## RDE SYSTEMS:

## **DELIVERING SOLUTIONS** FOR FASTER REPORTING, MORE **EFFECTIVE DATA MANAGEMENT +** ROBUST ASSESSMENTS

eCOMPAS and e2COMMUNITY CASE STUDIES







Case studies feature either eCOMPAS, the client-level data tracking and reporting system or e2Community, the needs assessments and client satisfaction surveys solution.

These are developed by RDE Systems. To learn more about eCOMPAS, e2Community, and other RDE solutions, visit www.rde.org or email info@e-compas.com



# STREAMLINED DATA MANAGEMENT IN BOSTON EMA

Customized Web-based software enables Boston's Public Health administrators to ditch paper system

"[RDE] is really different than traditional technology companies. Their flexibility was a huge factor in the success of the project."

—Mariah Hamilton, Former Senior Quality Management Program Coordinator

#### **The Challenge**

The Boston Public Health Commission (BPHC) HIV/AIDS Services Division needed a system that could capture, store, and report three different types of data: 1) comprehensive demographic and utilization data; 2) client-level data specifically required for Ryan White Part A funded providers; and 3) client-level outcome data.

Providers were using many different systems to store and analyze these

different data sets and BPHC wanted a single system that would streamline the process.

"We were so outdated that we were literally having data sent to us on paper and data entry staff would enter that into a system," explained then-Director Michael Goldrosen.

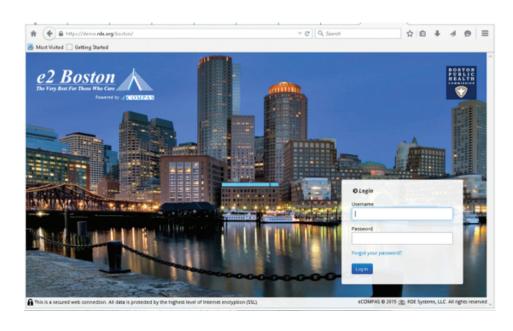
The system itself was also outdated. "Somebody who left the organization years ago built the system, and no one else could update it," Goldrosen adds.

"It was essentially held together with Scotch tape, and each provider was on their own to figure out how to do the federal report."

#### The Solution

BPHC selected the eCOMPAS system, developed by RDE Systems. RDE customized and enhanced eCOMPAS to meet Massachusetts' unique confidentiality rules and BPHC's needs. The result is the fully customized e2Boston system currently in use by 37 agencies and approximately 50 programs throughout the greater Boston and New Hampshire area.

"[From there], we all used one system and could look at live data, but we could all see it in different ways," says Goldrosen. "And there were these amazing reports, with visual analytics and the ability to drill down into client-level data [by navigating directly to client





#### **WHAT IS eCOMPAS?**

The Electronic Comprehensive Outcomes
Measurement Program for Accountability and
Success—or eCOMPAS—is a Web-based, clientlevel data system that can be customized for HIV
data reporting.

Created by RDE Systems, eCOMPAS is simply the most powerful and affordable data solution for contract management, quality improvement, and client satisfaction for HIV/AIDS program providers. The software is also fully compatible with the Health Resources and Services Administration's (HRSA's) client-level data reporting requirements and clinical performance indicators.

records]." Just as important is protecting client privacy. Using eCOMPAS' security and encryption along with role-based permissions, various users can view client data without seeing individual names. eCOMPAS' advanced security and encryption made it easy for the program team to achieve the level of data access needed to support program needs, while meeting HIPAA security and privacy requirements, with no required IT involvement.

The potential for quality improvement is another big advantage. "Program coordinators who work with funded providers on a regular basis now have real-time access to their data instead of waiting until the next quarter. As a result, they're able to have more current conversations with them about what's going on," says Mariah Hamilton, a former member of BPHC's quality management staff.

The HIV/AIDS Services Division also worked on integrating client-level outcome data into the system.

## Results: A New Kind of Technology Company

Preparing for the launch of e2Boston and training system users was a team effort. "RDE worked with me to do the initial provider training," says Hamilton. "That was great because I was able to speak to why we made certain decisions within the system and how to apply it programmatically, while RDE was able to help with any technical troubleshooting." RDE is also providing ongoing assistance for the system's help desk.

"They are just really different than other traditional technology companies," Hamilton adds. "Their flexibility was amazing. If we made a mistake by not specifying something clearly enough in the specs, they were really understanding about working with us to get it fixed."

