PBGH
PACIFIC BUSINESS GROUP ON HEALTH

Consumer Choice of Health Plan

Decision Support Rules for Health Exchanges

Installments 1 and 2

A PBGH publication in an ongoing series focused on improving value via health exchanges

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Dear Colleague,

With the arrival of the insurance exchanges, an estimated 22 million people will have the opportunity to choose their coverage through an exchange. Many of these consumers could make the "wrong" plan choice, selecting a plan that doesn't meet their health care needs or is not a good value for them. Exchange leaders have a critical role to play in supporting consumers in their search for high quality, affordable options that best meet their individual needs.

Through the *Helping Vulnerable Consumers in the Exchange Project*, the Pacific Business Group on Health (PBGH) has created plan choice decision support rules that exchanges can use to build their consumer choice software rules. These rules are largely based on plan choice research performed by decision science experts at Columbia, Penn, and Stanford Universities.

This document contains the first and second installments of consumer plan choice business rules; additional installments and updates will be forthcoming as more studies are complete. This report is designed for staff at the exchanges who are responsible for the plan choice technical requirements.

For additional details about the information required of health plans to support consumers in making plan choices please download a companion excel document located at www.pbgh.org.

If you would like additional information, please don't hesitate to contact Ted von Glahn, Senior Director, at tglahn@pbgh.org.

Sincerely,

Ted von Glahn
Senior Director
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INTRODUCTION

For consumers to overcome barriers to choosing a health plan via the Health Insurance Exchanges, our project team is developing consumer choice decision support rules to be incorporated into health plan choice software logic.

The rules concern an array of topics that we are addressing in research on Exchange consumer plan choice. These rules are based on a mix of evidence from our plan choice research and from the rich consumer choice architecture research literature.

Given the Exchange IT systems development schedule, we are releasing rules on a rolling basis as our research proceeds. This document includes Installment 1 and Installment 2. The third and final installment will be added to this document in September 2012. We will update certain rules in Installment 3 as we complete upcoming experiments.

These rules have been prepared by the Pacific Business Group on Health with guidance from research teams at Columbia University and the University of Pennsylvania. The project team members are:

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1. Hierarchy of Plan Choice Dimensions[1]

Dimensions hierarchy: Construct a hierarchy of plan choice dimensions comprised of several layers of information. The user navigates through these information layers. The upper tier of the hierarchy presents summary information comparing multiple plans. As the user descends the information hierarchy, the lower tiers of the hierarchy include side-by-side comparisons of two or more plans and detailed single plan information.

Even when choice information is organized in layers, the detailed information may impede rather than spur good choices for certain consumers. The Exchange's performance management information, to monitor users' choice experiences, should distinguish consumer segments based on use of summary versus detailed information. In turn, the Exchange can evaluate the experiences of each cohort of consumers who use information in each layer of the hierarchy.

Top hierarchy of plan choice dimensions: The top tier of hierarchy should be limited to a small number (e.g, 5-6) of choice dimensions – the Table 1 example lists 5 choice dimensions in the top layer. The default top choice dimensions should be of equal importance roughly. If not of equal importance, the rationale for an unbalanced set of choice dimensions should be explicit (e.g., unbalanced dimensions: annual premium cost vs. proximity of local pharmacies). The defaults may be altered depending upon the user preference-setting functions. The default top dimensions should include plan quality and cost. The candidate quality and cost dimensions are described in sections below.

RATIONALE: Hierarchy of Plan Choice Dimensions

Limiting cognitive tasks: People's decision-making capabilities are limited – individuals can concurrently process only a limited number of aspects of a decision (Kahneman, 2003; Simon, 1957).

Personalization: Layering information, coupled with alternative online navigation paths to access information, enables diverse users to use information in ways that fit their needs.

Balancing: When a quality indicator is paired with cost information, consumers are more likely to consider/choose a higher value option (Hibbard, J.).

Table 1: Plan Choice Dimensions Hierarchy Example

	COST				QUALITY				
LAYER 1	Total Premium Yearly		Cost at Time of Care Yearly • Your Cost Dollar Amount • 'Metals' Category		Health Plan Ratings • Access • Customer Service	Doctor Choice Rules		Provider Network & Plan Services • Named MD • Number of PCPs in Zip	
LAYER 2	Tax Subsidy Amount	Calculator to Adjust Subsidy & Time Period	Top Services (User Preferences)	Coverage Type & Rules*	CAHPS Composites • Getting Needed Care • Paying Claims • Getting Cost Info. Etc.	MD Use Rules	OON Rules	Plan Clinical Ratings (HEDIS)	Provider Ratings
LAYER 3	Tax Credit and Cost-sharing Reduction Eligibility Rules		Cost-share Amounts • $500 deductible, $25 copay, 20% coinsurance etc.		Explanations: Health Plan/ Product Ratings	Explanations		Plan Services (wellness, DM, & other)	Provider Directory Search

*Includes health plan type: Personal Account, Copay, Major Medical, etc. Also includes cost-sharing reduction eligibility and benefits.

1 A choice dimension is an aspect of the plan, such as premium cost, quality rating, covered services, doctor network, etc., that can be used in plan selection decisions.

Though it is unclear if these findings are generalizable to Exchange plan choices as this research concerned choice of doctor not health plan, there is a body of evidence showing that people equate higher cost with higher quality (i.e., they think that doing more is better). Presenting cost and quality concurrently is a presentation display technique to help people understand that quality and cost may not move in parallel, rather they can diverge. (Sofaer, S.) Per Table 1, the health plan quality should be clearly distinguished from provider quality.

Equal allocation: People tend to equally value each dimension in a set of choice dimensions when they are presented concurrently.

Policy and business objectives: The prominent placement of selected plan choice dimensions advances the Exchange's key objectives including promoting quality performance as an element of health care value and heightening awareness of the value of the public subsidies to improve access to care.

Exchange research evidence:[2]

Per the fall 2011 experiments:

1. Most people did not select the best plan option. People failed to choose the "right plan" in a relatively simple context of plan choice using cost information only. The odds were equal to or less than random chance that people chose a less expensive health plan. The "right plan" was defined as the lowest total cost option given the test participant's medical services use scenario.
2. When cost and quality are concurrently presented as plan choice dimensions, the quality measures did not diminish the odds of people choosing the 'right' plan and they may have improved the odds of a "right" choice. Here, the "right plan" is the lowest cost option given equivalent quality ratings.
3. The concurrent availability of quality metrics and summed plan costs, per a "cost calculator," seem to act jointly to improve the odds of making the "right" plan choice.

2. Number of Plan Options to Display

Number of plan options: In the initial plan comparison display, limit the number of plan choice options to a maximum of X choices.[3] Additional plan options should be available through a user action ("more," "unhide," "next 10 options" etc.) for the user to view subsequently.

This rule applies to the initial plan comparison display. Depending upon the application's information architecture, this initial display may have a "select a subset of plans to compare details" option. The user controls this subsequent compare step up to a pre-set maximum of plans that can be compared, typically, in a side-by-side format.

Eliminate dominated options: In the initial plan comparison display, present the choices that match the user's preferences for one or more threshold requirements (e.g., cost, doctor in plan, coverage). In this initial display, do not present plan options that are inferior ("dominated") to options that match the user's preference. An example of a "dominated" option is seen when a user prefers a plan that includes their doctor: plans that do not include that doctor are "dominated" by the plans that include the user's doctor.

RATIONALE: Number of Plan Options

Meet user preferences: Setting a limit on the number of plan options can be guided by a rule to present all of the options that meet the user's threshold requirements. Displaying more options likely does not introduce the user to plans that better meet their preferences, and can impede decision making as the greater number of choices requires more time and effort of the user (Iyengar, Huberman, & Jiang, 2004; Iyengar & Lepper, 2000).

Increased options lead to poorer choices: Earlier plan choice research showed that expanding the choice options from 2 to 3 options substantially reduced the likelihood of people making the right choice (Baker, T., University of Pennsylvania,

2 The Exchange research was conducted at Columbia University, Center for Decision Sciences in the Fall-Winter of 2011-2012. Typically, 150 or more consumers participated in each of these online plan choice experiments.

3 We are testing the impact of the number of options on plan choice. There is evidence that fewer choices are better, but we do not have evidence at this point to support a specific threshold number of options.

unpublished 2011). Similarly, a study of Part D plan selection revealed that an increase in the number of Part D drug plans, from 3 to 9 plans, resulted in a significant decrease in the odds of choosing the lowest cost plan. (Hanoch et al., 2011.)

When people are overwhelmed by multiple aspects of a decision they tend to focus on a single aspect that is most meaningful to them and ignore other important aspects of the decision. Fewer plan options in a concurrent display is preferred given that the complexity of the number of options is compounded by the number of choice dimensions (e.g., cost, quality, doctor, coverage) for which the user may need to make trade-offs. (Iyengar & Kamenica, 2006; Schram & Sonnemans, 2011; Wood et al., 2011)

Exchange research evidence:

Per the fall 2011 experiments:

1. People failed to choose the right plan in a relatively simple context of using cost information only. The odds were equal to or less than random chance that people chose a less expensive health plan.

3. Plan Costs

Summarize costs: Apply math logic to sum the premium and the estimated cost at time of care and display a total cost amount.

Cost calculator: Use a calculator to: a) provide user with annual cost at time of care estimates given the plan's covered benefits and the user's expected medical services use. Recommended cost calculator methods are described in the cost at time of care section below.

