

Countries Where Yaws Is Currently Known to Be Endemic.

areas for the initiation of elimination programs. Initial mapping of areas of high endemicity could be based on surveys conducted by local field teams using pictorial guides of clinical manifestations of yaws. Progress toward the elimination of transmission could be monitored by means of point-of-care serologic surveys for latent yaws in children.⁴

Finally, as with mass drug-administration programs for controlling and eliminating other infectious diseases, maintaining

high levels of community participation in treatment and monitoring will be essential. Azithromycin uptake by 80% or more of eligible community participants, as Mitjà et al. report in Papua New Guinea, with continued targeted community treatment will be critical if local elimination and, ultimately, global eradication of yaws are finally to be realized.

Disclosure forms provided by the author are available with the full text of this article at NEJM.org.

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Healthcare.gov 3.0 — Behavioral Economics and Insurance Exchanges

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In October 2013, the Affordable Care Act introduced a new insurance market — state and federal exchanges where people can purchase health insurance for themselves or their families. Although the rollout of the exchanges was disastrous,

around-the-clock efforts fixed many of the biggest technical problems, and nearly 7 million people purchased insurance in the new market. The second round of enrollment exposed some new problems with the exchange websites — for example,

Colorado's website had difficulty determining whether people were eligible for tax credits — but these problems paled in comparison with those encountered when the exchanges were first rolled out. In short, we have a largely glitch-free system



Figure 1. Two Different Versions of Information Given in a Test of Labels' Influence on Perceptions of Insurance Plans.

of health insurance exchanges that present millions of people with a robust set of health insurance choices.

Which means that it will soon be time to tackle the much more challenging job of designing exchange websites in ways that maximize the chances that consumers will choose plans best suited to their needs and preferences. If the first round of open enrollment was primarily about avoiding catastrophe and the second round was about ironing out wrinkles in the underlying programming code, then version 3.0, in our view, should focus on re-designing the way exchanges present their insurance choices, to avoid features known to bias people's decisions.

For example, consider the decision to lump health plans into categories with names such as bronze (for low monthly premi-

ums and high out-of-pocket costs) and gold (for higher monthly premiums and lower out-of-pocket costs). These labels could have unintended effects on people's attitudes toward which plans are best. After all, gold, silver, and bronze convey best, second best, and third best through association with sporting events, but the best plan for one enrollee will be different from the best plan for another.

To test whether such associations might influence people's perceptions of insurance plans, two of us recruited a convenience sample of participants from public buses in Durham, North Carolina, and asked them which category of plans they would look at first if they were shopping for health insurance. To half the people, we described the gold plans as having higher monthly premiums and lower out-of-pocket costs

— the language used by many exchanges. For the other half, we switched the gold and bronze plans, describing the gold plans as having lower monthly premiums and higher out-of-pocket costs (see Fig. 1).

It shouldn't matter whether plans are called bronze or gold. Instead, the plans' attributes — high or low monthly premiums and high or low out-of-pocket costs — should determine people's choices. The labels are arbitrary. Nevertheless, among participants who were below the median in mathematical ability, the majority said they preferred gold plans over bronze plans, regardless of which plan was labeled as gold. (Mathematical ability, which we measured after people made their hypothetical insurance choices, has been shown to predict people's susceptibility to a wide range of decision biases, even when the decisions do not involve complicated mathematics.¹)

Consider another seemingly innocuous design decision made by many state exchanges: to list health plans according to monthly premiums, with the least expensive premiums on top, as demonstrated in Figure 2, a screen shot from the Oregon exchange's website. When people make choices, they often settle for options at the top of a menu, regardless of whether that choice is best for them. Political scientists have shown, for example, that all else being equal, politicians listed at the top of ballots receive more votes than those whose names appear lower on the list.² Similarly, people choose different wines if the wine list presents them in order of quality (as judged by experts) than if they're ordered according to price.³ By or-

UPDATE ENTRIES

FINANCIAL SAVINGS

Tax credits

Annual tax credit: \$0

Monthly tax credit: \$0

VIEW ALL PLANS

FILTERS

Plan level

- Bronze
- Silver
- Gold
- Platinum
- Catastrophic

Quality rating

- 2.5 Stars
- 3.0 Stars
- 3.5 Stars

Insurance company

Browse medical plans

Based on the information you entered, the plans listed should be available to the people in your household. The premium costs shown are estimates of your monthly premium cost with an estimated advanced tax credit taken into account.

11 - 20 of 67 plans | 10 per page | Price: Low to High | Print

« Previous | Next »

\$179.00 per month

★★★★☆

Compare

KAISER PERMANENTE.

