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## Future State of Service QFD Project at Blue Cross Blue Shield of Florida

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Quality Function Deployment (QFD), Analytic Hierarchy Process (AHP), health insurance

### Abstract

The way Blue Cross Blue Shield of Florida (BCBSF) defines "Service" today is likely to change over time. As the United States health insurance model continues to evolve, with increasing financial responsibility falling on the consumer, the opportunities for new and different interactions with the health insurance company are sure to follow. Consumers are already very savvy when it comes to evaluating alternatives in other industries and it's only a matter of time before the health care industry is also comparatively shopped like many other commoditized products and services. BCBSF must continue to evolve to create a service experience that enables and empowers members in their decision-making efforts. This project utilized the QFD methodology to anticipate the changing needs of consumers and how service might evolve.

The requirements for the project included:

- Understanding the future-state of the health care industry
- Anticipating and prioritizing future member needs as a result of new industry pressures
- Developing a well defined goal for the Service Organization
- Identifying solutions that target member needs
- Validating solutions from the member's perspective
- Selecting the best solution(s) given benefits and constraints

- Implementing solutions that are most valuable to the member and continue to differentiate BCBSF

## Introduction

As BCBSF continues to move from the traditional B2B model to a B2C model, it will continue to transform into more of a retail-focused industry. In order to support customers in this new environment, it is important to understand the needs of customers as they're navigating this new model in order to develop solutions to ensure BCBSF exceeds its competitors in the "service" component of value chain – a valuable link in which BCBSF has differentiated itself for many years.

This project was initiated in an effort for the Service Organization (SO) in BCBSF to identify what they were going to need 3-5 years from now to continue to provide the type of service to support our customers in the new retail environment. This approach was designed to help the organization plan and appropriate the necessary resources to support the process changes, design, build, etc., required to deploy the recommended solutions. Figure 1 shows the general process flow. Note that research from previous QFD projects was applied in steps 2 and 3.<sup>1</sup>

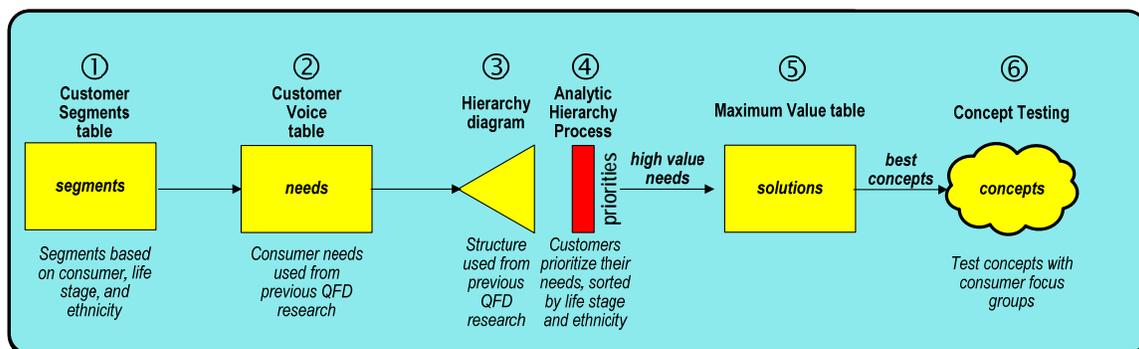


Figure 1 QFD process flow (tailored)

### 1. Customer Segment Table

The especially challenging component for this project was trying to observe, and have customers prioritize "future" needs in the evolving transparent versus transaction oriented world of health care. Even defining the segments was a challenge -- could our targeted segments of today be the same five years from now? Furthermore, could the targeted segments change based on the industry shift to transparency? Much discussion and deliberation was required for us gain agreement on these targets, but once leaders reached agreement on the who, which was determined based on segment size and segments with the greatest call volume, we then utilized the Customer Segments table (Table 1) to further help us determine what to observe, when, where, why, and how. This session was extremely beneficial in helping the team plan the gemba visits, where we would ultimately begin the process of observing our customers in action in order to truly gain a deeper understanding of our targeted customer's needs. Those targeted customers were