Premium cost: Apply math logic to calculate premium (monthly/annual) net of tax subsidy and display net premium. Include a display feature to unhide/detail the premium-subsidy calculation: upon user action, display the full premium, subsidy and net premium amounts. Display can highlight "see your savings" to educate user about the subsidy value.

Hierarchy of cost information: The default top tier of the plan choice hierarchy should not include individual covered services topics/amounts like the deductible, out of pocket maximum, hospital coinsurance etc. The exception to this approach would be driven by the user's preferences, if the user indicates that particular covered services are important, those services could be included in the top tier of the choice hierarchy.

RATIONALE: Plan Costs

Insurance terms misunderstood: Many consumers do not understand health insurance language or the underlying concepts of various insurance elements like the deductible or out of pocket maximum (Consumers Union, 2011).

Layering information: The deductible, coinsurance, and other cost-sharing amounts should not be included in the summary plan comparison because people overweight this information – ascribing greater costs than would be realized given their expected medical services utilization. Layering is a way to give less prominence to choice attributes that foster poorer selections..

Threshold dimension: Given that cost is a threshold attribute, it should be part of any summary plan compare display. Many consumers use it to determine if they will search further for additional health plan choices or limit their search to those plans that meet a cost threshold.

Summarizing cost information: Components of health plan cost should be summarized in the top tier of the plan choice hierarchy in part to 'make room' for other plan choice dimensions given people's cognitive limitations. Cost can dominate a plan choice decision, particularly for the many consumers who associate higher health plan costs with higher quality. The display of other choice dimensions, concurrent with cost, can alert the user to consider additional elements of health plan value.

Presenting a premium that is net of the tax subsidy in the initial display eases the cognitive effort by reducing the number of dollar values to interpret.

Failure to properly weight choice components:

The cost calculator can help mitigate the uncertainty that prompts consumers to give undue weight to their potential costs at time of care. The uncertainty surrounding benefits coverage affects consumers in

several ways: a) unknown needs for future medical services create loss aversion, and b) difficulty in interpreting the multiple aspects of benefits coverage (e.g., cost accumulation to the deductible and out-of-pocket maximums) creates a lack of comprehension. Consumers' propensity to overweight the deductible/cost-sharing is seen in a number of insurance product choice studies that examined consumer choice inconsistencies (Rottenstreich & Hsee, 2001).

Framing: Combining the premium amount and the estimated cost at time of time is a framing technique to dampen the tendency of people to segregate the two costs (Kahneman & Tversky, 1979; Thaler, 1985). That is, the person may amplify the potential loss by segregating the premium amount and the deductible amount (Johnson et al., 1993). Consolidating these amounts can help mitigate the overweighting of one or the other of these costs.

ACA required benefits coverage: The plan choice architecture should take advantage of ACA requirements that simplify aspects of comparing benefits coverage across health plans. A summary value of estimated cost at time of care is particularly helpful in the context of ACA requirements for greater uniformity in plans' benefits coverage, including: a) minimum coverage for all tiers of benefits, b) actuarial equivalence within a coverage tier (e.g., catastrophic, bronze, silver, gold, platinum), c) 100% coverage for preventive care services, and d) prescribed limits for the out-of-pocket maximum amounts that are pegged to the maximums for the High Deductible/HSA designs for Qualified Health Plans (QHP). The differences in various cost-sharing requirements within a QHP coverage tier is less important given these ACA requirements and many consumers can be better served, in the top tier of choice dimension plan comparisons, with a summary estimated cost at time of care amount rather than sifting through the 30+ benefits coverage topics.

Exchange research evidence:
Per the fall 2011 experiments:

1. The odds are equal to or worse than random chance that people will choose a health plan that is less expensive if the choice dimensions are not summarized and the user has to determine their expected costs by converting benefits coverage (e.g., deductible and copay amounts) into an expected cost for that plan and combine that value with the premium amount.
2. People significantly overweighted plans' cost-sharing (deductible and copays) – they were more apt to choose a more costly plan because they ascribed a greater cost to the deductible and copay amounts than would occur given the expected medical utilization; this is most likely because they are risk adverse.
3. Calculators significantly improve choice. The odds that people would overweight the deductible and copay were significantly reduced when costs were summed into a total cost amount. Nonetheless, a number of people did not choose the 'right' plan even when the calculator was applied.
4. People with lower numeracy skills were particularly vulnerable to choosing the wrong plan – they made the wrong plan choice most often but their decision-making improved markedly when values were summed using the "calculator" – the proportion of people who chose the right plan doubled (23% to 45%).
5. People want calculators to assist them in their decision-making

4. Cost at Time of Care Calculator

Cost calculator: Use a calculator to provide user with annual cost at time of care estimates given the plan's covered benefits and the user's expected medical services use. Recommended cost calculator methods described below.

User experience: Present user with medical services utilization profiles drawn from an actuarial model. The actuarial model provides a person-level distribution of medical services utilization. The utilization experience is specific to the Exchange's target population (e.g., lower SES). This services utilization distribution is used to define utilization profiles such as below average (25th percentile), average (50th percentile) and above average (75th percentile). These utilization levels

assume no benefit-design impact – that is, utilization demand is not influenced by cost-sharing as the user is declaring their expected medical care needs in the upcoming year. In turn, the user selected profile is overlaid on the available health plan benefits to produce a cost-sharing estimate. Depending upon the benefit design complexity, various assumptions are adopted in the cost calculator rules set (e.g., family members costs that accumulate to individual and aggregate out-of-pocket maximums). These rules should produce similar cost estimates for actuarial equivalent benefit designs (e.g., at each of the metals level categories) but costs will differ given the mix of services in the underlying actuarial model. For instance, the results can differ for a service mix that assumes more cognitive, office visit-based care and less procedural care versus a service mix with a higher proportion of procedures and related diagnostics.

Importantly, the cost at time of care is not a budgeting tool – it gives the user an estimate of the relative differences in costs at time of care across the available health plans rather than precise absolute costs. The actuarial model uses prevailing market-area provider fees, perhaps with a managed care discount factor – variations in network fee schedules are not reflected in the user's cost estimates. Users, independent of the health plan choice process, may have the option of accessing health plan-specific cost estimators that produce member cost estimates for a medical service or provider based on the plan's network fee schedule. The utility of these plan-specific cost-estimator tools for consumers can vary considerably given differences in the tools' level of personalization and ease of use. These plan cost estimator tools may not be available for choosing a plan; rather once enrolled, members use them to shop for services.

The medical service utilization profiles should be tightly integrated into the preferences section of the plan selection experience. The "cost calculator" or utilization profiles should not be positioned separately in a "toolkit" rather it should be a core step in the plan selection process.

The utilization profiles should be fully explained to the user (e.g., a 'below average user' means "three office visits and 2, 30-day prescriptions during the year"). See Table 2 below for utilization profile examples.

User personalization: The actuarial models will vary in the level of personalization. The model may blend or disaggregate demographics such as gender and age. Similarly, the models may use varying assumptions about the utilization patterns in a household or require the user to select utilization profiles for each family member. Utilization models that distinguish service use by demographic categories will require the user to self-report the relevant demographic characteristics (characteristics, like age, may be pre-designated given responses to Exchange eligibility questions). The level of customization for specific medical services can vary, too. Importantly, the medical services and the prescription drug utilization categories should be discrete given that individuals have distinct drug and medical use patterns.

The degree of personalization will be dictated by the vendor's actuarial dataset. Certain datasets can support cost estimates organized by variables such as illness severity/major condition. However, such variables may be confusing and burdensome to users and unwieldy, particularly in a family situation in which each family member has distinct personal and illness burden characteristics.

Personalization may include the option for the user to adjust the default utilization counts to tailor various medical service uses to their expectations. For instance, a user could adjust up/down a default set for an office visit frequency of 3 visits yearly. Similarly, the prescription drug personalization could allow the user to select their medications from a medication list and/or more generally adjust the number of monthly prescriptions, the dosage and the mix of retail and mail-order medications.

Defaults: Pre-set, default utilization profiles should be presented to the user. The utilization profile default could be set to the median or lower level utilization (need to confirm how consumers who used no services during a given year are treated in the service utilization distribution). For family coverage, the default can be set based on coverage tier-specific

utilization patterns (e.g., for a 2-adult tier coverage, assume 1 adult has average utilization and 1 adult has low utilization given actuarial evidence).

Users should be prompted to consider alternative utilization profiles – to do "what if" sensitivity analysis.

Time period: Cost at time of service values are annual amounts to reflect medical services use in a one-year period of coverage. This annual value means that premium cost must be shown as an annual amount too so the two can be considered, and combined, on a common yearly scale. Alternative premium cost views (e.g., monthly or per paycheck) can be provided in addition to the annual amount.

RATIONALE: Cost at Time of Care Calculator

Choice architecture technique: The use of utilization profiles is a technique to overcome users propensity to overweight cost-sharing. This approach to organizing the cost information helps to diminish the uncertainty posed by deductible and coinsurance designs and the loss aversion behavior spurred by this uncertainty (Thaler & Sunstein, 2008).

Choice inconsistency due to overweighting certain choice attributes: In the Medicare Part D plan choice study, only 12% of enrollees chose the lowest cost plan (combining premium and expected cost when getting prescriptions filled); the typical enrollee could have saved 30% of their total Part D costs by choosing a cost-minimizing plan (Abaluck & Gruber, 2011).

