Testimony
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Before the
COUNCIL OF THE DISTRICT OF COLUMBIA
COMMITTEE ON HEALTH PERFORMANCE OVERSIGHT HEARING
Fiscal Year 2017 – 2018
Councilmember Vincent C. Gray, Chairperson

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John A. Wilson Building
1350 Pennsylvania Avenue, NW
Room 412

Chairman Gray and Members of the Committee, my name is Mila Kofman. I am the Executive Director of the DC Health Benefit Exchange Authority (HBX). HBX is a public-private partnership established to create and operate DC's state-based on-line health insurance marketplace called DC Health Link. It is an honor to be here today to testify before you. I would like to thank you and all Councilmembers for your commitment to health reform, all your efforts to help residents and businesses gain affordable health care, and your help especially during our annual open enrollment (tweeting and participating in outreach events). I would also like to thank Mayor Bowser for her support and advocacy for the Affordable Care Act.

The Affordable Care Act (ACA) has enabled the District to expand health coverage so that more than 96% of our residents are now covered. We have the lowest uninsured rate we've ever had and rank between first and third (depending on the study) among all states in the nation for having the lowest uninsured rate. Our 2018 open enrollment period just closed on February 5, 2018 and we have 22,717 District residents who have made plan selections for 2018 coverage. We also have more than 76,000 people covered through our marketplace for small businesses.

Many states, including the District, leveraged the ACA to expand coverage and improve consumer protections for our residents and businesses. We intend to continue to build on this success. However, steps have already been taken at the federal level, and more are in the planning stages, which endanger the health coverage of tens of thousands of District residents and risk shifting tremendous costs to patients, medical providers and the District.

District Success is at Risk

Since 2017, the new federal administration has significantly changed policy at the federal level, destabilizing private health insurance markets.

To summarize:

- **Cut Open Enrollment**: The federal Administration cut in half the open enrollment period for 2018 from three months to six weeks (November 1, 2017 - December 15, 2017). In response, the District and a few other states with state-based marketplaces expanded open enrollment. DC, NY and CA state-based marketplaces had the longest open enrollment in the nation with DC being the first to decide to have a three month open enrollment period.
- **Slashed Media Budget:** The federal Administration cut their paid media budget by 90% -- from $100 million to $10 million. We know from internal surveys that half of our customers learn about us by first going to the federal webpage. Under President Obama, the Administration spent hundreds of millions of dollars to drive traffic to the federal site. Also, during open enrollment, Obama Administration cabinet officials through their state travel generated millions of dollars in earned media, which also heightened awareness about the federal website to then drive traffic to state-based marketplaces. The cut in federal paid media had a significant impact. As a state-based marketplace, we were able to take steps to mitigate the negative impact. Although we could not make up for the millions in lost paid media, through creative events and the assistance of Mayor Bowser and all Councilmembers, we generated approximately $1.9m in earned media coverage.
- **Slashed Funding for Navigators:** The federal Administration cut funding for federal navigators by 40%, from $62.5 million to $36.8 million. In DC, we kept our funding investment in DC Health Link Navigators and Assisters at the same level as the prior open enrollment. Again we are able to do this because we are a state-based marketplace.
- **Stopped CSR Reimbursements:** The federal Administration stopped reimbursing health plans for cost sharing reductions (CSR). Around the nation, this led to a significant problem of some insurers pulling out of the market. Here in DC, because of the policy choices the District made early like expanding Medicaid to childless adults with up to 215% Federal Poverty Level (FPL), the impact of federal administration actions were negligible because most residents qualify for Medicaid. We had approximately 300 residents receiving CSR and the cost of that was borne by the health plans.
- **Adopted Regulations Creating Enrollment Barriers:** The federal administration issued regulations that created barriers to enrollment including new requirements for verification. As a State Based Marketplace, we were able to have District rules in cases where states have flexibility. See HBX comments to the proposed regulation: https://hbx.dc.gov/sites/default/files/dc/sites/hbx/page_content/attachments/DC_HBX_Comment_CMS-9929-P.pdf
- **Proposed Regulations for Association Health Plans:** The federal administration recently proposed regulations to create essentially unregulated insurance companies exempt from the requirements of the ACA. The proposal allows AHPs to sell across state lines calling into question state authority to regulate. The proposal exempts AHPs from ACA consumer protections such as essential health benefits (EHB), rate reforms, guaranteed issue and single-risk pool requirements. AHPs could refuse to cover maternity and mental health benefits. AHPs could also discriminate in rates, charging women higher rates than men, charging smaller businesses higher rates, charging businesses in certain industries higher rates, and charging older people higher rates without limit. AHPs could engage in marketing practices to keep sicker small groups and people out. AHPs could also engage in red-lining – establishing themselves in geographic locations of their choosing. AHPs will cherry pick the healthiest businesses and people to cover, while leaving older and sicker people and small businesses in certain industries to rely on state regulated markets. This practice will destabilize state regulated small group (small business) and individual private health insurance markets. These markets will

collapse when only sicker people are left. That means that people will be left with no health insurance options. Historical note: when Kentucky exempted association health plans from state insurance reforms, membership in associations doubled within 90 days of the exemption going into effect. Kentucky's individual market collapsed. Furthermore, AHPs have a long history of fraud and insolvencies that leave small businesses and self-employed people with hundreds of millions in unpaid medical bills.

HBX's external actuaries from Oliver Wyman estimate the impact of AHPs on the small group and individual market in DC. They estimate that the impact of AHPs would be an increase in premiums by as much as 25.8% for small businesses and 10.9% for individual market coverage – this is only because of AHPs. This is in addition to medical trend and other factors that drive premium increases. Furthermore, out of 76,000 people in our small group market, nearly 58,000 would migrate into AHP coverage and an additional 1,600 people with small group coverage would lose that coverage. On the individual side, an estimated 4,200 people of the 17,000+ in the individual market would be in AHPs with an additional 500 becoming uninsured. If these predictions materialize, then the ACA private market will collapse. People and businesses who need consumer protections under the ACA will suffer greatly. (Please see attached Oliver Wyman analysis.)

Because this proposal is under the Employee Retirement Income Security Act of 1974 (ERISA), which preempts state action in many areas, states may be powerless to protect their residents through state legislative and regulatory actions. We are very concerned about this proposed regulation which I refer to as repealing the ACA without Congress. We will be submitting comments to the U.S. Department of Labor to urge changes to the proposed regulation and we are working with a broad coalition that includes ERISA experts, other state-based marketplaces, and others to educate federal policymakers on the dangers of this proposal.

- **Proposed Regulation for Short Term Duration Policies:** The Administration proposed a regulation to change and expand what qualifies as limited duration policies exempt from the ACA. Under the Obama Administration these products were limited to no more than three months in duration because they do not meet the ACA consumer protections and can leave people without needed coverage. The proposed new standards will allow short term policies to be as long as 364 days (up to one year). The proposed rule does not preempt states from having more consumer protective standards. We are reviewing the proposal and will be submitting comments. We will also work with DISB to find ways to continue to protect District residents.

In addition, there have been several efforts to repeal the health reform law. None have been successful. However, Congress repealed the individual responsibility requirement as part of the tax legislation signed into law in December 2017. The federal responsibility requirement goes away starting January 1, 2019. Our outside actuaries estimate that in DC there would be a 7% increase in claims, increasing premiums as healthy people drop coverage. Importantly, the increase from the federal individual responsibility requirement being repealed is on top of the annual premium increases for medical inflation and other factors. The Congressional Budget Office estimates a 10% increase in premiums and loss of coverage for millions of people.