identified as Boomers (consumers age 46-64 with no children living at home) and Parents with Young Children (consumers with the youngest child living at home under age 11). We chose to evaluate the customers that will be moving into the targeted segments in the next 3-5 years, as well as consumers currently in some of the “plans for the future,” which we often refer to as high out of pocket plans (HOOPS). It was determined that while we did not have a crystal ball to precisely know the needs of the future, we could look at the needs of 65-75 year old people today as an approximation of the what today’s boomers would need. The assumption was that the needs wouldn’t change, but the way we solved for them likely would. Therefore, we would apply a “retail” approach in our design of solutions in order to incorporate the “retail” trends of the industry.



Figure 2 Affinity Diagram

Table 1 Customer Segments Table

Project Goals	Who uses product?	What is product used for?	When is product used?	Where is product used?	Why is product used?	How is product used?	How big is this segment?	Recommended Gembas
To identify and prioritize the most important service related needs for Parents with Young Children and Boomers	Existing Customers - Individual Parents with Young Children and Boomers only	1) To save money 2) To gain access to certain doctors 3) To provide peace of mind 4) To treat myself and family members when needed 5) To protect myself from harmful financial risk	1) Annual Renewal (agent or direct sales center) 2) Provider Visit/ER 3) Drug Prescriptions/Refills 4) Service Related Inquiries (benefit clarification and claims status) 5) Accessing	1) Florida Blue Retail Store 2) Home 3) Work 4) Enrollment Meeting 5) Provider Office (e.g., pediatrician) 6) Direct Sales Center 7) Sales VP "pitch" 8) Agent/Broker/Consultant	1) To save money 2) To gain access to certain doctors 3) To provide peace of mind 4) To treat myself and family members when needed 5) To protect myself from harmful financial risk	1) Physician Offices/Access Treatment (Pediatrician for Parents with Young Children and GI, Cardiovascular and Oncology for Boomers) 2) Hospitals 3) Urgent Care Facilities 4) Retail Locations for	Parents with Young Children = 17% (GREATEST OPPORTUNITY); Boomers/ Retirement Focus = 39% Total = 56%	1) Member Contact Center (inbound calls) 2) Pediatrician Office (Parents with Young Children) 3) Urgent Care Facilities (Parents with Young Children) 4) GI/Cardiovascular/ Oncology Specialists
To identify and prioritize the most important service related needs for Parents with Young Children and Boomers	new Customers - Individual Parents with Young Children and Boomers only [former BCBSF Health customers, spouse, children, elderly parent, pets, uninsured, former members of competitor plans (left	1) To save money 2) To gain access to certain doctors 3) To provide peace of mind 4) To treat myself and family members when needed 5) To protect myself from harmful financial risk	1) Rolling Off Group Coverage 2) Leaving A Competitor 3) Relocating or Moving to Florida (Blue or non-Blue) 4) Get Pregnant 5) Kids Get Sick 6) I Get Sick 7) Onset of A Predictable Event (annual physical, scheduled procedure)	1) Florida Blue Retail Store 2) Home 3) Work 4) Enrollment Meeting 5) Direct Sales Center 6) Sales VP "pitch" 7) Agent/Broker/Consultant Visit or Call 8) Member Contact Center 9) Seminar/Town Hall Meeting	1) To save money 2) To gain access to certain doctors 3) To provide peace of mind 4) To treat myself and family members when needed 5) To protect myself from harmful financial risk	HA	Parents with Young Children = 31%; Boomers/ Retirement Focus = 33% Total = 64%	1) Direct Sales Center 2) Pediatrician Office (Parents with Young Children) 3) Urgent Care Facilities (Parents with Young Children) 4) Florida Blue Retail Store

**2. Customer Voice Table and 3. Hierarchy Diagram**

Prior QFD projects were used to obtain customer needs and their structure.<sup>1</sup>