Exchange research evidence:

Per the fall 2011 experiments:

1. The odds are equal to or worse than random chance that people will choose a health plan that is less expensive if the choice dimensions are not summarized and the user has to determine their expected costs by converting benefits coverage (e.g., deductible and copay amounts) into an expected cost for that plan and combine that value with the premium amount.

Table 2. Cost At Time of Care: Utilization Profile Examples

UTILIZATION PROFILES: 4 LEVELS			
YOU	SPOUSE/DP	LEVEL OF HEALTH AND EXPECTED SERVICES	
Level 1	Level 1	No health problem or a well-controlled condition and...	
Level 2	Level 2	Moderate health problem, requires regular doctor care to watch or control a problem, and...	
Level 3	Level 3	Significant health event or problem requires monthly doctor office visits, outpatient treatment, and...	
Level 4	Level 4	Serious and Costly problem or condition requires a hospital stay and...	
UTILIZATION PROFILES: 3 LEVELS			
YOU	SPOUSE/DP	LEVEL OF HEALTH AND EXPECTED SERVICES	
Very Healthy	Very Healthy	No health problem or a well-controlled condition and...	
Average Health	Average Health	Moderate health problem, requires regular doctor care to watch or control a problem, and...	
Poorer Health	Poorer Health	Significant health event or problem requires monthly doctor office visits, outpatient treatment, and...	
EXPECTED MEDICAL SERVICES USE: USER CAN CUSTOMIZE DEFAULT AVERAGE SERVICE USE COUNTS			
2 office visit(s) primary care	0 hospital stays	3 retail prescription drugs (30-day supply each)	3 laboratory tests/screenings
1 office visit(s) specialist	1 outpatient surger(ies)	0 mail-order prescription drugs (90-day supply each)	1 x-ray/imaging
0 mental health visit(s)	0 therapy visit(s)	1 chiropractic/acupuncture visit(s)	1 diagnostic test (e.g., EKG)

2. People significantly overweighted plans' cost-sharing (deductible and copays) – they were more apt to choose a more costly plan because they ascribed a greater cost to the deductible and copay amounts than would occur given the expected medical utilization.
3. The overweighting effect was strongest with the deductible.
4. Calculators significantly improve choice. The extent to which people overweighted the deductible and copay were significantly reduced when costs were summed into a total cost amount.
5. People with lower numeracy skills were particularly vulnerable to choosing the wrong plan – they made the wrong plan choice most often, but their decision-making improved markedly when values were summed using the "calculator" – the proportion of low numeracy people who chose the right plan doubled (23% to 45%).
6. Even among people with higher numeracy skills, fewer than 50% choose the right plan.
7. People want calculators to assist them in their decision-making.

5. Doctor Choice

Preference elicited: User preferences should elicit the importance of doctor choice. The user's interest in a particular doctor should be distinguished from the importance of having flexibility in choosing and using doctors or hospitals generally. As an example, the user could be queried about:

- ☐ A medical plan that includes *my regular doctor* is important to me
- ☐ A medical plan in which I can *directly go to any doctor in the plan* is important to me
- ☐ I do *not* want a medical plan that requires me to pick a doctor for routine care or to get an "ok" to see a specialist doctor

If a regular doctor is important then provide user with: a) consolidated all-plans, provider directory doctor search to determine which plans the doctor belongs to – my doctor's name is: _____ b) health plan specific provider directories to search each plan directory separately.

Techniques to present the full spectrum of doctor choice flexibility can help the user identify their preference. In this example, the user sees doctor choice requirements that range from plans with minimal restrictions to plans that use a restricted, smaller network.

Use any doctor or hospital in plan network
Required to pick a PCP and get specialty referrals
Restricted to smaller network of doctors and hospitals

Default: The pre-selected default for "my regular doctor is important to me" should be set to positive/affirming this statement unless there is evidence that the majority of Exchange users do not have existing doctor/clinic relationships. Other doctor choice importance attributes should be set to "no/null" – assumes that doctor choice flexibility is not an important element of plan choice unless the user affirms otherwise. The countervailing arguments for these default setting recommendations are discussed below.

Plan comparison – doctor choice: The plan-specific doctor choice result (e.g., named doctor in plan or type of doctor choice requirements/restrictions, etc.) should be presented in the top-most layer of plan comparison information.

Validate doctor importance: Users, who designate a specific named doctor as important in their plan choice, should be prompted at "check-out" to compare the plans that include their doctor with plans that do not include that doctor. This technique can help users who took a short-cut to consider their plan options by eliminating all options that did not include a particular doctor. Users take such short-cuts to reduce the number of plan options to a manageable level, but the user likely has not considered trade-offs in doctor choice, cost and other aspects of the plans.

Doctor search: In the preferences section, the user has the option to enter a doctor's name to determine if doctor participates in the available health plans (ideally a type-down that displays matching last names and practice addresses). The user also should be able to search by clinic name or address. The search result displays the doctor's name in the list of attributes on the "compare plans" screen. A "doctor not found" label displays for those plans in which no match occurs.

Preferably, the doctor search uses an all-plans consolidated provider directory to simplify the user experience. The best user experience would list all of the plans, and the associated plan products, to which the doctor belongs, in a single view. This consolidated view is particularly helpful given that doctors may participate in different products offered by the same insurer. And, it is a huge service for users with family members who are enrolling in separate plans (e.g., one spouse is eligible for Medicaid plans and other spouse is eligible for non-Medicaid plans). Further efficiencies are realized for users who wish to search for several doctors. Alternatively, if a consolidated directory is not provided, the user searches for a doctor separately for each of the available plans. Likely, this would require the doctor search function to be sequenced later in the plan compare process, with a winnowed, manageable set of plans, and as such the user cannot use "doctor in plan" as an initial threshold requirement. An interface that uses separate doctor searches by plan likely requires the user to record the doctor match for each plan given complexity of creating automated processes for all plans in the Exchange.

A potentially valuable feature for users who do not seek a particular doctor but wish to assess a plan's convenient access to doctors is a provider concentration by geography search. Here, the doctor type (e.g., primary care, mental health, etc.) and the geographic radius (e.g., 5 mile radius from user zip code) is entered and the result displays, for each plan, the count of doctors that match that criteria. Map functionality provides a visual display of these nearby doctor/practice locations.

The doctor search service should include an alert to encourage users to call the doctor/clinic to confirm that that provider is accepting new patients through the health plan that is of interest to the user. This information should be included in any "to prepare for using the Exchange, have the following information ..." communications.

Doctor choice flexibility and access performance: In the doctor choice preferences section, create a bridge to relevant doctor access to care information that may be housed in the quality ratings topic. This connection cues the user about the relationship between enrollee-reported access experiences and doctor choice. The conventional doctor choice metrics are structural measures (e.g., my doctor or number of doctors in the plan; authorization and referral requirements). Other doctor access measures overlap with quality measures like enrollee-reported access to care and ease in finding a personal doctor.

Detailed provider choice issues: User should have the option to drill down for provider choice details – these details would be housed at a lower level in the information hierarchy such as a single, plan-specific details page. Details should include: a) specialty care networks that often restrict access either via an authorization process (e.g., specialty referral/ authorization rules) or limited network (e.g., pharmacy, vision, behavioral health, centers of excellence), b) the plan's provider access support services such as language translation, c) doctor access performance – this connects user to the relevant provider access performance ratings/information, and d) pharmacy network services such as mail-order, specialty drugs, and online medication purchasing.

RATIONALE: Doctor Choice

Threshold dimension: Given that "my doctor" is a threshold plan choice attribute for many consumers, it should be part of any summary plan compare display. Roughly two-thirds of all commercial insureds report that a doctor they currently use is important in their health plan choice (PBGH Plan Chooser). Many consumers use this attribute to determine if they will

search further for additional health plan choices or limit their search to those plans that meet this threshold.

Personalization: Retrieving the user's "my doctor" results for all plans is a top value to personalize information to the user. It reduces the number of preferred plan options for user to initially consider. Similarly, for users for whom doctor choice flexibility is important, though a specific doctor is not a need, the list of preferred plan options can be narrowed per this attribute. And, this level of personalization, overall, can better engage users in the plan comparisons (Iyengar & Lepper, 2000).

Trade-offs in default settings: Given that doctor choice is important to a majority of commercial insureds, setting a default that assumes "my doctor" is important prompts the user to either enter a doctor's name or to de-select that default. However, it is likely that the proportion of Exchange consumers, for whom doctor choice is important, will be lower than the commercial experience given that many Exchange consumers will have had less continuity of care and fewer established doctor-patient relationships, given historical access barriers.

Omitting a default setting for doctor choice flexibility generally (e.g., use any doctor in the plan, no referral/authorization requirements) is desirable to: a) avoid overweighting 'doctor choice flexibility' which is intrinsically appealing; rather there is value in prompting user to consider doctor choice and coverage/cost trade-offs, b) there are many diverse doctor access features across the health plan products – this product diversification hampers easily categorizing plan products by doctor choice flexibility. Doctor choice 'details' information will be needed to explain these nuances. For example: a) HMO/EPO products that restrict patient referrals versus those that allow self-referral for an array of specialty care service, and b) primary care access requirements that differ by the provider designation – depending upon the plan an enrollee may need to designate a medical group, a clinic, a PCP, or make no designation and can self-refer at time of care. And, consumers will encounter access restrictions to particular services – like behavioral health or certain brand-name prescription drugs – regardless if a PPO, HMO or other product type.