To protect the stability of our private market and to make private coverage more affordable, HBX established an ACA Working Group to develop local policy options. The ACA Working Group included diverse stakeholders including health plans, small businesses, brokers, health care providers, and consumer and patient advocates. Several District agencies provided technical assistance including DHCF, DISB, and the OCFO (additional District agencies including DOH and staff from DMHHS joined the working group in January 2018). The ACA Working Group developed local policies that would protect the stability of DC's private market and improve affordability. In October 2017, the working group

adopted through consensus the following recommendations designed to work together to make coverage more affordable and ensure market stability:

1. A locally funded reinsurance program to keep the District's individual health insurance market stable and to lower premiums for everyone. Reinsurance existed under the ACA and helped reduce premiums for everyone with private individual health insurance. The federal program expired. Locally funded reinsurance would reduce premiums for all people with individual health insurance – those who pay full premium and those whose premiums are reduced through APTC.
2. A locally funded subsidy program to increase affordability for people who qualify for federal tax credits. Some District residents choose to forgo coverage because it is too expensive even when they qualify for federal premium reductions (APTC). A locally funded wrap to APTC would make premiums more affordable for people at 215% to 400% FPL.
3. A fallback enforcement of the federal individual responsibility requirement (no longer relevant with its repeal); and
4. A fallback cost sharing reduction reimbursement for the District's health plans when the federal government does not make payments.

The HBX Executive Board considered and adopted the ACA Working Group consensus recommendations on November 8, 2017.

After passage of the repeal of the individual mandate in December of 2017, Mayor Bowser asked HBX to reconvene the ACA Working Group to "consider whether there are actions the District of Columbia should take in light of the repeal of the individual mandate."

HBX reconvened the ACA Working Group on January 19, 2018. The ACA Working Group discussed pros and cons of implementing a local individual responsibility requirement to fill the void left by the federal government and if a local requirement is implemented, whether DC should build on the federal structure or create its own unique structure. Experts presented on the federal individual responsibility requirement, the Massachusetts individual mandate, and proposals in Maryland to respond to the federal repeal of the mandate. After eight meetings, the ACA Working Group through consensus (14 yes; 0 no) voted to recommend for the District to adopt an individual responsibility requirement that mirrors the federal requirement with changes to enhance protections for District residents. The recommendation is available at the HBX website.[1] The HBX Executive Board unanimously adopted the recommendation on February 21, 2018.

While the District has leveraged the ACA to expand and improve coverage and as a result achieved a coverage rate of more than 96%, it is now equally important to protect coverage gains and continue to looks for ways to make coverage more affordable. The ACA Working Group's consensus-based recommendations are an important path forward to make private coverage more affordable for our residents and to keep our private market stable. These recommended policies would require your support to enact new laws here and would require local funding.

DC Health Link 2018

In 2018 for individuals and families we have 26 private health insurance plans (including two catastrophic plans) that are offered by CareFirst Blue Cross Blue Shield and Kaiser Permanente. On the small business side, DC Health Link offers 151 private health insurance plans from three United Healthcare companies, two Aetna companies, and CareFirst Blue Cross Blue Shield and Kaiser Permanente. For both markets

[1] https://hbx.dc.gov/page/affordable-care-act-aca-working-group-2018-meeting-materials.

these plans include HMOs, POS, PPOs, zero deductible plans and HSA-compatible high deductible coverage.

As of February 19, 2018, there are 94,204 people with private health insurance coverage through DC Health Link. That includes 76,574 people employed by DC small businesses (and Congress) and 17,630 (paid enrollment) District residents covered through the DC Health Link Individual marketplace. See attached enrollment data.

Outreach

HBX once again engaged in a robust outreach and enrollment campaign for our fifth open enrollment period, which ended February 5th, 2018. Based on our internal surveys we know that earned media – TV, radio, newspapers – is the second most prevalent way our customers learn about us. The first is through healthcare.gov as discussed earlier.

This year we asked all Councilmembers and the Mayor for significant assistance. Councilmembers and Council staff, the Executive Offices of the Mayor and Deputy Mayor for Health and Human Services, and Mayor Muriel Bowser actively helped us at enrollment and outreach events. To kick off open enrollment, we had a press conference with Mayor Bowser. Director Wayne Turnage (DHCF), Director Laura Zeilinger (DHS), and Commissioner Stephen Taylor (DISB) attended to help us. The press conference had more TV, radio, and print press than we have ever had at a kick-off event. The local news coverage helped greatly raise awareness for open enrollment.

In addition, Mayor Bowser and we joined together to host a community-wide enrollment and health fair a few days later. Congresswoman Eleanor Holmes Norton, a champion of DC Health Link since inception, participated in open enrollment kickoff events and used her newsletters to help educate residents. During the community-wide Open Enrollment and Health Fair Kickoff, Congresswomen Norton led the ceremonial opening of the DC Health Link marketplace. The event included onsite enrollment, health screenings, children's play, moon bounce, a cooking demo, Zumba, yoga, local entertainment, a remote radio broadcast, and more. Congresswoman was joined by Council Chairman Phil Mendelson, Councilmember Brandon Todd and Deputy Mayor of Health and Human Services HyeSook Chung. All helped to rally residents to get enrolled. The local news coverage helped generate awareness and resulted in many residents signing up that day.

Most recently, when we extended open enrollment, the Mayor announced the extension at the bill signing ceremony and press event for the *Defending Access to Women's Health Care Services Amendment Act of 2017*. This law was passed by the Council to ensure that women in the District continue to have access to coverage. This announcement helped raise awareness for an extension of our open enrollment.

Additionally, this open enrollment all Councilmembers helped educate District residents through social media, newsletters, or in person community events. Some, like the Chair of the Health Committee, Councilmember Gray invited us to participate at several panel discussions that helped us reach people we otherwise may not reach. Some Councilmembers, like Brandon Todd, went door-to-door canvassing with us, others like Councilmember McDuffie helped by sending their staff. While many Councilmembers used social media to help us, some of the most prolific efforts were by Councilmembers Grosso, Nadeau, and Allen.

Your strong support helped generate news stories. We greatly appreciate all your tweeting, community meetings, and participation. You helped raise media interest, which is essential to helping educate residents. You helped the District to have another successful open enrollment. Thank you for your strong support for the ACA and DC Health Link here in the District.

Paid Media

Paid media helped to support outreach efforts. Paid media included radio spots on local and diverse stations, on cable, NBC4 and Fox 5, and in community newspaper ads and digital ads. Ads in print publications included the Washington Informer, Washington Post Express, Washington Hispanic, Washington Jewish Week, The Blade, the Washington Afro-American, The Current Newspapers, Capital Community News, and Washington Business Journal.

Digital & Social Media Outreach

HBX leveraged digital communications to help drive engagement and to educate and reinforce enrollment messaging. HBX utilized active digital communications tactics through targeted email campaigns to connect, and remind customers of approaching enrollment deadlines. Additionally, HBX employed a text message alert system around each of the deadline dates to remind customers of approaching enrollment deadlines and to enroll in health insurance coverage.

Outreach

This year we continued successful events from prior years like our one touch enrollment site, storefront enrollment sites, Faith-in-Action campaigns, LGBTQ outreach, beauty and barber days, Movie Nights at local theaters, and enrollment weeks of action targeting specific populations. We also tried new activities including Kostume Karaoke Night and Grassroots Comedy – a comedy show on behalf of DC Health Link and open enrollment. On Super Bowl Sunday, the biggest day of the year for takeout pizza, DC Health Link partnered with Red Rocks, a firebrick pizzeria with locations in DC. Red Rocks pizza boxes were stickered with DC Health Link fliers with a reminder that enrollment was extended until Monday, February 5th, and that they could still get health insurance for 2018 coverage.

Small Business Outreach

Small businesses can enroll at any time during the year. For our Small Business Campaign, HBX launched the "Affordable Choices Campaign," which includes advertisements on Metro buses that featured DC Health Link's small business customers; media buys with radio stations and local newspapers, including Capital Community News, the Hill Rag, Mid-City DC, East of the River, The Washington Post, Capital News, The Express, El Tiempo, and Washington Business Journal; and a digital/social media outreach through targeted email blasts, text-a-thons, mobile device ads through geo-fencing, and on-screen Hollywood–quality produced movie ads in 29 movie theatres, lobbies and concession stands throughout the city.

Aligned with the SHOP Affordable Choices Campaign, HBX facilitated its 2nd Annual POWERUP DC National Small Business Week Forum in partnership with the Washington Business Journal. Additional partners included local business organizations: the DC Chamber of Commerce (DCCC), the Greater Washington Hispanic Chamber of Commerce (GWHCC), the National Association of Health Underwriters and Restaurant Association Metropolitan Washington (RAMW). The event focused on research on the state of small business, what keeps small business owners up at night and their outlook for the year ahead. Additionally, a panel of distinguished DC Health Link small business customers, Compass Coffee, Urban Stems and Telecommunications Development Corporation, Inc., shared insights on business successes and provided insights into building and growing a small business.