**4. Prioritizing Customers Needs**

Prioritization in multi-criteria decision-making was advanced by the research of Dr. Thomas Saaty in the 1970s at the U.S. Department of Defense and later at the Wharton School of Business at the University of Pennsylvania. Saaty found that decision makers facing a multitude of elements in a complex situation innately organized them into groups sharing common properties, and then organized those groups into higher level groups, and so on until a top element or goal was identified. This is called a hierarchy and when making informed judgments to estimate importance, preference, or likelihood, both tangible and intangible factors may be included and measured. The Analytic Hierarchy Process (AHP) was created to manage this process in a manner that captures the intuitive understanding of the participants and also yields mathematically stable results expressed in a numerical, ratio scale. A numerical, ratio scale is preferred for the following reasons:

- Numerical priorities can be applied to later analyses to derive downstream priorities.
- Ratio scale priorities show precisely how much more important one issue is than another. Ordinal scales only indicate rank order, but not the magnitude of importance.
- Numerical scales can be tested for judgment inconsistency, sensitivity, and other useful properties.

In order to leverage the work of this project for other major corporate initiatives, we chose to have the Analytic Hierarchy Process (AHP) completed by consumers across all 5 life stages, ethnicity, and also for customers that currently have HOOPS (Table 2). Although major expected themes emerged, such as affordability across all the segments, there were some notable differences by category. This information alone has been utilized repeatedly in the Marketing Organization in its development of things such as the African American Brand campaign, Hispanic Consumer Strategy planning, and evaluating Financial Convergence opportunities.

**Table 2 Customer needs priorities by consumer, life stage, and ethnicity**

	Overall	White	Hispanics	AA's	YI	EI	PYC	POC	Boomer	HOOPS	Uninsured
My health care costs are	27.4%	29.0%	22.1%	28.8%	23.7%	26.7%	25.1%	22.8%	34.7%	26.6%	33.6%
I know which medications to take and can easily	14.3%	13.9%	14.9%	17.1%	12.4%	13.8%	12.5%	16.4%	17.8%	14.9%	11.8%
The health care plan is	14.7%	14.2%	15.4%	17.8%	14.9%	15.7%	13.4%	14.6%	15.3%	15.4%	13.5%
I can make the best	15.5%	15.5%	16.3%	13.8%	16.5%	15.3%	15.8%	16.3%	13.6%	15.2%	14.7%
Happy family life and	18.6%	18.7%	18.8%	13.8%	19.3%	18.0%	24.4%	19.5%	11.7%	18.1%	17.6%
Respect for customers	9.5%	8.7%	12.6%	8.7%	13.2%	10.5%	8.8%	10.3%	6.9%	9.8%	8.7%

## 5. Maximum Value Table

In an effort to “step up” our brainstorming of solutions on the top needs, we hired a brainstorming consultant and an illustrator<sup>2</sup> to facilitate the session. In preparation for the session we framed challenges based on the needs prioritized by the customer. In this case it was the needs of the Parents with Young Children (PYC) and Boomers identified in the Customer Segment Table.

*What are all the things we can do to make it easier for parents to fit with their busy lifestyles?*

*What are all the ways that we can help parents reassure the health of their entire family (including the parents themselves)?*

*How could we help make the Boomer’s experience be simple and stress free when it comes to dealing with prescriptions?*

*What ways could we use technology to help provide extraordinary service to Boomers and Families with Young Children?*



Figure 3 Brainstorming sessions

This high energy session with representation across the enterprise yielded over 100 ideas. We then narrowed the list to build out 12 of the ideas. These ideas were the basis for building a Maximum Value Table (MVT) (Table 3). This exercise enabled the team to elaborate on the idea, including evaluating its impact on the need, as well as the impact internally, including any major hurdles to implementation that we might have to overcome. Similar to the Customer Voice Table, where the solutions or problems with solutions help us understand the true customer need, the Maximum Value Table helps us work in the opposite direction by increasing our understanding of how the various components of a particular solution work to deliver value relative to a specific customer need, including the characteristics, technology, usability, and even cost.