Elimination/other strategies to reduce number of choices: People use various techniques, including elimination, to reduce the number of decisions to a manageable level. In the doctor choice context, consumers may eliminate all options that do not include their preferred doctor. As such, users forgo considering competing options that may be better for them than the "my doctor in plan" based options. Without assessing the trade-offs in doctor choice, cost, quality, covered services etc. the user may make suboptimal choices (Besedes et al., 2011, publication pending).

User burden: Requiring a user to separately drill down into each relevant health plan doctor directory to ascertain doctor in plan is a chore for any consumer and less desirable than an all-plans consolidated directory. It is a time consuming effort that is complicated by differences in the products that a provider participates in within the same plan. The task often becomes more complex given differences in plan directory search experiences – learning the vagaries of multiple search processes can be a vexing and tiring experience. Users may shortcut this chore by using other plan attributes to zero in on a preferred plan and then drill down into that plan's directory to confirm the presence of a particular doctor. As such, the user may overweight a particular attribute and not fully consider a set of comparable plans as a way to mitigate the doctor in plan search task across multiple plan directories.

Exchange research evidence: Research study participants will be surveyed about the importance of doctor choice in plan decision-making in our Phase II research. This is an opportunity to document the extent to which doctor choice is important to the population that will be served by the Exchanges as the research participants will be representative of the Exchange consumers.

6. Quality Ratings and Other Performance Markers

Preference elicited: User preferences should elicit the importance of health plan quality ratings to the user. The user's interest in health plan customer service can be distinguished from interest in provider network access and quality of care. As an example, the user could be queried about:

Mark the box if the quality rating is important to you in comparing medical plans

- ☐ I want to see how experts and plan members *rate the medical plans*
- ☐ I want to see how experts and plan members *rate the doctors and hospitals* in the medical plans

Report the health plan performance results as composite, summary ratings. As such, aggregate clinical ratings into an all-clinical summary rating.

Member reported results, using the industry standard CAHPS survey, can be reported using two composite summary indicators:

1) access: aggregates the getting needed care and timely provider appointments topics,
2) plan service: aggregates the customer service, cost information and paying claims topics.

Disaggregated performance results should be available at a lower level in the information hierarchy (e.g., single plan-level details).

Default: The pre-selected, default to consider health plan quality ratings should be set to positive/affirming the importance of the ratings.

Plan comparison – quality ratings: The health plan quality ratings should be presented in the top-most layer of plan comparison information.

Exchange: Supporting consumers in use of provider-level performance ratings and other quality markers: Provide users a way to incorporate provider-level performance, availability and other quality markers into their health plan decision-making. Depending upon the availability of provider-level information in a given state, the Exchange can organize information in several ways to help people:

- Find a doctor/clinic that best meets their needs
- Find a doctor/clinic with whom they have an existing relationship
- Find a health plan whose providers get high marks for access to care
- Evaluate access to a specific service – a medication's formulary status, an outpatient treatment program, etc.
- Assess if there is quality of care information that is relevant to them

In the preferences section, the user can be queried about their interest in finding a provider or service that meets their needs. An example of the user query:

- ☐ I want to find a doctor or medical practice that is nearby and gets high grades on my health concerns or problems
- ☐ Coverage for a particular medical service, drug or other treatment is important to me

Candidate Exchange provider-level performance information strategies include:

Exchange organized/hosted provider quality information

- Consolidated all-plan provider directory that includes: a) provider performance ratings or recognition information, and b) advanced search functions to locate convenient providers
- Industry-standard, or statewide common-reporting of provider ratings
- Health coach/advisor services to counsel people in choosing and using providers
- Collect and report real-time consumer ratings of plans and doctors – accumulate as Exchange membership grows

Health plan organized/hosted provider quality information

- Plan directory-based hospital, medical group, and doctor recognition or ratings
- Product-specific provider performance designation – high-value network, etc.
- Condition-specific provider designation – centers of excellence, reference pricing for selected services, etc.

Publicly available/Internet-based provider quality resources

- Connect user to Health 2.0/internet-based provider information resources

RATIONALE: Quality Ratings and Other Performance Markers

Balancing: When a quality indicator is paired with cost information, consumers are more likely to consider/choose a higher value option (Hibbard, J.). Though it is unclear if these findings are generalizable to Exchange plan choices as this research concerned choice of doctor not health plan, there is a body of evidence showing that people equate higher cost with higher quality (i.e., they think that doing more is better). Presenting cost and quality concurrently is a presentation display technique to help people understand that quality and cost may not move in parallel, rather they can diverge. (Sofaer, S.) Per Table 1, the health plan quality should be clearly distinguished from provider quality.

Policy and business objectives: The use of quality ratings and other performance markers is part of the national strategy to create efficient healthcare markets in which suppliers and consumers are sensitive to product quality attributes.

User preferences: 20%-25% of commercially insured users of a plan choice decision aid report that health plan quality ratings are an important aspect of their health plan selection (PBGH Plan Chooser).

Availability of healthcare quality information: Most of the quality performance available to Exchanges for health plans will be at the line of business/regional plan level, and for providers will be at the hospital and in some cases the medical group/IPA level. There is real potential to mislead consumers given the considerable quality performance heterogeneity among providers within these organizational levels. For instance, a consumer cannot infer that a medical group quality rating directly applies to a particular doctor within that group given the distribution of performance among doctors in any medical group. The consumer should be apprised of the best way to use such performance information.

Consumer interpretation of healthcare quality: "Quality" is interpreted differently by various consumer segments – presentations of quality information must safeguard against misleading consumers. Such safeguards include clearly distinguishing each aspect of quality, whether it concerns health plan quality, provider quality or other aspects of the decision. Segments of consumers define the quality component of the cost-quality equation differently – for some people the equation means "cost + my doctor"; others define it as "cost + access convenience" or "cost + provider reputation" and still others define quality as "affordability" or "comprehensive coverage."

Exchange research evidence:
Per the fall 2011 experiments:

1. When cost and quality are concurrently presented as plan choice dimensions, the quality measures did not diminish the odds of people making the 'right' plan choice and they may have improved the odds of a right choice.

   Significantly more people chose the right plan when quality was added to the cost information even though the quality performance was identical across the plan options. It may be that including quality markers, and putting varying plan costs in the context of equal quality, dampens the tendency of people to overweigh the cost sharing (deductible and copays) leading to better decisions.

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Installment II Preface

Unless noted otherwise, these Installment 2 recommendations are based on a series of experiments conducted by the PBGH team in Spring 2012. In this series of experiments, participants were screened to ensure that they roughly matched the demographic profile of prospective Exchange users eligible for subsidies. Specifically, participants were primarily low income and low education. See the Appendix on page 25 for more details about the screening criteria and participant demographics.

1. Defaults For Consumer Preferences

Defaulting preferences: In the user preferences section, set defaults ("pre-check") for certain aspects of plan choice to encourage users to consider these topics when comparing health plans. These attribute defaults concern consumers' preferences – this does not concern defaulting people to particular health plan options. Health plan defaults, to guide people to specific plan options, will be addressed separately in Installment 3 of the Business Rules.

RATIONALE: Default Preferences

Meet user preferences: The decision regarding which preference options to default should be informed by evidence about choice dimensions that matter to many people (Goldstein et al., 2008). Such defaults encourage users to consider topics popular with other similar users.

Accomplish policy objectives: The selection of topics to set as preference defaults should be informed by policy objectives (Thaler & Sunstein, 2008). Such defaults can advance an Exchange's objectives by giving prominence to select topics and encouraging users to consider topics considered important.

Reduce decision complexity: Attribute defaults, such as the preference defaults discussed here, ease decision-making complexity by reducing the number of decisions people must make, while preserving their freedom of choice (Thaler & Sunstein, 2008). When preference defaults are set, instead of needing to actively decide which topics to view, people can view topics pre-selected for them or, if they wish, they can decide to view other topics instead.

Exchange research evidence per spring 2012 experiments:

Our research indicates that, for the following four domains, the associated topics are of interest to a large number of people:

1. Metal Tier – Silver
2. Quality – Provider Quality
3. Wellness – Controlling Cholesterol and Blood Pressure
4. Covered Services
   - Doctor visit
   - Emergency care
   - Deductible
   - Annual out-of-pocket maximum
   - Prescription retail
   - Lab/radiology
   - Hospital stay

Our research provides evidence for the use of defaults in the user preferences section – to prompt consumers to consider certain aspects of plan choice. Half of the participants were randomly assigned to use a preferences section with defaulted topics and the other half had no topics defaulted. Defaults were selected based on topics that people report are important to them when choosing a health plan (PBGH Plan Chooser) and policy objectives to promote value-based purchasing. We observed study participant behavior to assess the frequency at which users:

1. Select topics that were not defaulted
2. Deselect topics that were defaulted
3. Retain topics that were defaulted
4. Select different health plans depending upon exposure to preference defaults

Our research affirms that Exchanges can set default preferences to prudently guide users to consider topics that matter to many Exchange consumers in ways that preserve users' flexibility to identify topics of interest to them and that provides a positive choice experience. Table 1 shows that the frequency at which users select topics in the preferences section is similar between users who are exposed to defaults and users for whom no defaults are set. Notably, the "defaults set" counts

TABLE 1

Choice Dimension	Defaults Set Frequency Which User Selects Dimension	No Defaults Frequency Which User Selects Dimension
Doctor Choice	92%	83%
Quality of Plan or Providers	98%	95%
Wellness Services*	1.5 services/user	1.4 services/user
Covered Services**	4.9 services/user	4.4 services/user

*Participants could select 0 to 4 wellness services; **Participants could select 0 to 5 covered services.

are net of the defaulted topics that users deselect – many users do not passively accept defaults.