In addition, through our partnership, the DC Chamber of Commerce recognizes a DC Health Link Healthy Business of the month online and in their monthly newsletter to members which helps generate interest from other member small businesses.

DC Health Link Certified Brokers, Navigators, Assisters and Certified Application Counselors

HBX has invested since day one in ensuring strong community partnerships. To that end, we currently have more than 750 certified DC Health Link brokers, approximately 40 assisters and navigators, and 60 certified application counselors authorized as DC Health Link trained experts. They are trained and certified to help individuals and small businesses through the DC Health Link account set-up, application, and plan selection process. They also participate in many outreach and education efforts to find the uninsured in the District, and to let them know about DC Health Link and the benefits of having health insurance coverage. These trained experts have been vital to helping individuals and small businesses, and have been important in helping us make a significant impact on reducing the number of uninsured in the District. Because they are trusted voices in their communities, these experts will remain vital in the effort to find the remaining uninsured and help them obtain coverage. Different from the federal government which greatly reduced funding for their navigators in the federal marketplace states, we are committed to our investment and proven partnerships.

Information Technology

Since we opened for business, we have learned many lessons. We initially used commercial off-the-shelf (COTS) products for DC Health Link. After the initial build, we faced millions of dollars in annual licensing fees for COTS products. Change requests cost hundreds of thousands and at times millions of dollars due to the complexity of changing hard-coded software. Product development cycles were 6, 8, and sometimes 12 months or longer. Code upgrades and changes required the entire code to be redeployed and the Marketplace to be off-line in maintenance, which meant customers could not use the Marketplace while the system was down.

To help achieve sustainability and a customer-centric on-line experience, in 2015 for SHOP and individual marketplace customers, we began changing the IT system to an agile, cloud-based, and open source code. Open source code means that there are no licensing fees. Agile approach and open source allow us to make changes to the IT system in a cost effective and timely way. There are no long development cycles and we can make changes on a daily basis without having the system down. (See attached policy brief from NASHP recognizing HBX's innovation).

In June 2016, Amazon Web Services (AWS) awarded us a Best Practices in Innovation Award (the only state-based marketplace to have recognition in the IT space). In January 2017, DC Health Link was ranked number one among public marketplaces for our online consumer decision support tools.

In the fall of 2017, AWS approached HBX to highlight how we've used the AWS cloud to operate more efficiently and less expensively. AWS produced a 5 minute video featuring the fact that we were the first state-based marketplace in the nation to migrate to the cloud. In addition, there is a written case study available at https://aws.amazon.com/solutions/case-studies/DC-HBX/.

As a reminder, SHOP and individual private health insurance enrollment and shopping is cloud-based. This IT solution is used by approximately 76,000 people covered through SHOP and approximately 23,000 people who selected individual marketplace plans for 2018. Note that the eligibility rules engine shared with Medicaid to make determinations for APTC eligibility is not cloud-based, open source, or agile. The initial IT system built in 2013 (also called DCAS) is used for APTC. There are approximately 900 people enrolled with APTC as of mid-February 2018.

Our agile development approach and cloud-hosted solution enables us to make continuous improvements without taking the web site down. Accordingly, HBX continues to add features to enhance the user

experience for enrollment, plan selection, and changes to coverage. We also continue to automate back office processes. Here are a few highlights of our IT improvements:

- We customized Electronic Data Interchange (EDI) with carriers to improve transactions, reducing manual corrections. Our EDI improvements also resulted in transmission of 17,929 renewals with a data accuracy rate of 99.99%.
- We added automated COBRA functionality, making COBRA transactions quicker.
- We improved verification for customers whose information could not be verified through the federal data HUB. The automated notices quickly inform customers seeking APTC and CSR and enable customers to upload documents necessary to resolve the inconsistency. HBX case managers now have automated administrative tools to efficiently resolve the inconsistencies.
- We added a new glossary with 3,036 defined insurance and medical terms to DC Health Link customers.
- We added new administrative functionality for HBX staff, resulting in quicker termination and reinstatement of groups.
- For open enrollment we added a next-generation mobile app. The iPhone and Android-compatible app allows DC residents to apply for new, coverage via their smartphone. Current HBX customers and those applying for financial assistance are automatically redirected to the DC Health Link website to update or complete their application.
- We added a nationwide doctor directory, enabling our SHOP customers who live outside of the DC area and individual market customers to identify covered providers. This is a powerful tool to help employees select the right plan for them.
- We expanded our consumer decision support tool – Plan Match – to our SHOP customers. Plan Match allows customers to compare plans based on an annual total out-of-pocket cost estimate, to see in which plans their doctors participate, and to find out which plans cover their prescription drugs and compare prescription drug benefits. Using a self-service web page, employees and prospective employees enter information from an instruction sheet generated by the application, personalized with information specific to the employer's cost sharing and plan offerings. In 2018, we intend to enhance the Plan Match functionality for SHOP in two ways. First, we will deploy a one-click feature to prepopulate information without having to enter it. Second, we will show employees their current plan details side-by-side with plans they are reviewing. This will allow employees to have an apples-to-apples comparison of their current health insurance plan and alternative plans.
- To improve the experience for our APTC customers, we developed a new application. The application in use since 2013 is not as responsive or user-friendly, and it is difficult and costly to update. The new application is designed to provide a better user experience, and is designed for easy and cost effective updates. The new application is not yet available to customers. However, HBX staff have been using an earlier version of the new technology since 2016 to support customers with APTC and CSR.

In 2018 we will make additional improvements to plan shopping including improvements to how plan information is presented to customers. Currently, plan information – such as copays and co-insurance – are displayed to customers based on information received from carriers in a CMS-mandated template. Our plan shopping redesign project is focused on translating the technical language in the CMS templates into understandable language that will be more useful to customers comparing plans. We also intend to add additional features to our broker quoting tool. We will re-convene our Broker IT working group for input for this and other system improvements.

In 2018 all IT development will improve DC Health Link's online functionality for customers and/or focus on automating back office processes.

First in the Nation State-based Marketplace Partnership

Last year, HBX and the Massachusetts Health Connector (Health Connector) announced a first-in-the-nation state-based marketplace partnership. The Health Connector chose HBX to replace Health Connector's SHOP technology with DC Health Link SHOP and to provide on-going maintenance and operations support. (See NASHP blog: https://nashp.org/massachusetts-shop-ed-new-small-group-marketplace) In addition to generating revenue to offset HBX's operational costs, this partnership means that we share costs for improvements and maintenance of the IT system supporting SHOP.

We deployed the new technology on-time and on-budget. The Massachusetts Health Connector SHOP program went live on August 15, 2017, with a subset of the health insurance carriers that were early adopters. Full go-live was on November 1, 2017. Now, for the first-time, Massachusetts small businesses can offer choice to their employees.

The Health Connector pays HBX monthly for work done by our staff and consultants. We use CBEs to perform ongoing and development IT work. The Health Connector also pays an administrative fee to HBX for overhead expenses and contributes to shared costs reducing HBX's operating expenses. For example:

- pays a percentage of the monthly costs of operating our contact center
- pays a percentage of the monthly cost of our premium aggregation vendor

The Health Connector also has funded the development of features that were not previously available in DC. This provides new tools to DC Health Link customers at a fraction of the cost of new development. For example:

- Massachusetts funded enhancements to our broker quoting tool that we can now make available to DC brokers.
- Massachusetts funded development of a notice automation tool that streamlines the notice generation process and saves operations and maintenance costs for DC and Massachusetts.

A key goal of the federal funding provided to states through the Affordable Care Act for the implementation of health insurance exchanges was that states would share technology, learn from each other, and improve their systems through experience. Our partnership with Massachusetts fully realizes that goal. Because of the mutual benefit of this partnership, we will continue to look for additional opportunities to partner with other states with the goal of improving services and on-line experience at less cost.

Conclusion

We are proud of the work we do each and every day. But, we know we don't do it alone. We are successful for many reasons including: consistent, strong support from our Mayors and the Council; active participation and input from community members, stakeholders, and advocates; strong partnerships with the health insurers offering coverage through DC Health Link; and ongoing cooperation among sister agencies in the District. We look forward to continuing to work together to build on our success in the District – and combat federal efforts to undermine these important achievements for District residents, small businesses, and their employees.