**Table 3 Maximum Value Table**

needs	Solutions				Design				Build and Deliver	
	characteristics & capabilities	functions (hardware)	processes (service)	objects (software)	technology	components	reliability	maintainability	usability	manufacturing
My health care costs are affordable	Add health care benefits to financial planner packaging - life ins., LTC, 401K, etc.					Possible partnership opportunity w/ AMEX or Fidelity Financial Planners				
I know which medications to take and can easily obtain them	Understanding pharmacy - generics, costs, interactions, tracking (history), timing, restrictions	Pharmacy/medication Service Line or mailbox					Knowledge level of phone rep	Updating with latest information	Available 24/7	
I can make the best health care choices	Personal care manager - Personalized info tracking, appt. reminders, anticipated cost calculations, updates on conditions, rewards/coupon									
My health care plan is flexible	Hospital Concierge - Kiosk in hospital to help customer navigate health care system at	Facilities/Real Estate @ hospital					Wide range of knowledge required - Don't want to mislead customer that help implies	Customer specific information required/BCBSF policies	Availability expectations - 24/7	

Concepts included everything from a simple online chat capability to actually having BCBSF representative's onsite at hospitals to help customers navigate through their health care experiences. A couple of the illustrations produced at the session are provided below:



**Figure 4 Concept illustrations**

## 6. Testing the Concepts

Eight of the twelve concepts were presented with the targeted customers in eight focus group sessions in Jacksonville and Miami Florida. The concept most promising is what we're referring to as the "Click to Chat" (C2C) capability. This capability incorporates a couple of different concept ideas into one -- the online chat and customer service appointment ideas. Initial evaluation indicates that this idea not only provides customer value, but also provides the opportunity for significant cost savings to the organization. Some of the benefits and expectations from the focus group members were used to feed the MVT (help with italicized comments from Smith Dahmer<sup>3</sup>):

***Less chance for confusion:*** *respondents feel that if they can print the response they receive, they can refer back to it and make sure they have it straight.*

- *"I like it because there's no chance for confusion. I'll hang up the phone and think they said one thing and they'll come back and say it's different."*
- *"When I'm on the phone with them, it all makes sense and then when it comes time to fill out the form or I'm at the doctor or whatever it isn't so clear."*

***Accountability:*** *they also feel that if there is a hard copy of the dialogue with customer service, they are sure to receive accurate information that they can bring with them to a care provider if necessary.*

- *"This way you can bring a copy of the thing with you to the doctor and it eliminates any back and forth. Plus now they have to be sure what they're telling you is actually right because there's a written document of it."*

***Expectation:*** *Several respondents are familiar with online chat services offered by other organizations.*

- *"Bank of America has this service and I think is great. It's horrible when you call your insurance and they send you from here to there and they ask you things that you have to hang up, look it up, and call again."*

***Design Recommendations:*** *Respondents are receptive to the idea of "page pushing," where the customer is steered to a relevant webpage that can be viewed by them and the customer service rep at the same time.*

- *"So if I was asking a claims question – you know, 'hey I'm not sure which form to fill out,' it literally pops right up or a web page with the right content would pop-up. That's really exceptional."*
- *"Rather than have to click through to the service, most respondents like the idea of a non-intrusive pop-up window on their carrier's home page that proactively offers help."*
- *"Maintaining a "personal touch" in electronic communications could be another consideration. As customers move away from speaking with*

*representatives, it will be important to maintain a human element in electronic interactions*

**Measurement:** *Much of the concept's appeal comes from the "discussion" component of the interaction. Too much of a delay in replying to a customer would undermine the benefits of the service.*

- *"I'd want someone to respond in a minute or so and it at least lets me know they're working on it if it's a more complicated question. . . you don't want to be sitting there wondering if someone is out there or not."*

## Implementation

It's been said that "ideas are a dime a dozen, but implementation is the differentiator". In this particular project, C2C is currently in the pipeline to determine build, buy or ally. Attached are some sample screen shots and savings results from Connexions<sup>4</sup>, a business partner of ours that has implemented a similar capability in their industry and is helping to further our business case for moving forward.

