbRQcxKmaa-dH1oa7KJgVgjnIDdA6NIJkn7fTXexT3IQ&hsmi=18295944).

<sup>28</sup> Julie Piotrowski, "Excise Tax on 'Cadillac' Plans," Health Policy Brief, *Health Affairs*, 2013, [http://healthaffairs.org/healthpolicybriefs/brief\\_pdfs/healthpolicybrief\\_99.pdf](http://healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_99.pdf).

<sup>29</sup> Douglas W. Elmendorf (Director, Congressional Budget Office, "Letter to Speaker Nancy Pelosi," 20 March 2010, Table 2, <https://www.cbo.gov/sites/default/files/amendreconprop.pdf>.

<sup>30</sup> Jon Gabel and others, "Taxing Cadillac Health Plans May Produce Chevy Results," *Health Affairs*, Vol. 29, No. 1 (January 2010), pp. 174-181, <http://content.healthaffairs.org.ezproxy.bu.edu/content/29/1/174.abstract>.

<sup>31</sup> Ayla Ellison, "IRS Provides Guidance on 'Cadillac' Health Plan Tax," *Becker's Hospital Review*, 25 February 2015. For details, see IRS, "Section 4980I — Excise Tax on High Cost Employer-Sponsored Health Coverage Notice 2015-16," n.d., <http://www.irs.gov/pub/irs-drop/n-15-16.pdf>.

<sup>32</sup> See, for example, Mark V. Pauly, "The Economics of Moral Hazard," *American Economic Review*, Vol. 58, No. 3, Part 1 (June 1968), pp. 531-537, <http://www.ppge.ufrgs.br/giacomo/arquivos/eco02072/pauly-1968.pdf>.

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- <sup>33</sup> See <https://www.healthcare.gov/glossary/out-of-pocket-maximum-limit/>
- <sup>34</sup> See <https://www.healthcare.gov/glossary/out-of-pocket-maximum-limit/>.
- <sup>35</sup> Zarek Brot-Goldberg and others, "What Does a Deductible Do? The Impact of Cost-Sharing on Health Care Prices, Quantities, and Spending Dynamics," presentation, 12 June 2015, <http://eml.berkeley.edu/~bhandel/wp/BCHK.pdf>.
- <sup>36</sup> For example, see Malcolm Gladwell, "The Moral-hazard Myth," *The New Yorker*, 29 August 2005, <http://www.newyorker.com/magazine/2005/08/29/the-moral-hazard-myth>.
- <sup>37</sup> U.S. OOPs are generally higher than those in other OECD nations. Our health costs per person are two to two and one-half times as great. The risk that high U.S. OOPs may lead to inability to seek needed care is heightened by our nation's first-place position among rich democracies in income inequality.
- <sup>38</sup> OECD, *Frequently Requested Data, 2014*, <http://www.oecd.org/els/health-systems/oecd-health-statistics-2014-frequently-requested-data.htm>.
- <sup>39</sup> See, for example, Gerard F. Anderson and others, "It's the Prices, Stupid: Why the United States Is So Different from Other Countries," *Health Affairs*, Vol. 22, No. 3 (May-June 2003), pp. 89-105, <http://content.healthaffairs.org/content/22/3/89.full.pdf+html>.
- <sup>40</sup> Gary Claxton and others, "Consumer Assets and Patient Cost Sharing," Kaiser Family Foundation Issue Brief, February 2015, <http://kff.org/health-costs/issue-brief/consumer-assets-and-patient-cost-sharing/>; Deloitte Health Solutions, "Dig Deep: Impacts and Implications of Rising Out-of-pocket Health Care Costs, 17 November 2014 <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/life-sciences-health-care/us-lchs-dig-deep-hidden-costs-112414.pdf>; and Kaiser Family Foundation and Health Research and Educational Trust, *Employee Health Benefits: 2014 Summary of Findings*, <http://files.kff.org/attachment/ehbs-2014-abstract-summary-of-findings>.
- <sup>41</sup> Mike Mitka, "Release of Data on What Hospitals Charge Appears More Likely to Confuse Rather than Enlighten Consumers," *JAMA*, Vol. 310, No. 2 (10 July 2013), pp. 130-131; Eric Whitney, "Colorado's Elusive Goal: A Complete, Useful Health Care Price List," *Kaiser Health News*, 19 February 2014, <http://www.npr.org/sections/health-shots/2014/02/12/276001379/elusive-goal-a-transparent-price-list-for-health-care>; Chad Terhune, "California, 44 Other States Fail at Posting Medical Prices, Report Says," *Los Angeles Times*, 24 March 2014, <http://articles.latimes.com/2014/mar/25/business/la-fi-mo-health-prices-report-card-20140323>; Mark Merlis, *Health Care Price Transparency and Price Competition*, "National Health Policy Forum Background Paper, 28 March 2007, [http://www.nhpf.org/library/background-papers/BP\\_PriceTransparency\\_03-28-07.pdf](http://www.nhpf.org/library/background-papers/BP_PriceTransparency_03-28-07.pdf); and Government Accountability Office, *Health Care Price Transparency: Actions Needed to Improve Cost and Quality Information for Consumers*, GAO-15-11, October 2014, <http://www.gao.gov/assets/670/666572.pdf>.
- <sup>42</sup> J. Matthew Austin and others, "National Hospital Ratings Systems Share Few Common Scores and May Generate Confusion Instead of Clarity," *Health Affairs*, Vol. 34, No. 4 (March 2015), pp. 423-430, <http://content.healthaffairs.org/content/34/3/423.full.pdf+html>; Jordan Rau, "Medicare Assigns Poor-to-middling Scores to Washington Area's Hospitals," *Washington Post*,