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February 21, 2018

Potential Impact of Association Health Plans in the District of Columbia

Dear Mila:

In this letter, we provide estimates regarding the potential impact to the District of Columbia's (the District's) individual and small group markets, specifically for those members covered under Affordable Care Act (ACA) plans, that could occur as a result of the proposed rule related to association health plans (AHPs). Please note that the estimates that follow are not based on robust actuarial micro-simulation modeling specific to the District. However, the unique characteristics of the District's ACA market have been taken into consideration, including but not limited to its distribution of membership by age, gender, and group size. In our opinion the estimates we have developed provide the District with a reasonable starting point for discussions related to the range of the potential impact the proposed AHP rule could have on claim costs in the District's ACA markets.

Results

In general, the impact that the proposed AHP rule will have on claim costs in the District's ACA markets could vary significantly, depending on the interest of both issuers and employers to utilize AHPs in the coming years. Given that, we have developed estimates under several scenarios to demonstrate the sensitivity of our results to changes in assumptions, particularly with respect to which groups will ultimately have AHPs made available to them as well as how results could be impacted to the extent carriers are successful in developing AHP plans for which the highest cost groups will not be interested (e.g., due to specific benefit exclusions).

The results of the scenarios we have performed are summarized in Exhibit A. For the small group ACA market, our estimates range from an increase in average claim costs of +0.2% to +25.8% (on a per member per month basis, excluding the portion which can be rated for through the ACA age curve), depending upon the assumptions that are employed. For the individual ACA market, our estimates range from an increase of +1.1% to +10.9%. Exhibit B provides the estimated coverage losses that would occur in both the small group and individual ACA markets. Note that these estimates assume full implementation of AHPs as proposed in the rule promulgated by the U.S. Department of Labor. This study does not account for future rule changes pursuant to the RFI specific to self-insured AHPs and does not attempt to reflect that the impact of AHPs on the ACA markets could be lower in the initial year(s) following effectuation of the proposed rule.

The methodology which was utilized to develop our estimates is provided in the following section of this letter.

Methodology

In conducting our analysis, we began with a dataset provided by the District of Columbia Health Benefit Exchange Authority (DCHBX) which includes the following key information for each member enrolled in the individual and small group ACA markets as of January 2018: Group ID (for small group), Policy ID, Member ID, Date of Birth, and Gender. Utilizing this membership information, US Census data, and claim continuance tables which vary by age group and gender, we created a cohort of simulated small groups/policies to represent the membership enrolled in the DC ACA markets and their corresponding claim costs (e.g., for small group, a similar distribution of employers by group size, age, gender, and industry, calibrated such that average claim costs for each segment described vary as would be expected while the overall average claim cost for the membership is approximately equal to that incurred in the District's actual small group market).

To assess the impact of the proposed rule related to AHPs, we calculated an AHP rate for each group,[1] assuming carriers would be able to use most rating factors which existed prior to the ACA (including group size, industry, full claim based age/gender). Further, we assumed carriers would be able to develop rates based on the average morbidity of all covered lives enrolled in the AHP (but would not be able to develop rates that vary for each group based on the specific morbidity of the group). We then determined which employers would be eligible for an AHP based on the scenario being modeled (e.g., the AHP is made available only to the Finance and Insurance industry). Note that in some scenarios (i.e. Scenarios 1a, 2a, 3a, and 4a of Exhibit A) we assumed that a segment of the highest cost employers and sole proprietors would not enroll in an AHP regardless of their eligibility or their calculated AHP rate (if eligible) due to the targeted exclusion of specific benefits (e.g., behavioral health, pharmacy, chemotherapy) in the AHP plans.

For those employers and sole proprietors meeting the eligibility requirements to enroll in an AHP under each scenario, we compared their calculated AHP rate to the rate the employer or sole proprietor would otherwise be charged under the ACA. If the AHP rate was less than the ACA rate, it was assumed that the group or sole proprietor would exit the ACA market. Note that in making this comparison, unless otherwise noted as in Scenarios 1a, 2a, 3, 3a, and 4a, it is being assumed that the only significant differences between the AHP plans and ACA plans are the rates (e.g. similar networks, benefits).

Based on the results from the prior step, we then calculated the percentage difference between the average allowed claim costs (on a per member per month basis, excluding the portion which can be rated for through the ACA age curve) of the employers or sole proprietors expected to remain in the ACA and the overall ACA population. Finally, the calculated difference in average allowed claim costs was increased by a factor of 20% (e.g. if the initial estimated change in average claim costs was 1.0%, the estimate was increased to 1.2%) to reflect the impact which would be expected to occur assuming any changes in average claim costs due to shifts in

[1] It is assumed that approximately 48% of the District's individual ACA market is made up of self-employed individuals who would be eligible to purchase AHPs based on results from a November 2015 survey conducted by the District

enrollment to AHPs will be passed to remaining ACA enrollees in the form of a rate increase, driving additional coverage losses.

Combined Impact of the AHP Rule and Repeal of the Individual Mandate Penalty
In a prior letter dated February 6, 2018, we provided an estimate that the repeal of the individual mandate penalty is expected to result in an increase in average claim costs in the individual ACA market equal to approximately +7.2% (on a per member per month basis, excluding the portion which can be rated for through the ACA age curve). To the extent AHPs are fully implemented at the same time as the repeal of the individual mandate, we would not expect the net impact to average claim costs in the individual market to simply be the sum of the previously referenced +7.2% estimate and the AHP estimates provided for the individual ACA market in Exhibit A. Instead, we would expect that some of the policyholders who would exit as a result of the repeal of the individual mandate would also be those who would move an AHP if given the opportunity. Overall, to the extent both items are fully implemented at the same time, we would expect the combined impact on average claim costs in the individual ACA market to be equal to approximately +7.9% to +16.4%, depending upon the assumptions that are employed.

Limitations and Considerations
Key limitations and considerations associated with our analysis include the following:

- Estimates rely on membership information provided by DCHBX. If the information used is inaccurate or has been misinterpreted, the underlying findings and conclusions may need to be revised
- Estimates are not based on robust microsimulation modeling and therefore may not fully recognize all interactions specific to the District's ACA markets that might exist.
- Values are based on estimates of future events; therefore, actual results will vary
- Actual results are expected to vary on a carrier specific basis
- Estimates assume that Congressional employees currently enrolled through the SHOP would not be eligible to move to an AHP
- Unless specified, estimates are based on the isolated impact of the proposed rule related to AHPs and do not consider the impact of other changes in legislation or regulation at either the District or Federal level
- AHP pricing factors were developed based on external data sources and may vary from actual cost differences (e.g., by group size) observed within the District's employer market

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taken or decisions made as a consequence of the results, advice or recommendations set forth herein. This report should not replace the due diligence on behalf of any such third party.

Please let me know if you have any questions related to this letter.

Thank you.

Sincerely,

Ryan Schultz, FSA, MAAA

Copy: MaryBeth Senkewicz, DCHBX
Purvee Kempf, DCHBX
Debra Curtis, DCHBX
Tammy Tomczyk, Oliver Wyman

Exhibit A - Estimated Impact of AHP Rule on Average ACA Claim Costs

		Change in Average ACA Claim Costs[6,7]	
Scenario	**AHP Available To:**	**Small Group**	**Individual**
1[1]	All employers	+9.9%	+5.0%
1a	Scenario 1, but 25% of highest cost employers don't consider AHP[2]	+25.8%	+8.9%
2[3]	All except employers in highest cost industries	+5.9%	+4.1%
2a	Scenario 2, but 25% of highest cost employers don't consider AHP	+12.9%	+8.7%
3[4]	All employers, but exclude maternity in AHP	+0.2%	+4.8%
3a	Scenario 3, but 25% of highest cost employers don't consider AHP	+3.1%	+10.9%
4[5]	Professional, Scientific, and Technical Services industry	+0.9%	+1.1%
4a	Scenario 4, but 25% of highest cost employers don't consider AHP	+2.9%	+4.0%