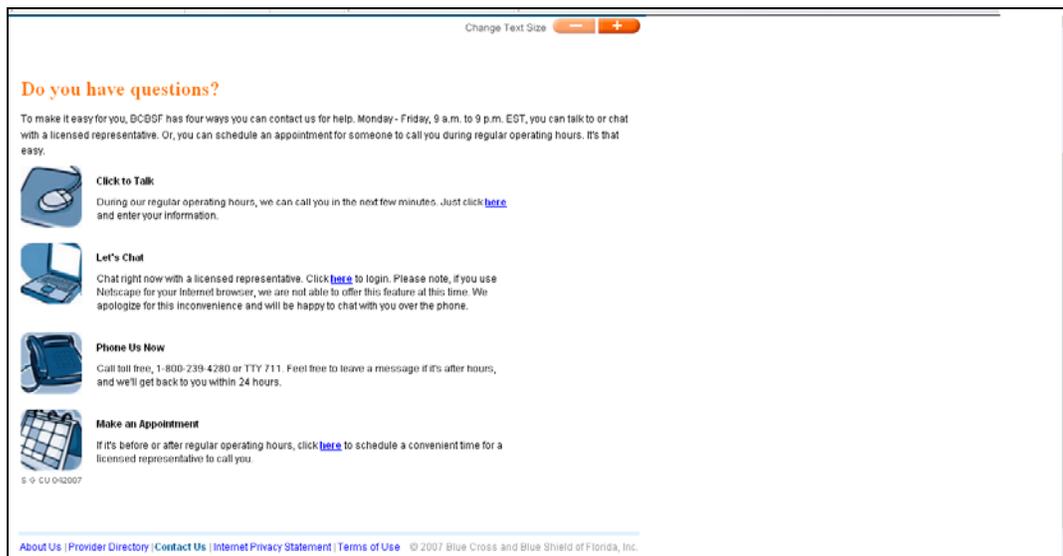


Figure 5 Screen shots of chat concept

## Illustration of the cost impact of C2C capability:

### Traditional Call:

FTE Cost	\$29 per hour
AHT	10 minutes
Calls per Hour	6 calls
<b>Cost per Call</b>	<b>\$5.80</b>

### Click-to-Chat:

FTE Cost	\$29 per hour
Chats per Hour	9 – 12 chats
<b>Cost per Chat</b>	<b>\$3.22 - \$2.41</b>

**Projected Savings:**

	CALL VOLUME	500K	1 Million	1.5 Million	2 Million
CALL/ CHAT MIX	90/10	\$129,000	\$258,000	\$387,000	\$516,000
	80/20	\$258,000	\$516,000	\$774,000	\$1,032,000
	60/40	\$516,000	\$1,032,000	\$1,548,000	\$2,064,000

**Conclusion**

Although we have one solution teed up for implementation, there will need to be more in order to exceed our competition in this new retail environment. The excellent thing about output from this project and the QFD tools utilized is that we don't have to start from scratch. Whether designing retail solutions for this segment or one from another life stage or ethnicity, we have the prioritized needs of our customers that we can use as a foundation for designing the best solutions.

**About the Authors**

**Kathy Hines** has been employed by Blue Cross Blue Shield of Florida for ten years. She has supported the membership and billing functions, customer service, product development and most recently the marketing function in a variety project and leadership roles. She currently serves as an Innovation Leader, of which her primary responsibilities include capturing deep customer insights and translating those into actionable products, services, and capabilities to attract and retain customers; including members, providers, and agents/brokers. BCBSF uses the QFD methodology in its innovation process of which Kathy currently holds a provisional QFD Black Belt<sup>®</sup>. [kathy.hines@bcbsfl.com](mailto:kathy.hines@bcbsfl.com)

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