PLAN NAME: KP OR BRONZE STANDARD 5000 HSA
 PLAN TYPE: HMO
 PLAN ID: 71287OR0420004-01

DEDUCTIBLE (I): \$5,000^{mc}
 DEDUCTIBLE (F): \$10,000^{mc}
 OOP MAX (I): \$6,350^c
 OOP MAX (F): \$12,700^c
 PLAN LEVEL: BRONZE

VIEW DETAILS

\$184.00 per month

★★★★☆

Compare

PacificSource HEALTH PLANS

PLAN NAME: SMARTHEALTH VALUE BRONZE 3000
 PLAN TYPE: PPO
 PLAN ID: 10091OR0380007-01

DEDUCTIBLE (I): \$3,000^m
 DEDUCTIBLE (F): \$6,000^m
 OOP MAX (I): \$6,350
 OOP MAX (F): \$12,700
 PLAN LEVEL: BRONZE

VIEW DETAILS

Figure 2. Ordering of Insurance Plans According to Monthly Premium on the Oregon Exchange Website.

dering health insurance choices according to the amount of the monthly premiums rather than, say, the amount of the deductible or the quality of the health care providers included in the network (an admittedly controversial measure), the design of exchange websites has probably increased the influence of monthly premiums on people’s choices.

Even the decision to present premium information on a monthly timescale could unintentionally influence people’s choices. We conducted a survey in which we presented half the participants with information on weekly premiums and the other half with information on monthly premi-

ums. The latter information magnified the price difference among plans: a \$24 difference in the weekly price amounted to a \$104 difference in the monthly price. The perception of a bigger difference in premiums drew attention away from other relevant features, such as the magnitude of copayments and deductibles. Consequently, participants were significantly less likely to choose the higher-premium, lower-deductible plan when we presented them with monthly premiums than when we cited weekly ones.

Some states have designed their own exchanges, whereas others have relied on Healthcare.gov. Design differences among ex-

change websites raise important questions about how best to present people with insurance choices. For example, most states place monthly-premium information in the left-most column of the page, but a few place it in the right-most column. Do these design differences lead to different choices? We don’t know. Minnesota and California include “plan helpers,” which help people focus on the information they indicate is the most important to their decision. Do these helpers improve people’s decisions? Quite possibly. A study that one of us conducted with colleagues used simplified prototypes of exchange websites and showed that adding

educational definitions and calculators improved decision making.⁴

As the federal government and states continue to refine their exchange websites, they may want to take fuller advantage of insights from behavioral sciences regarding the influence of design architecture on people's choices. For starters, we believe that the websites should downplay powerful connotative labels such as bronze, silver, and gold. In addition, they should deemphasize complicated tables of financial information that lay out cognitively overwhelming details about premiums, copayments, deductibles, out-of-pocket maximums, and the like. Instead, they should make it easier for shoppers to estimate total annual costs under a series of plausible scenarios, such

as expected utilization based on previous spending history, as well as under best-case and worst-case scenarios. Finally, when the influence of design architecture on choices is unknown, designers should partner with researchers who can run experiments to inform the process.

Health insurance exchanges have the potential to revolutionize U.S. health care markets. To maximize this potential, we think it's incumbent on states and the federal government to minimize the potential for the public face of these exchanges to bias people's choices. Supreme Court Justice Louis Brandeis once observed that a "State may . . . serve as a laboratory; and try novel social and economic experiments."⁵ The current health exchanges represent one very complicated experiment; we hope that state and

federal decision makers are observing the outcomes.


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 An audio interview with Dr. Ubel is available at NEJM.org

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Patients in Context — EHR Capture of Social and Behavioral Determinants of Health

Nancy E. Adler, Ph.D., and William W. Stead, M.D.

Although social and behavioral factors influence health and mortality, such determinants are often ignored in clinical practice. A few, such as smoking and alcohol use, are commonly assessed by primary care physicians, but many others may be viewed as outside the scope of medical practice. Calls for clinicians to attend to these factors are increasing,¹ and several developments are accelerating the medical community's interest in addressing them. We hope that a new set of standard measures for social and behavioral deter-

minants of health, delineated by an Institute of Medicine (IOM) committee that we cochaired, will catalyze action on this front.²

Reimbursement policies that reward population health management and value-based purchasing are encouraging attention to modifiable determinants of health. Penalties for hospital readmissions and the move toward accountable care organizations are fostering attempts to address elements of patients' lives and behavior that influence the risk of disease and the effectiveness of medical treatment.

A growing body of research links social and behavioral factors including low income, low levels of education, lack of exercise, and stress to the onset and progression of diseases ranging from arthritis and asthma to diabetes and cardiovascular disease, as well as to overall mortality. Various studies have shown that the effects of social and behavioral risk factors such as smoking and social isolation rival and sometimes exceed those of genetic factors and clinical indicators such as blood pressure.³

Meanwhile, incentives for adop-