Notes

[1]All SHOP enrollees (excluding congressional employees) and sole proprietors are eligible to purchase AHPs; Differences in pricing factors exist between the AHP and ACA plans; Assumes AHPs use pre-ACA rating factors; There are no differences in covered benefits between the plans

[2]Assumes carrier actions through the exclusion of benefits such as behavioral health and high cost prescription drugs discourage 25% of the top quartile of employers (based on average claim cost per employee) from considering the AHP

[3]All SHOP enrollees (excluding congressional employees) and sole proprietors are eligible to purchase AHPs except for those in the following industries: Accommodation and Food Services; Arts, Entertainment, and Recreation; Educational Services; and Health Care and Social Assistance; Differences in pricing factors exist between the AHP and ACA plans; Assumes AHPs use pre-ACA rating factors; There are no differences in covered benefits between the plans

[4]AHPs do not cover maternity benefits; Assumes enrollees in the individual market only consider AHPs if there are no females between ages 21-40 included on their policy, and employers in the small group market consider AHPs only if they have less than 15 employees and 20% or less of their membership is made up of females between ages 21-40; Differences in pricing factors exist between the AHP and ACA plans; Assumes AHPs use pre-ACA rating factors; AHP rates reflect the exclusion of maternity benefits

[5]Only SHOP enrollees (excluding congressional employees) and sole proprietors in the Professional, Scientific, and Technical Services industries are eligible to purchase AHPs; Differences in pricing factors exist between the AHP and ACA plans; Assumes AHPs use pre-ACA rating factors; There are no differences in covered benefits between the plans

[6] On a per member per month basis, excluding the portion which can be rated for through the ACA age curve

[7] Estimates reflect the impact of additional changes in morbidity which would be expected to occur assuming changes in average claim costs resulting from enrollment in AHPs will be passed to remaining ACA enrollees in each respective market (i.e. small group and individual) in the form of rate increases, driving additional coverage losses; at a high level, it is being assumed that the additional coverage losses would lead to further increases in average claim costs (on a per member per month basis, excluding the portion which can be rated for through the ACA age curve) equal to approximately 20% of those which were calculated solely due to enrollment in AHPs

Exhibit B - Estimated Coverage Losses (Covered Lives[1])

		ACA Small Group		ACA Individual	
Scenario	**AHP Available To:**	**To AHP[2]**	**Terminate Coverage[3]**	**To AHP**	**Terminate Coverage**
1	All employers	54,700	700	2,400	200
1a	Scenario 1, but 25% of highest cost employers don't consider AHP	57,700	1,600	2,900	400
2	All except employers in highest cost industries	39,400	700	2,000	200
2a	Scenario 2, but 25% of highest cost employers don't consider AHP	41,400	1,500	2,900	400
3	All employers, but exclude maternity in AHP	12,600	0	2,600	200
3a	Scenario 3, but 25% of highest cost employers don't consider AHP	14,100	600	4,200	500
4	Professional, Scientific, and Technical Services industry	11,800	200	700	100
4a	Scenario 4, but 25% of highest cost employers don't consider AHP	13,200	600	1,500	200

Notes

[1]Total covered lives in the District's individual and small group ACA markets were assumed to be equal to approximately 17,000 and 76,600, respectively

[2]Reflects the volume of covered lives who would be expected to shift from ACA plans to AHPs under the scenario described

[3]Reflects the expected volume of enrollment that will terminate coverage entirely due to increases in the ACA rates (driven by the migration of lower cost groups to the AHPs) equal to the values shown in Exhibit A for each respective market (i.e. small group and individual)

Health Affairs

D.C. Marketplace Formally Recommends District-Level Individual Mandate

Katie Keith

FEBRUARY 22, 2018

On February 21, 2018, the District of Columbia (D.C.) moved one step closer toward becoming the second in the nation, behind Massachusetts, to adopt an individual health insurance mandate. The Executive Board of the D.C. Health Benefit Exchange Authority (Authority) approved a resolution recommending the adoption of a District-level mandate as well as a number of other policy proposals. The resolution will have to be approved by the D.C. Council before going into effect.

D.C. would be the first to adopt its own mandate in the wake of repeal of the Affordable Care Act's (ACA's) individual mandate, but it joins at least eight states considering or studying their own individual mandate. If approved, D.C.'s mandate would go into effect in 2019 and would largely mirror the federal individual mandate. D.C. would also prohibit new association health plans (AHPs) from qualifying as coverage for purposes of the mandate; this means that individuals who

enroll in AHPs under future federal regulations may have to pay a penalty under D.C. law.

The Authority's resolution reflects consensus recommendations made by its ACA Working Group, which includes representatives from the insurance industry, the chamber of commerce, health providers, academics, and consumer advocates, among others. In January 2018, Mayor Muriel Bowser had asked the Authority to reconvene its ACA Working Group to recommend ways to protect D.C.'s coverage gains in light of repeal of the individual mandate by Congress.

The recommendation made today supplements a previous resolution already adopted by the Executive Board of the Authority in November 2017 on ways to promote market stability and affordability in D.C. Those recommendations urge the development of a local reinsurance program, cost-sharing reduction payments for insurers, and an additional "wrap-around" subsidy for low-income consumers who qualify for federal advance premium tax credits.

How D.C.'s Individual Mandate Would Work

In making its recommendations, the ACA Working Group urged D.C. to "fill the void left by the federal government" by requiring D.C. residents to maintain qualifying health insurance coverage or pay a penalty on their District taxes unless they qualify for an exemption. As noted above, the

D.C. mandate would largely mirror the ACA's individual mandate.

Like the ACA mandate, the amount of the penalty would be 2.5 percent of family income or $695 per adult (plus $347.50 per child), whichever is greater, adjusted for inflation each year. The penalty would not be unlimited, with D.C. maintaining caps on the penalty pegged to the average premium for a bronze plan in the District. D.C. would also largely maintain federal exemptions to the individual mandate for those who qualify based on, for instance, religious exemptions, income, or going without health insurance for three months or less.

Differences Between The D.C. And Federal Mandates

There are some notable differences between D.C.'s proposal and the ACA's individual mandate. First, D.C. would create additional exemptions from their mandate, relative to federal law. Those with incomes under 200 percent of the federal poverty level and those who qualify for Medicaid or other public programs, such as the D.C. Healthcare Alliance Program, would be exempt from the mandate. The proposal would also clarify that coverage through the Immigrant Children's Program satisfies the mandate.

Second, the proposal would define "qualifying coverage" for purposes of the mandate to exclude AHPs that would be permitted under a recent federal proposed rule. Citing concerns that these "looser rules" could "undermine the

District's private health insurance market," the proposal would only allow coverage purchased through an association to satisfy the District mandate if it meets the requirements in place under federal law as of December 15, 2017 (i.e., before the federal proposed rule). Thus, individuals who enrolled in an AHP that failed to meet the standards set in December 2017 might be required to pay the D.C. individual mandate penalty. This type of policy could make it less attractive to offer association coverage under the new federal rules while also discouraging individuals from enrolling in AHP coverage if they have to pay the D.C. penalty.

Third, D.C. would "use the tax filing process as an opportunity to conduct outreach and education" to the uninsured. There is far less detail about this part of the proposal and it is unclear how this would be implemented. Behavioral research suggests that low-income individuals feel less stress and financial pressure in the early months of the year relative to November and December, due at least in part to tax refunds. Although some stakeholders have advocated for shifting the open enrollment period to coincide with tax filing season because of these considerations, federal regulators have never adopted this proposal. It will be interesting to see what D.C. policymakers do to implement this recommendation.

Finally, if the federal government adopts an individual mandate in the future, D.C. residents would not be subject to double penalties (i.e., not penalized under both federal and state law). The proposal recommends that the D.C. individual

mandate be revisited and refined over time to ensure that it is effective.

Approaches In Other States

If D.C. succeeds in adopting this proposal, it would join Massachusetts in becoming only the second with its own individual health insurance mandate. Massachusetts adopted an individual mandate in 2006 as part of its health reform effort, which later became a model for the ACA. Massachusetts maintained its individual mandate alongside the ACA's federal individual mandate, requiring most residents over the age of 18 who could afford health insurance to maintain coverage or pay a tax penalty (while working to ensure that residents were not doubly penalized). State officials cite a number of benefits of state-level administration of the mandate, including the collection of data on insurance status that has allowed the state to craft tailored outreach strategies.