Study participants were more likely to select a topic when that topic was defaulted – this was universally true across all of the plan choice dimensions tested. The corollary also was true: if defaults were not used, participants were more likely to choose one or more of the alternative topics. These choice patterns are illustrated in the charts below.

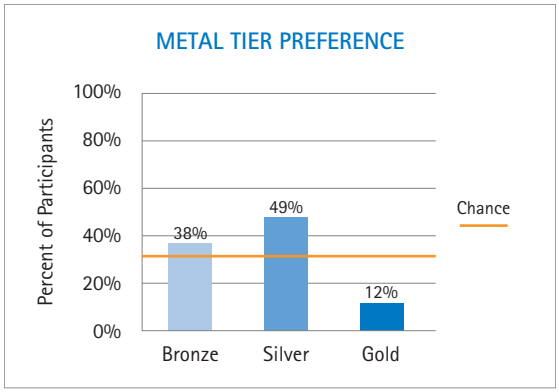
The preference defaults appear to have had a neutral effect on participants' plan choice experience – they did not improve or diminish participants' choice efficacy or their reported levels of perceived difficulty in choosing a plan, decision aid helpfulness, and decision confidence. The defaults did reduce the amount of time spent on the preferences page ($p < .05$) though there was not a significant difference in the overall time spent using the decision aid for those exposed to defaults versus those for whom no defaults were set.

Study participants, regardless of their exposure to preference defaults, made similar health plan choices. These preference defaults differ from health plan defaults which guide users to consider specific plan options. The plan defaults will be evaluated in upcoming experiments. The absence of a preference default effect on plan choice may be explained by:

- Our research indicates that cost is a primary driver of plan choice – though preference defaults can amplify non-cost dimensions, costs dominate the decision for many consumers. In response to a post-choice question, 71% of participants ranked cost as the most important feature in choosing a plan.
- We also speculate that the following may have contributed:
  - The extent of variation between health plans within a dimension may have affected the impact of preference defaults. That is, minimal variation between plans on certain dimensions may reduce the impact of defaults for these dimensions. For example, if plans offer similar added-value services, a default for an added-value service may have a smaller effect than if plans offered very different services. Limited variation reflects real world conditions – in a number of market areas there is modest to small variation among health plans on certain dimensions of plan choice such as plan quality ratings and added-value services like wellness programs. For most topics, the health plan content used in our research is based on actual quality ratings, plan services and costs.
  - The extent of variation among health plans across dimensions may have affected the impact as well. Variation among plans across dimensions may reduce the impact of a default on any one dimension. For example, when two plans differ on cost, quality, and added-value services, a default for added-value services may have a smaller effect than if this were the only dimension that differed. It is also more difficult to isolate the impact of any single dimension on health plan dimension
  - The hypothetical plan choice context in these experiments may have diminished the importance of certain choice dimensions like "my regular doctor in plan" – in a real world decision such topics may carry more weight.

Metal tier: In the preferences section, study participants selected the Silver Tier most frequently when they were asked to indicate their interest among three metal options: Bronze, Silver and Gold. Nearly half (49%) of participants chose Silver – a selection rate that was significantly different than chance ($p < .001$). The participants' preference for Silver is consistent with a decision-making shortcut to select the middle option, which is seen as a compromise between the two extreme options (Simonson, 1989; Tversky & Simonson, 1993). .

Chart 1. Percent of participants indicating a preference for each option.*



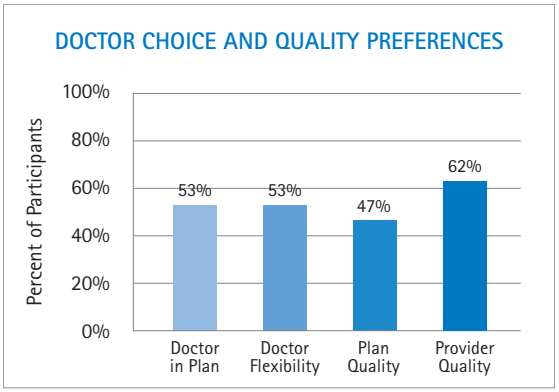
*Participants were required to select one of the three options

Doctor choice and quality: Across four doctor choice and quality topics, provider quality was most popular among study participants – 62% indicated that they were interested in "how experts and plan members rate the doctors and hospitals in the medical plans."

Various Exchanges may be unable to present provider quality ratings initally if such information has not been historically measured and reported in the state. Although we did not specifically test such a scenario, it is likely that in this circumstance consumers would be interested in plan quality since it could be the only dimension of quality performance available. Thus, if provider quality ratings are unavailable, Exchanges may want to default plan quality.

Based on our research, no doctor choice default is recommended: a) there is not a dominant doctor choice dimension, and b) the importance of maintaining an existing doctor relationship is sharply delineated – it is important to roughly half of the population and not a compelling need for the other half. Moreover, the two doctor choice topics were of equal interest to study participants – about half of the participants were interested in knowing if "my regular doctor is in the health plan" and a similar proportion were interested in "doctor flexibility" – the health plan rules about choosing and using doctors (e.g., PCP assignment and referral requirements). About a quarter of the participants were interested in both doctor choice topics.

Chart 2. Percent of participants indicating an interest in each dimension.*



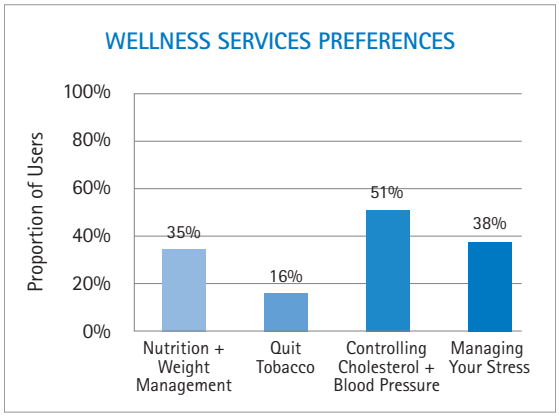
*Participants could select as many dimensions as they wanted.

Our research did not reach to a third aspect of doctor choice – the availability of a particular doctor or medical practice if a consumer moves between commerical and Medicaid coverage due to income flucuations. A Health Research Institute survey found that continuity across commercial and Medicaid coverage is important to more than half of consumers (Health Research Insititute, 2011). Therefore, if the Exchange is providing plan choice decision support for commercial and Medicaid programs, continuity of provider availability across Medicaid and commercial products may be a compelling preference default topic for individuals whose income straddles the Medicaid-commercial eligibility threshold.

Wellness: Across four wellness services, "Controlling Cholesterol & Blood Pressure" was most popular among study participants – 51% indicated interest in

this service. The remaining three wellness topics were of interest to a material number of study participants. Although these were the only four health improvement services we tested, options could be expanded to include other health plan services for enrollees with modifiable risk factors such as substance abuse, or to include general health risk assessment and follow-up services.

Chart 3. Percent of participants indicating an interest in each service.*



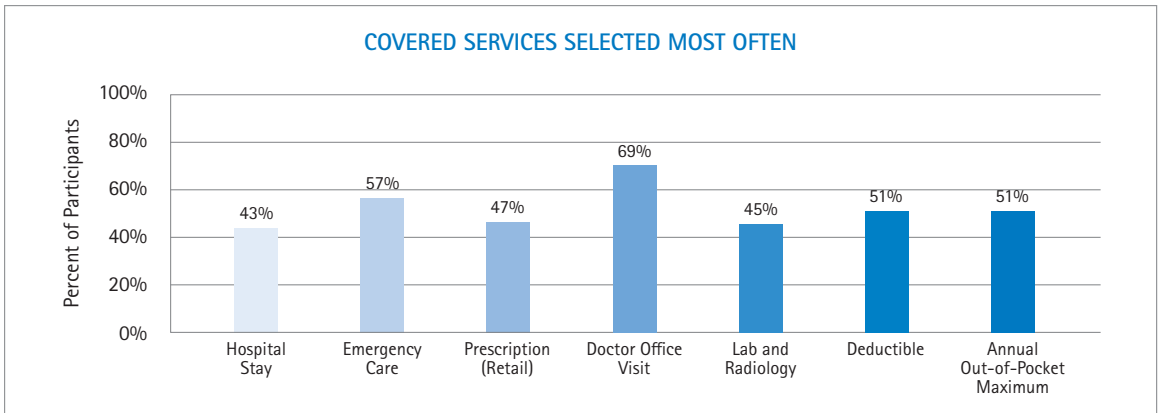
*Participants could select up to 4 services.