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<sup>43</sup> Robert A. Berenson and Deborah R. Kaye, “Grading a Physician’s Value—The Misapplication of Performance Measurement,” *New England Journal of Medicine*, 28 November 2013, <http://www.nejm.org/doi/pdf/10.1056/NEJMp1312287>; Darius Tahir, “More Docs Report Quality Data and E-prescribe but Many Prefer Penalty,” *Modern Healthcare*, 24 April 2014, <http://www.modernhealthcare.com/article/20150424/NEWS/150429944?template=print>; and *Transparency of Physician Quality Information*, 16 December 2014, <http://www.hci3.org/sites/default/files/files/2014%20Quality%20Report%20FINAL%201.pdf>.

<sup>44</sup> Sarah Goodell and Katherine Swartz, “Cost-sharing: Effects on Spending and Outcomes,” *The Synthesis Project*, Policy Brief No. 20, December 2010, [http://www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2010/rwjf402103](http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2010/rwjf402103); Katherine Swartz’s full report is here, <http://www.rwjf.org/en/library/research/2011/12/cost-sharing--effects-on-spending-and-outcomes.html>.

<sup>45</sup> Ben Handel, “Health Care Cost-sharing Prompts Consumers to Make Big Cuts in Medical Spending,” *The Conversation*, 15 June 2015, <https://theconversation.com/health-care-cost-sharing-prompts-consumers-to-make-big-cuts-in-medical-spending-41657>.

<sup>46</sup> Sara R. Collins and others, *The Problem of Underinsurance and How Rising Deductibles Will Make It Worse*, Commonwealth Fund Publication No. 1817, Vol. 13, May 2015, <http://www.commonwealthfund.org/publications/issue-briefs/2015/may/problem-of-underinsurance>.

<sup>47</sup> Collins and others defined under-insurance as

- ✓ OOPs—excluding premiums—exceeding 10% of household income yearly
- ✓ Or OOPs excluding premiums exceeding 5% or more of income for people below 200% of the federal poverty level
- ✓ Or a deductible exceeding 5% of household income

<sup>48</sup> Les Boden, Personal Communication, 19 June 2015.

<sup>49</sup> Zarek Brot-Goldberg and others, “What Does a Deductible Do? The Impact of Cost-Sharing on Health Care Prices, Quantities, and Spending Dynamics,” presentation, 12 June 2015, <http://eml.berkeley.edu/~bhandel/wp/BCHK.pdf>.