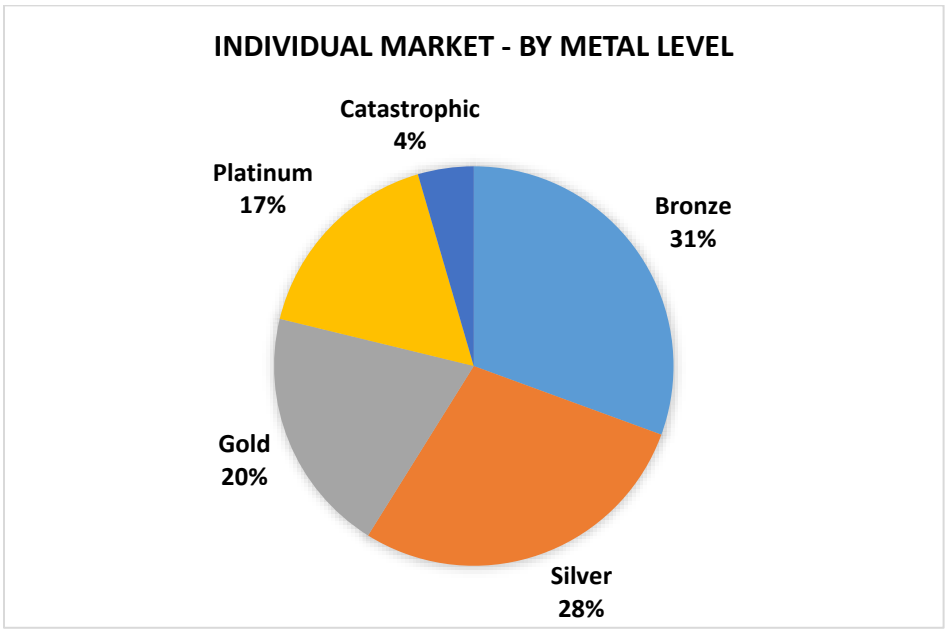
There are states considering more complex approaches to the individual mandate than D.C. In Maryland, for example, policy makers are considering legislation that would impose a penalty on uninsured state residents that could be paid to the government or used as a "down payment" for premiums. The default option would be enrollment in a no-cost health insurance plan through the marketplace, although residents could opt out. Marylanders could also hold their penalty fees in escrow until the next year's open enrollment period and use those funds to shop for health insurance during the open

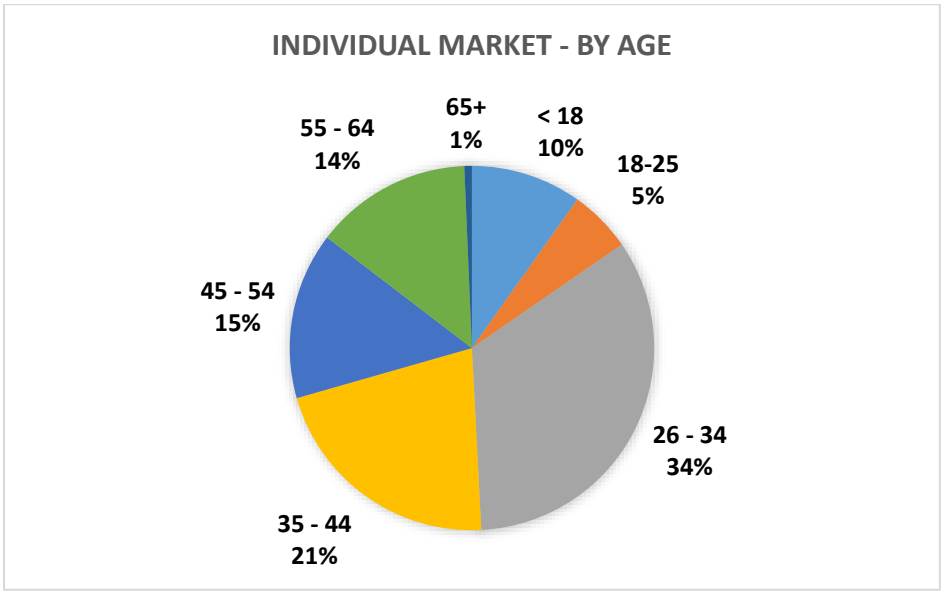
enrollment period. If enacted, Maryland's plan would not be expected to roll out until 2020.

DC HEALTH BENEFIT EXCHANGE AUTHORITY
2018 Enrollment Summary
As of February 19, 2018

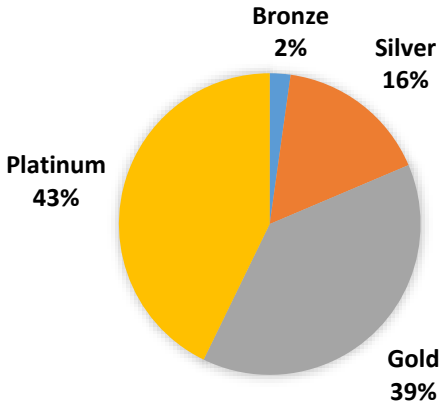
CURRENT ENROLLMENT	
PROGRAM	LIVES
INDIVIDUAL MARKET	17,630
SHOP MARKET	76,574
TOTAL	**94,204**

** Totals As of February 19th, 2018 - PAID*
** SHOP market includes 4,892 Groups*
** Individual market includes 250 paid covered lives with a March start date.*
** SHOP market total includes Congress*





SHOP MARKET - BY METAL LEVEL (INCLUDES CONGRESS)



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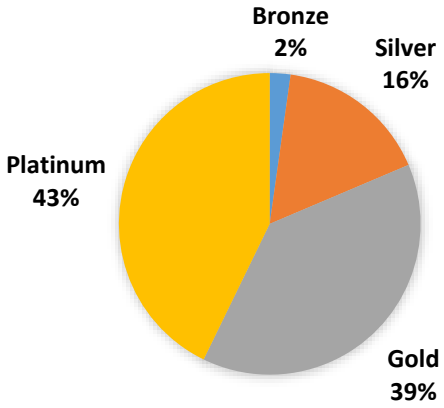

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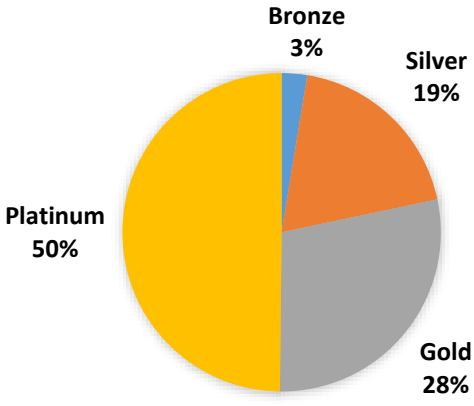

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Building a More Efficient Marketplace: Lessons from DC Health Link's Experience with Open Source Code

Corinne Alberts

Every open enrollment affords State-based Marketplaces (SBMs) new opportunities to introduce innovative ways to continually improve their systems while also lowering costs to achieve sustainability of their marketplaces. During the 2015-2016 open enrollment season DC Health Link, the District of Columbia's health insurance marketplace, began using open source code, an Agile development approach, a commercially hosted government cloud, and a re-architected solution.

This change comes on the heels of several years of costly issues. Launched in 2013 with two commercial off-the-shelf (COTS) products DC Health Link faced millions of dollars in annual licensing fees for COTS products. Change requests ranged from hundreds of thousands to millions of dollars due to the complexity of changing hard-coded software. Product development cycles were long, averaging six to eight months for updates. Deployment of changes required the marketplace to be taken off-line for maintenance, which meant customers could not use the marketplace while the system was down.

Following the major overhaul to its health insurance marketplace, DC Health Link reports significant benefits from these changes including: documented savings, a reduction in consumer complaints, and greater agility to address and improve technical functions.

DC's success with open source code presents an interesting opportunity for states exploring their marketplace models and technology. Using the experience of DC Health Link, this brief explores the use of open source technology to improve customer experience, reduce technical failures and find cost savings.