Covered Services: Seven covered services were markedly more popular than the remaining topics among the 22 services that were presented in the preferences section. Doctor office visit was selected by the largest proportion of study participants (69%). Another six topics (Chart 4) were also chosen at high rates (43%-57%). The large number of participants (57%) who selected emergency care is striking when compared to the small number of working age insured consumers who express an interest in this same topic (PBGH Plan Chooser); this may be a signal that relevant care settings differ for a lower income population.

Given upwards of 30 covered services topics, the approach to setting defaults is sensitive to the flexibility of the plan comparison format to display any number of covered services topics. If the Exchange's format constrains the covered services information that can be displayed in the top tier of side-by-side plan comparisons, that may influence the approach to setting covered services defaults. Covered services display options include the following.

- Select default topics based on their popularity with users:
  - Default only doctor office visit topic given its paramount importance
  - Default all or a subset of the top seven covered services topics per Chart 4
- Include topics based on policy objectives, such as encouraging users to consider important features:
  - Regardless of defaults, apply logic to always display the out-of-pocket maximum and the deductible amount

Chart 4. Percent of participants indicating an interest in each service.*



*Participants could select up to 5 services.

2. Cost at Time of Care Defaults

Preference defaults: Preference defaults should **not** be set for cost at time of care medical service and medication use categories; rather the user should be prompted and required to select a utilization profile (e.g., low, average, high expected utilization).

RATIONALE: Cost at Time of Care Default

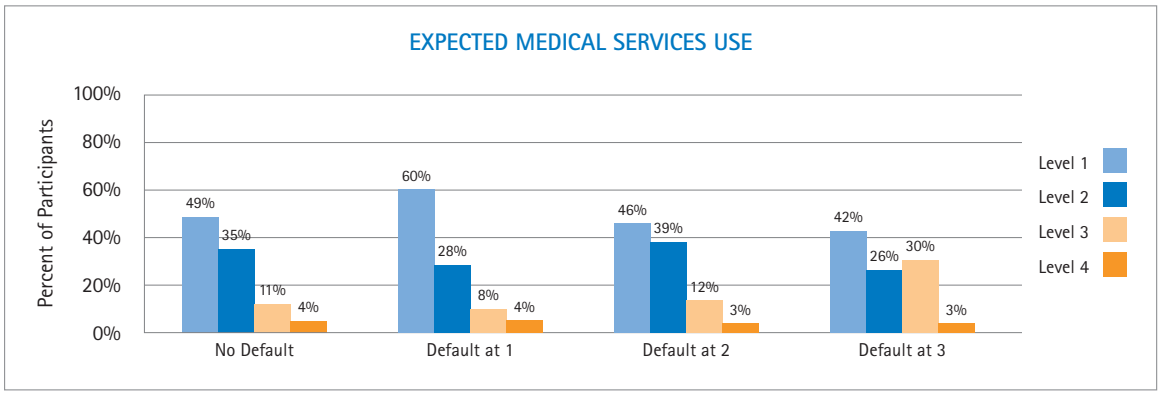
Limitations of defaults: When a default may have potentially harmful consequences, requiring users to choose is better than offering default options (Goldstein et al., 2008). This is true of cost at time of care use: expected medical service use levels can dramatically affect projected costs and viewing the wrong expected cost can lead to a poor decision. In the absence of sufficient information to make an educated guess about each user's expected usage levels, defaults should not be set for expected usage.

Exchange research evidence per Spring 2012 experiments:

Study participants were randomly assigned to no default or to one of three defaults for cost at time of care (Level 1, 2 or 3) – no one was defaulted to Level 4 the highest cost level. Participants could deselect the default and choose any one of the four cost at time of care levels.

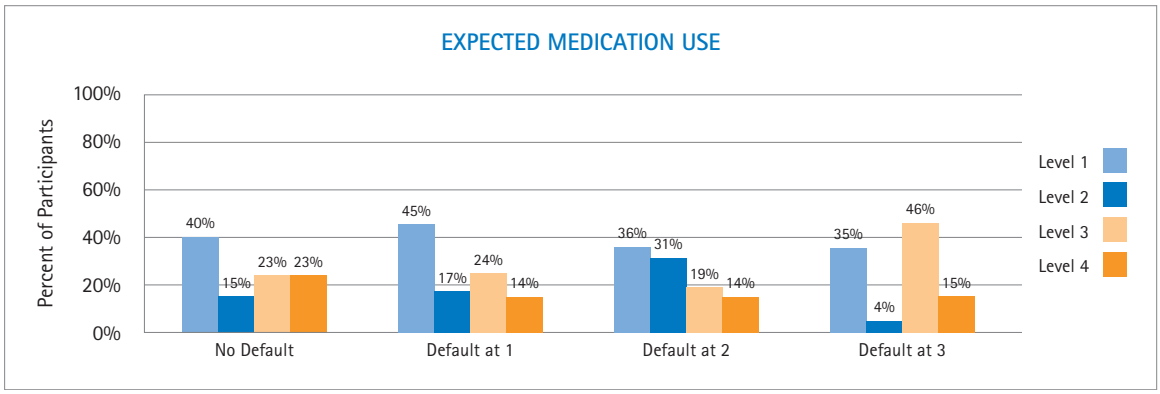
In line with previous evidence indicating that defaults are sticky (Thaler & Benartzi, 2004), our research found that study participants, who were defaulted to a utilization level, were more likely to keep the default level than they were to select that same level if it was not defaulted. As such, defaults at higher use levels skewed the distribution of expected utilization levels toward higher medical services use and hence greater expected costs at time of care. As seen in Chart 5, for medical services, the distribution

Chart 5. Percent of participants indicating each level of expected medical services use.*



*Participants were required to select one of the four levels.

Chart 6. Percent of participants indicating each level of expected medication use.*



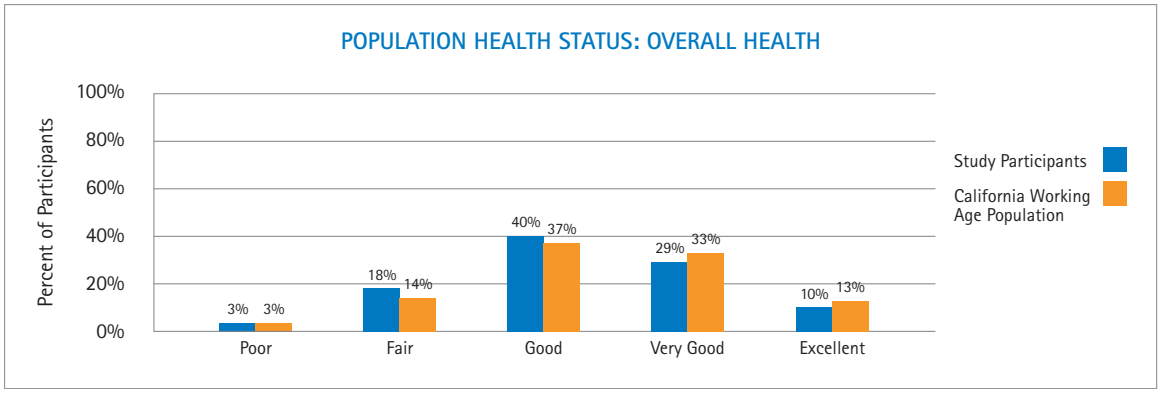
*Participants were required to select one of the four levels.

of participants who were defaulted to Level 3 was skewed significantly higher than the distribution of participants who were not exposed to a default ($p<.001$). As seen in Chart 6, for medication use, the distribution of participants who were defaulted to Levels 2 and 3 were skewed significantly higher than the distribution of participants who were not exposed to a default ($p<.01$ and $p<.001$, respectively).

Importantly, the distribution of expected service use for study participants defaulted to Levels 2 or 3 diverges from the general population norm. In the general population, we expect to see considerably fewer people opting in to Levels 2 and 3 and roughly 20% more people opting in to Level 1 than is observed for the Level 2 or 3 defaulted participants. These study participants' self-reported health status is somewhat but not dramatically lower than general population norms (Chart 7).

Cost calculator instructions improve decisions: Because of the potentially large impact of cost sharing amounts on a consumer's total plan costs, it is important for users to understand how their expected utilization is used to calculate cost at time care estimates. Recent work by Eric Johnson indicates that educating study participants about the cost calculator significantly increased the likelihood that they would choose the most cost effective plan (Johnson et al., 2012). Providing instructions about the purpose of the cost calculator fostered an important incremental gain in making the "right plan choice." Prompting users to consider and select a utilization profile is a subtle but meaningful way to help users understand a cost calculator and the source of the cost information that subsequently appears in the plan comparison display. In turn, we believe that this greater comprehension of the cost information can help people choose plans that better fit their needs.

Chart 7. Percent of participants indicating each level of overall health.



Consequently, our research indicates that if a cost at time of care default is used, at least for utilization levels that are greater than the "low end utilization profile," there is a greater likelihood that some number of people could compare plans using higher cost at time of care amounts (i.e., based on utilization levels that are greater than those expected by the user). Notably, although some participants kept the default, this propensity to retain the default was not nearly as strong as was observed for the other plan choice dimensions including quality, doctor and covered services.