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How Massachusetts SHOP-ed for a new Small Group Marketplace

By Corinne Alberts May 1st, 2017

Earlier this spring, the Massachusetts Health Connector (Health Connector), the health insurance exchange of the commonwealth, announced that it would be joining Washington, D.C.'s, exchange, DC Health Link, in a first-of-its-kind collaboration to develop a joint platform for their small business exchanges. This partnership is an exciting example of the collaborative possibilities for states. By building off of DC Health Link's successful platform, Massachusetts is leveraging expertise and existing infrastructure, while yielding cost-savings for both exchanges. Together Massachusetts and DC will benefit from shared investment in the technology to not only maintain, but also improve the platform in response to evolving customer needs.

The Small Business Health Options Program (SHOP) was created under the Affordable Care Act (ACA) to help small employers (those with up to 50 or, at the discretion of the state, 100 employees) facilitate the enrollment of employees into qualified health plans. Initially, the Health Connector leveraged a "legacy" platform, first built under Massachusetts' 2006 health reform law, for its SHOP exchange; however, low enrollment meant the Health Connector began to lose money annually on operation of its SHOP. Driven by a desire to make the SHOP more appealing for employers and brokers, yield cost savings, and bring the Connector into ACA compliance, Massachusetts sought an upgrade. After two cycles of reviewing proposals for a new SHOP—none of which achieved its desired targets for financial and technical specifications—the state began to explore a new option, leveraging the SHOP of another State-based Marketplace (SBM).

Massachusetts contacted peer states to gage interest and feasibility of leveraging another state's system. Each interested state filled out a detailed questionnaire about the capabilities of their SHOP platform, including capacity to support the additional and unique needs of a new state. After considering proposals sent from three states, Massachusetts selected to partner with the District of Columbia, hoping to leverage the flexibility built into its system by using the agility of DC Health Link's open source code, the marketplace's proven ability to hold up under high volume, its scalability, and cost effectiveness.

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DC Health Link prioritized focus on its small business community early on. Currently, DC has more than three times as many people enrolled through SHOP than through the individual marketplace, with over 4,300 businesses and nearly 70,000 consumers currently participating—a contrast with any other SBMs where enrollment is more heavily concentrated in the individual market (to compare, Massachusetts has 1,435 groups and nearly 6,000 covered persons). Last year, NASHP wrote about how DC Health Link had developed a new agile, open source, cloud-based solution for its small business market—in non-tech terms, an easily adaptable technology built using shared public code. Rather than paying high licensing fees to a software vendor for a commercial off-the-shelf product, DC used local small IT businesses to develop custom open source to create its marketplace. The District was able to leverage this system to streamline their website, improve the consumer experience, and reduce operation and maintenance expenses. DC Health Link has reported significant cost savings as a direct result of its new award winning technology, as well as a reduction in consumer complaints.

Beyond wanting to leverage the efficiencies of DC's platform, Massachusetts was especially attracted two qualities of the DC SHOP 1) an infrastructure designed to accommodate rapid growth, an important concern as Massachusetts dedicates itself to growing its small group market; and 2) ability of the technology to allow Massachusetts to offer employers "employee choice", an option by which an employer can set a benchmark contribution and then allow their employees to select from a range of comparable plans. In a presentation to the Board of Directors in February, Health Connector staff noted employee choice increases carrier competition and estimated that allowing employee choice may reduce costs to consumers by approximately 30 percent. Additionally, assuming current enrollment levels remain constant, the ongoing operational costs for the new platform are estimated to be approximately 50 percent less than the cost of Massachusetts's previous SHOP. With organic growth anticipated due to the addition of new product offerings, the Health Connector projects that the SHOP market will become totally self-sustaining by its second year of operation.

Massachusetts is intent on minimizing customizations, which will make transition to the joint-platform quick and efficient. DC Health Link, with assistance from IT staff in Massachusetts, will complete the six-month development process in mid-August and conduct an early launch phase for coverage with an October 1, 2017 effective date. The SHOP will be fully operational during this early launch phase, and carriers who are ready to transition to the new platform will be able to do so immediately. The Health Connector will work with its carriers throughout the pilot to help them make a smooth transition before full participation begins in 2018.

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States continue to raise the bar as laboratories of innovation. The partnership between the Massachusetts Health Connector and DC Health Link is one example of how states can and are partnering with each other in order to bring the best practices from around the country into their own state. For several years, NASHP has engaged with states to help foster shared resources, services and innovation across states. We will continue to monitor these developments as states strive to implement ground-breaking and sustainable strategies to address coverage needs.

Thank you to the officials from DC Health Link and the Massachusetts Health Connector who generously reviewed and contributed to this work. In particular, thank you to Rob Shriver of DC Health Link, and Jason Lefferts and Jason Hetherington from the Massachusetts Health Connector.

The State Health Exchange Leadership Network is a project of the National Academy for State Health Policy (NASHP), which works to support state officials and staff working on the operation and implementation of health insurance exchanges.

What is Open Source Code?

"Open source" refers to publicly accessible code or technology that can be shared or modified by any developer, giving users the ability to choose and customize at will without incurring extra costs.[1] Source code, or the underlying code that runs a program or application, is made publicly available to networks of developers that can then review or modify the code.[2] Using open source code is a way organizations can reduce costs while taking advantage of a vast network of technical innovation.

The open source community is a thriving network of tens of thousands of developers who collaborate on data fixes and the creation of new software.[3] Unlike a website like Wikipedia ®, where changes can be made by anyone and are immediately displayed, open source patches are subject to a system of review.[4] Usually, open source networks are highly watched and reviewed communities, regarded by technology professionals as extremely reliable and secure. In fact, some open source software is more secure than closed source code.[5] Developers submit patches or updates to the source code, usually to address security issues or other glitches. After review and testing, the patch can either be accepted or the original builders of the program can work on developing their own patch. This network is not all volunteer-based; there are for-profit companies that sell support and training services for open source technology.

Flexibility is a large part of the appeal of open source code. Unlike commercial products, open source coding is a constantly evolving technology that often produces solutions more quickly than private companies. There is also a wealth of existing code that can be pieced together to form a unique program. To use the Linux example (**see box on right**) different applications and functions can build off the "kernel" to suit individual requirements.[9]

Popular Uses of Open Source Code

The most well-known and popular example of open source sharing is Linux, an operating system originally developed in 1991 by Linus Torvalds.[6] The infinite customizability and low associated costs of the Linux "kernel" has caused it to be taken up by businesses the world over; Google, IBM, and Amazon all use Linux code in major IT functions. Linux is the operating software for 98 percent of supercomputers, and powers most of the worlds Internet servers.[7]

Thousands of developers use and have access to the Linux code everyday. Patches and changes are subject to a higher rate of review then most private companies are capable of. The code itself can be acquired and modified by anyone. anywhere, for free.[8]

Why Open Source for Health Insurance Marketplaces?

Use of open source code can benefit insurance marketplaces because it can be freely acquired and adapted to suit the needs of each state. Unlike commercial products, open source enables a marketplace to have greater ability to bring the technology "in-house," allowing greater autonomy to marketplaces to innovate as well as to be proactive about identifying and finding solutions for technical problems. Industry experts would say, this is notable, as, by nature, code is not perfect or static. Bugs, such as website crashes or security breaches are almost inevitable.[10]

Open source technology gives those that use it access to the resources of thousands of developers across the world increasing cost-effectiveness. This large and supportive community is the centerpiece of open source software, and what makes it so distinct from off-the-shelf products. Developers work with open source software daily and have the ability to identify and offer solutions to emerging issues quicker than most commercial systems. Moreover, the rewards of open source software multiply as more people use it, so, if several marketplaces were to adopt the same open source code, they could become part of their own network of innovation and support.[11]

Making the Switch at DC Health Link

In late 2014, DC Health Link decided to make the switch from COTS products to an open source solution. The switch, it determined, would lead to better prospects for long-term sustainability and improved customer experiences. DC Health Link flagged the open source initiative in grant work submitted to the Center for Medicare and Medicaid Services (CMS), and staff kept in regular contact with CMS throughout the development and implementation of the new software.

DC's local tech corridor was key to the development and launch of the new open source system. Building on an already existing internal IT team of consultants to lead development, the transition was efficient, with minimum down time of the website. In fact, when initiating the switch, DC Health Link was able to make a full migration to the new system without needing to run a parallel platform before the site went live. DC also received significant input from customers, brokers, and internal business staff to build their new system. Since making the switch, DC Health Link has witnessed many improvements.

Cost-Savings

After an initial investment in developing the open source solution, DC has seen significant reductions in costs. Eliminating annual licensing fees from their previous commercial products translated into an immediate $2.9 million in savings. Furthermore, by bringing technical systems in-house, DC Health Link eliminated spending resources on time consuming and costly change orders; previously, even simple changes to text required full code deployment and expensive end-to-end testing. Under the new system, if DC Health Link's call center notices a pattern of consumer issues arising because of a technical glitch, then its team can make immediate changes (e.g., changing language on website after hearing that consumers are confused about specific wording). This also applies to functional and user interface (UI) code changes. There is a cost for developer time, quality assurance testing of new modular functions (modular meaning it requires testing of the functions that would be affected by the changes -- which is different from end-to-end testing of the entire code replacement), and deployment by the internal operations and maintenance team.

More Agile and Responsive Systems

An immediate effect of open source code is that DC Health Link gained more ownership over their system. This enables DC Health Link to move swiftly to correct defects and address software bugs as soon as they are identified; changes can be made every day without down time. Moreover, when customers or brokers offer suggestions for improvements; those can be developed and implemented quickly. Business and operations teams can work in tandem with IT teams to address changing priorities without the constraint of an eight-month development cycle common for many private-sector vendors.

Code is a constantly evolving organism, requiring constant maintenance and new IT deployments. The agile approach and open source code means when technical issues arise, the issues are constrained and do not impact other functionality.

DC Health Link's previous system required that the system be offline during major IT deployments, resulting in productivity loss and impacting consumers. Now, updates can be made continually and without taking the system offline. This is enormously important for DC Health Link's growing small business marketplace. Long system outages during deployments can be especially disruptive for the Small Business Health Options Programs (SHOP) enrollment since small business can enroll at any time during the year.

DC Health Link staff also expresses confidence in the ability of their new system to adapt to changing policies and demands of marketplace consumers. For example, DC Health Link anticipates that 2016 will be a big year for the small group marketplace. A 2013 law that merges the individual and small group markets into the marketplace and requires all carriers to sell all products on the marketplace is in the final stages of full implementation.[12] DC's SHOP--which already covers nearly 800 small businesses--is expected to grow six-fold with these changes. DC Health Link officials are confident that the improvements to agility, usability, and website performance (1.45 second average page load time and commercially hosted government cloud with automated virtual server capacity) means that their new platform is equipped to handle a high volume of users.

An additional benefit of the new technology, is that because most of their website and enrollment functions are run by in-house teams, DC Health Link has immediate access to data they are generating. This gives staff greater flexibility and ability to develop and monitor metrics about its marketplace consumers. This data is an invaluable resource for the marketplace as accurate and timely knowledge of who is using the marketplace and how they are using it is essential for making technical improvements to website usability as well as for creating marketing strategies, policies, and goals for the marketplace.

Improved Consumer Usability

Use of an open source code also gave DC Health Link greater flexibility to design their new platform with customer and broker feedback. The website has been streamlined and simplified to improve customer experience. For example, consumers now need to "touch" only five screens (down from 28) to complete enrollment. The employer application was reduced from 22 screens to six, while employee shopping and account set-up pages have been reduced from 28 screens to five. A progress bar, similar to those seen on commercial websites, was added to help consumers track their enrollment process. Every step in the enrollment process can be completed in less than 3 minutes. On average, users spend 6.33 minutes on the site at a time.

Website improvements have also impacted the demand for assistance through DC Health Link's call centers. During the 2015-16 open enrollment season, average wait times were reduced from 8.7 minutes during the previous open enrollment to 1.5 minutes. Abandonment rates improved from 23 to six percent. DC Health Link staff directly attributes these reductions in contact center use to the vast improvements in usability made possible by the improved website. Inter-team collaboration ensures that the front-line consumer input that call centers receive goes directly to the IT staff. The current routine regression testing of new IT deployments means that buggy functions never see the light of day. All of this adds up to an easier consumer experience, meaning fewer questions and problems and a lighter volume of calls.

Challenges and Opportunities

DC Health Link has been able to use its open source code to make significant steps towards securing the sustainability of the marketplace by reducing its overhead and administrative costs. The flexibility of open source code and the autonomy it affords states makes it an attractive solution for other SBMs looking to make sustainability improvements of their own. None of this is to say that there are not challenges in moving to open source for those interested in exploring that option.

While a benefit of open source code is that it can be tailored, there are inevitable costs and challenges associated with that process. Marketplaces would need to dedicate resources to conduct a full inventory of their current systems and determine how to migrate over to the new code. There are inevitable start-up costs. Bringing additional IT functions in-house means that internal IT capabilities will need to be strengthened, either through additional staff or increased resources. DC Health Link has found there is some trade-off in this area. While they did add some open source consultants for this new system, they were able to reduce the consultants needed to support the two COTS products.

The full capabilities of open source software have not been fully examined. While DC Health Link uses open source code to run all aspects of their SHOP marketplace and for full pay individual marketplace customers, some COTS software is still used for Advance Premium Tax Credit (APTC) calculations because of DC's shared rules engine with Medicaid. While DC Health Link is developing an open source, cloud-based back-up for APTC to use when the COTS product is off-line, this is an area of future growth. DC Health Link plans to deploy their new code before the next open enrollment, but this would be uncharted territory for other marketplaces.

Challenges aside, open source code is an intriguing possibility for SBMs looking to reduce expenses, improve their web systems and consumer experiences. Low costs, and the potential of open source software for customization are particularly important benefits. As SBMs work towards a more sustainable future, we may see more states take up an open source solution of their own. DC Health Link stands ready to work in partnership with any SBMs that would like to move to an open source code solution.

The open source code from DC Health Link is available to all SBMs at the following links:

- https://github.com/dchbx/enroll (enrollment application)
- https://github.com/dchbx/cv (ACApi canonical vocabulary)
- https://github.com/dchbx/gluedb (enrollment database)

End Notes

1. "How PaaS & Containerization Can Improve Government IT," Red Hat. February 19,2016. Accessed February 24, 2016. http://img.en25.com/Web/GovDeliveryInc/%7B2be89bf2-431d-45b1-9de8-58a30ca5f639%7D_IP-PaaS-Containerization.pdf
2. "What is open source?" Opensource.com Accessed March 3, 2016. https://opensource.com/resources/what-open-source
3. "The open source way" Opensource.com. Accessed March 3, 2016. https://opensource.com/open-source-way
4. Vance, A. " The Creator of Linux on the Future Without Him." Bloomberg Business. June, 16, 2015. Accessed March 3, 2016. http://www.bloomberg.com/news/articles/2015-06-16/the-creator-of-linux-on-the-future-without-him
5. Bhartiya S. "Linus Torvalds: Security will never be perfect." CIO. August 20,2015. Accessed March 3, 2016
6. "What is Linux?" Opensource.com Accessed March 3, 2016 https://opensource.com/resources/what-is-linux
7. Bhartiya S. "Linus Torvalds: Security will never be perfect." CIO. August 20,2015. Accessed March 3, 2016
8. "2014 Enterprise End User Trends Report" Linux Foundation. December 2014. Accessed March 3, 2016 http://www.foxt.com/wp-content/uploads/2015/08/lf_end_user_report_1214-1.pdf
9. "About Linux" *The Linux Foundation*. Accessed March 3, 2016 http://www.linuxfoundation.org/about/about-linux
10. Vance, A. " The Creator of Linux on the Future Without Him." Bloomberg Business. June, 16, 2015. Accessed March 3, 2016. http://www.bloomberg.com/news/articles/2015-06-16/the-creator-of-linux-on-the-future-without-him
11. "How PaaS & Containerization Can Improve Government IT," Red Hat. February 19,2016. Accessed February 24, 2016. http://img.en25.com/Web/GovDeliveryInc/%7B2be89bf2-431d-45b1-9de8-58a30ca5f639%7D_IP-PaaS-Containerization.pdf
12. "FAQ" DC Chamber of Commerce. Accessed March 3, 2016 https://www.dcchamber.org/dc-health-link/faq/

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