3. Covered Services Content And Display

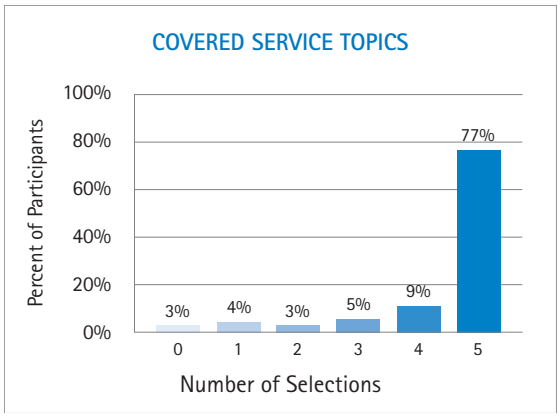
Preferences elicited: User preferences should elicit the importance of select covered services. The number of covered services and the labeling of these services will be informed per the benchmark plan that the Exchange adopts and the Essential Health Benefits final rule. Per the discussion above, preference defaults can be set for a small number of services that are of interest to a large number of people. Users would have the option of deselecting these defaults and/or expanding their preferences set to other coverage topics per the following example which shows 3 defaults.

- [x] Annual Out-of-Pocket Maximum Self/Family
- [ ] Behavioral Health Out-of-Pocket Maximum Self/Family
- [ ] Chiropractic/Acupuncture Visit
- [x] Deductible Self/Family
- [x] Doctor Office Visit
- [ ] Mental Health Inpatient
- [ ] Mental Health Outpatient
- [ ] Outpatient Therapy Visit
- [ ] Prescription Mail-order generic/brand/non-formulary
- [ ] Prescription Retail generic/brand/non-formulary

RATIONALE: Covered Services

Meet user preferences: Though the covered services information is cited by few consumers (~5%) as their main reason for choosing a plan, services coverage information is rated as "very important" by a large number of working age, insured consumers (38%) when selecting a plan (PBGH Plan Chooser).

Chart 8. Percent of participants indicating an interest in each number of services.*



*Participants could select up to 5 services.

Exchange research evidence per the spring 2012 experiments:

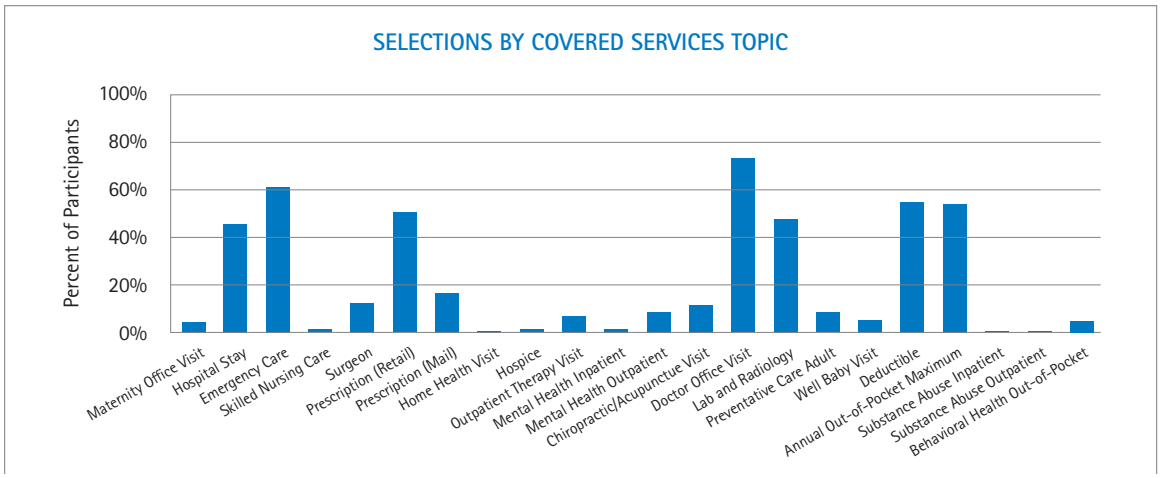
In our research, one or more covered services are of interest to virtually eveyone – only 3% of study participants did not select at least one covered services topic when indicating their preferences (when no defaults set for covered services). And, 77% of these same participants selected the maximum number (5) of key services.

Seven covered services were markedly more popular across the 22 services that were presented in the preferences section. "Doctor office visit" was selected by the largest proportion (69%) of study participants. Another six topics (Chart 9) were also chosen at high rates (43%-57%).

Plan comparison:

The plan comparison information should include a "your top covered services" set which displays the user-selected most important services in a plan side-by-side match-up. This set could be followed by plan-to-plan comparisons of all of the Essential Health Benefits and the associated cost-sharing amount (e.g.,

Chart 9. Percent of participants indicating an interest in each service.*



*Participants could select up to 5 services.

copay, coinsurance etc.). Such displays could use hide/unhide devices in which the default displays the "your top covered services" and the other services information is available per the user control to "unhide" the content. Given their importance and distinction as global aspects of coverage, the out-of-pocket maximum and deductible amount should be placed at the top of the covered services plan comparisons.

If the format constrains the covered services information that can be displayed in the top tier of side-by-side plan comparisons, the covered services information could be placed on a subsequent display that presents the detailed plan comparisons for health plan options flagged by the user.

Plan comparison column vs. row format: If health plans are compared in a side-by-side column format, in which the plan choice dimensions are positioned in rows, each covered service topic can be arrayed in a row displaying the cost-sharing amount for the plans. The covered services can be organized in one of several ways:

- "Key services" of interest to a user per selections made in the perferences section
- Clustered in the ten Essential Health Benefits (EHB) categories
- A combination of "key services" and the EHB clusters

A health plan comparison format that positions the plans as rows with the plan choice dimensions placed as columns could constrain the covered services information that can be displayed in the top tier of a side-by-side plan comparison. Among the tactics to present the covered services information in a concurrent view with the remaining top choice dimensions are:

- Create a pre-determined, limited number of covered services topics that can be displayed and

Plan as Columns

	Zenith HMO GOLD	Summit HMO GOLD	Pinnacle PPO SILVER	Eminent Health PPO SILVER
Key Services (hide)				
Annual Out-of-Pocket Maximum Self/ Family	$1,000/$3,000	$1,500/$3,000	$2,000/$4,000	$3,000/$9,000
Chiropractic/ Acupuncture Visit	Not covered	Not covered	20%	20%
Deductible Self/ Family	$0	$0	$500/$1,000	$250/$750
Doctor Office Visit	$15	$25	$20 PCP; $30 specialist	20%
Lab and Radiology	$0	$0	20%	20%

Plan as Rows

Medical Plan	Your Cost	Doctor Choice	Wellness Services	Key Services What you pay for in-network services	Quality Ratings
Zenith HMO GOLD Yearly total cost **$11,452** My top plan choice	**$15,600** Yearly premium **-$4,248** Yearly premium tax credit **$100** Yearly cost at time of service	Your doctor not found in plan. Must select a primary care physician (PCP); referral required for specialist.	Quit tobacco: includes phone counseling More...	Deductible Self/ Family: **$0** Annual Out-of-Pocket Maximum Self/ Family: **$1,000/$3,000** Doctor Office Visit: **$15** Lab and Radiology: **$0** Chiropractic/ Acupuncture Visit: **Not covered** See all services ...	Medical Plan ★★★ Doctors & Hospitals ★★★

present these topics based on the user selections in the preferences section. Compare the remaining covered services in a secondary page display

- Freeze the pane that displays the other top choice dimensions and scroll through a series of panes to present clusters of covered services topics
- Omit or truncate the covered services information in the top tier of the plan comparison hierarchy and present the full covered services information set in a secondary display that may be limited to a small number of plan options that the user designates for a detailed comparison.

4. Top Hierarchy of Plan Choice Dimensions

Hierarchy of doctor and quality information:

The most recent experiments bolster the evidence for including doctor choice and quality performance information in the top tier of plan comparison information that was described in the Installment One Business Rules.

RATIONALE: Top Hierarchy Topics

Meet user preferences: Selecting topics for the top tier of plan comparison information should be informed by evidence about choice dimensions that matter to many people.

Accomplish policy objectives: The selection of topics for the top tier of plan comparison information can also be informed by policy objectives, such as encouraging consumers to consider quality ratings.

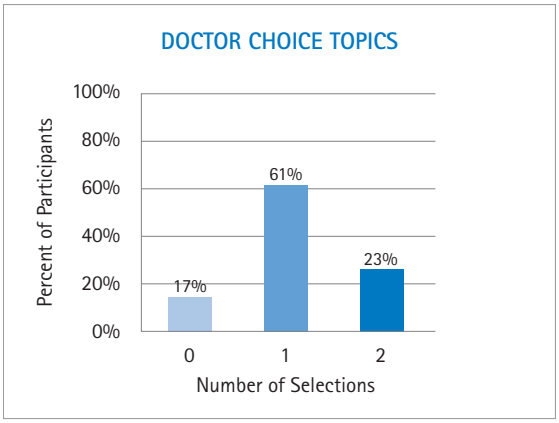
Exchange research evidence per spring 2012 experiments:

Dominance of cost information: The cost of the medical plan may be the single greatest influence on plan choice. In our research, 71% of participants rank cost as the most important feature in choosing a plan. If the Exchange's policy objectives include encouraging consumers to consider other aspects of plan choice and assess costs in the context of these other plan attributes, it is particularly important to position non-financial aspects of the decision in the top hierarchy of information when comparing plans side-by-side.

Preference for doctor choice information: In our research, 83% of study participants selected at least one doctor choice dimension when considering their plan choice preferences. The two doctor choice topics were:

- is "my regular doctor in the health plan"
- rules about choosing and using doctors (e.g., PCP assignment and referral requirements)s

Chart 10. Percent of participants indicating an interest in each number of doctor choice topics.*

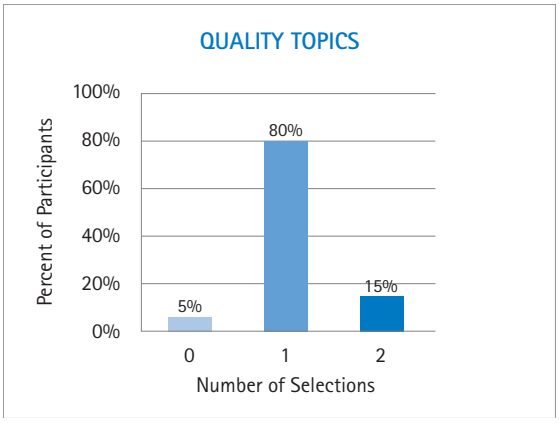


*Participants could select neither, one, or both topics.

Preference for quality information: In our research, quality performance was of interest to almost all study participants – only 5% bypassed this topic while 95% were interested in one or both of the two quality performance ratings. The two quality topics were:

- "how experts and plan members rate the medical plans"
- "how experts and plan members rate the doctors and hospitals in the medical plans"

Chart 11. Percent of participants indicating an interest in each number of quality topics.*



*Participants could select neither, one, or both topics.

5. Order of Plan Dimensions

Ordering plan dimensions: In the top hierarchy of plan comparison information, plan dimensions should be ordered based on their importance.

RATIONALE: Ordering of Plan Dimensions

Meet user preferences: The ordering of plan dimensions should be informed by evidence about choice dimensions that matter to many people.

Accomplish policy objectives: The ordering of plan dimensions also can be informed by policy objectives, such as encouraging consumers to consider provider access and quality ratings.

Exchange research evidence per spring 2012 experiments:

Our research suggests the following relative priority of each of the key aspects of choice:

1. Costs (including cost at time of service, premium, and total cost)*
2. Doctor Choice (including doctor in plan and doctor choice flexibility)
3. Quality Ratings
4. Covered Services

*Metal tier may be positioned in same cell

The Chart 12 participant rankings illustrate the paramount importance of cost information followed by doctor choice content. In making trade-offs among choice dimensions, quality performance information is of less importance to many people.

6. Content of Filters for Users to Limit the Number of Plans in a Comparison

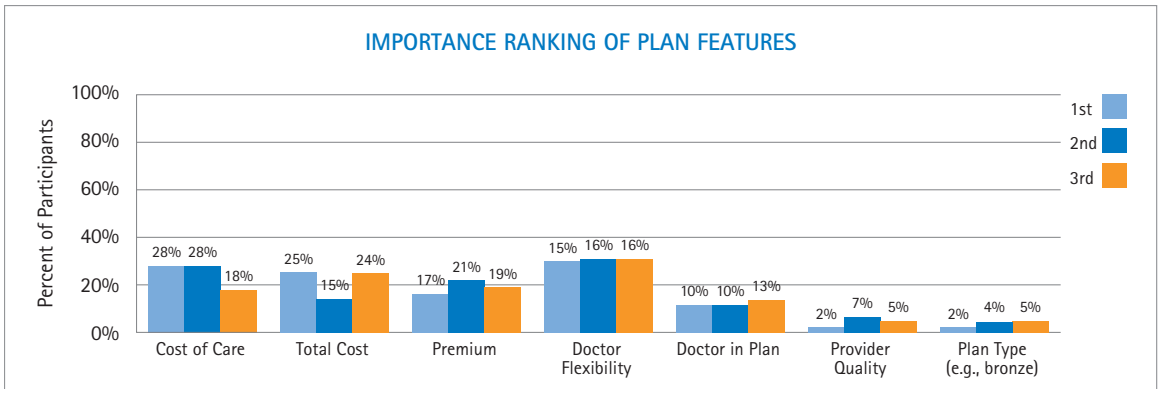
Filter Topics: We recommend the following candidate filters that users can apply to view narrower subsets of health plan options. This is not an exhaustive list as filtering will be further addressed in the Installment 3 Business Rules.

- My Doctor in Plan
- Doctor Belongs to Commercial and Medicaid Networks Offered by Same Plan
- Doctor Choice Flexibility (PCP selection or referral authorization requirements)
- Metal Tier
- Geographic Area

Filtering topics help users identify plans that best match their preferences – the list of available plans is organized and truncated to match the filter topic. Filtering is particularly important if there are a larger number of health plan options. Typically, on the website plan comparison page, the user has a filter function with a listing of topics to narrow the plan options to plans that match that topic (e.g., "my doctor in plan").

The criteria to select filtering topics should include topics that: a) are threshold decisions for many users – ranked as the top priority, b) distinguish health plan options – there is variation among the plans, c) have a stronger relationship to plan selections, d) have categorical rather than continuous results, and e) for which the data is available on most if not all plan options. If there is missing data for a particular dimension, like quality ratings, it is best to use a sort function to organize and

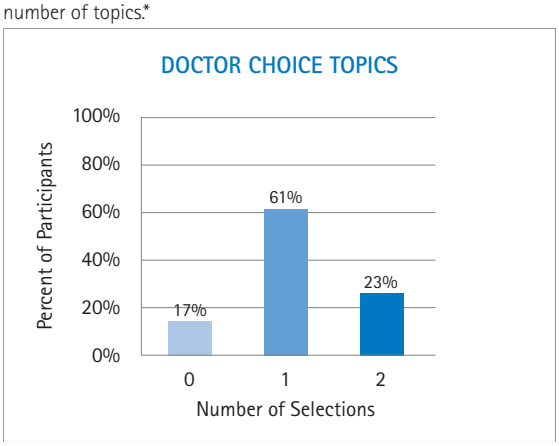
Chart 12. Percent of participants who rank each plan feature as one of their top 3 plan features.



rank the information by that dimension rather than a filter whereby a user could be unaware that they have excluded certain plan options due to data gaps. Plan dimensions such as cost, quality ratings, and cost-sharing amount are not good candidates for filter topics if these are continuous values. However, the Exchange may score and organize certain dimensions as categorical values (e.g., "above average" quality rating).

Decisions about including certain topics as filters, like covered services, should be made once the QHP products are known. Covered services may not be a useful filter if there is little product variation per the Essential Health Benefits. However, differences in cost sharing amounts may argue to include certain covered services in a filter (e.g., deductibles >/< $2,500).

Chart 13. Percent of participants indicating an interest in each number of topics.*



*Participants could select neither, one, or both topics within each category.

RATIONALE: Filters for Plan Comparison

Doctor Choice: In our research, 83% of study participants selected at least one doctor choice dimension when considering their plan choice preferences. Two doctor choice topics were tested: a) is "my regular doctor in the health plan," and b) rules about choosing and using doctors (e.g., PCP assignment and referral requirements).

"My doctor" is a threshold plan choice attribute for many consumers. Roughly two-thirds of all commercial insureds report that a doctor they currently use is important in their health plan choice (PBGH Plan Chooser). Fifty-three percent (53%) of study participants indicated that "my regular doctor" is important in choosing a plan.

Doctor belongs to commercial and Medicaid networks offered by same plan: Exchange membership projections indicate that a large number of Exchange enrollees have incomes that hover around the Medicaid income eligiblity threshold; with modest earnings flucuations a number of these individuals, over time, could shift between commercial and Medicaid eligibility. Moreover, a number of lower income households have family members who may be split between Medicaid and commercial plans. The "my doctor belongs in plan…" variable could be expressed as an individual practitioner and/or as the number of nearby primary care doctors who participate in the plan's commercial and Medicaid products.

Geographic area: The health plan service area is the fundamental filter for narrowing the plan list. Generally, the initial plan comparison is limited to plans serving the user per a zip code entered in the eligiblity section. The geographic area filter enables a user to modify the search to consider other locales.

Metal tier: The Metal categories are a proxy for coverage and cost. However, because the cost-sharing designs and out-of-pocket maximums could vary considerably within a Metal Tier, it may be prudent to use the Metals as a sort option and not as a filter. The Exchange should determine its decision support approach for the Metal Tiers once the Qualified Health Plan products are finalized and the variation in cost and coverage within and between Metal categories is known.

Appendix: Participant Demographics

Participants were provided by a market-sampling firm and compensated at the firm's standard rates. Participants were required to be over the age of 18 and fluent English speakers. Additionally, participants were screened by the firm based on self-reported income and education to ensure that the sample was similar to the presumed demographics of prospective Exchange users. Data from participants were excluded for one of two reasons: 1) In each study, 0-1% of participants reported annual household incomes exceeding 400% of the federal poverty level, and 2) In each study, 1-2% of participants did not complete the study in good faith, completing the study in less than two standard deviations from the mean completion time (e.g., taking less than 3.5 minutes to complete a 15-minute study). After these exclusions, each study had data from, on average, 300 participants. As intended, these participants were primarily low income and low education: across studies, all participants reported annual household incomes close to or below 400% of the federal poverty level and 87% of participants reported having a high school education or less. The sample was 69% female with a median age of 45 (M = 43.88, SD = 12.33). Fifty-seven percent of participants were married or living together and average household size was 3.05 (SD = 1.52). Sixty-three percent of participants were enrolled in a health plan at the time of participation.

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