Previously, BPHC had worked with another vendor to build a different system. "The contrast to working with RDE was pretty dramatic," recalls Goldrosen. "Every change came with a separate bill and trying to convey our business needs was always a challenge." That's how RDE is different. RDE believes in a partnering philosophy where they go above and beyond the scope of contract to ensure success beyond expectations. RDE chooses to work only with clients who care about making a real difference and who value and appreciate innovation.

"We got far enough to have a prototype of that system," says Hamilton. "There was no reporting feature and no graphics. It couldn't show client names to the providers and not show them to us. There were all these structural issues that created crazy workarounds," she explains, regarding the system prior to e2Boston.

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#### e2Boston results as of June 27, 2016:

- Total clients in e2Boston: 13,250
- Total users: 317
- Total number of data points integrated: 668,453
- Total data points: 6,036,350
- Total number of hours saved: 8,000+

#### New e2Boston features:

- Added modules: outcomes, dental updates, advanced visual analytics (for powerful reporting capabilities)
- Users have submitted RSR 2014 and 2015 and the process has been incredibly smooth



#### **Key Benefits**

"The e2Boston system has already had a significant impact on patient care, as it frees up time for providers to spend directly with clients. As outcome data was integrated, that impact became even more profound."

"Agencies and providers will be able to improve the structure of the services, depending on what the data tells us," explains Goldrosen, "especially if we get to the point where clients' data is shareable — with client consent of course. Now, when a client goes to provider A and then goes to provider B, they have to repeat their intake information and initial assessment. If data can be shared eventually, then I think we'll see a huge impact on the day-to-day aspect of clients' lives," he says.

"Currently, the laws in Massachusetts are preventing us from capitalizing on [sharing data], but we are looking into ways

that we can legally allow clients to take advantage of that," explains Hamilton.

The fact that e2Boston is "RSR ready" is also a huge plus. RSR refers to the client-level data that all grantees must provide annually for the Ryan White Services Report.

In addition, the system allows designated administrators to step in as needed. "I basically can do anything in the system, within reason," says Hamilton. "For example, suppose we have an agency that just disappears off the face of the planet, and we really need to submit an RSR on their behalf. As a 'super administrator' I could actually go in and do that. Having that kind of access and control around our data is great."

And it comes with a high level of security in terms of assigning roles and limited data access. "That was a key point for us because of our concern for protecting client confidentiality," said Goldrosen.

#### **ASSESSING USER SATISFACTION**

Customizing and launching a system that has many users across a disparate array of funded agencies—all with their own diverse technical capabilities—is a significant challenge. To assess user satisfaction levels with e2Boston, RDE Systems conducted pre- and post-launch surveys.

Pre-launch surveys revealed that users were highly skeptical that the effort would be successful. Post-launch surveys, however, revealed a high level of user engagement and appreciation. Here is a sampling of qualitative feedback received from various case managers and program coordinators:

- "It's easy to navigate. I like how the client utilization report allows me to make sure data matches before it is submitted."
- "I love it! Overall, it is easy to use."
- "It's a great system. I like that it gives all the information right away."

(See next page for more qualitative feedback!)

#### Assessing User Satisfaction

- Everything is manageable and good. Very useful system."
- The system is excellent. It is easy to access and use it."
- "It's a breeze [to use]."
- "One of the best programs. I love it!"
- "It's been really great! Everything I need is right in front of me."
- "Support for e2Boston has been very helpful and responsive."
- "Overall, I like it much better than the old system. Everything is a click away."
- "We love it! It is really helpful and the reports definitely give me what I need."
- "It's working beautifully. Makes our jobs much easier."
- "I love the reporting and demographics!"
- "Keep up the great work! I love the new system!"
- "The e2Boston system has already had a significant impact on patient care, as it frees up time for providers to spend directly with clients. As outcome data is integrated, that impact has become even more profound."
- "I would find it hard for their system to compete with the ease of access and great interface that e2Boston provides. It's by far the best system we've ever been invited to use through any of our contracts since I got here in 2008."
- "Not sure if other programs had a similar experience, however, my staff and I can attest to how E2Boston has made our data collection and reporting much more manageable."
- "Submitting the RSR–Part A client level data was smooth and literally at a click of a button. I loved how we were able to review our data and resolve any errors/warnings prior to generating the XML file for submission."
- "My vision is to one day have an integrated system for all funding sources where we can import clinical data and have the entire RSR submission process be as efficient as it was for Part A."
- "Selecting RDE systems to develop e2Boston was genius. They are one of a kind, responsive, caring and truly invested in the work that we do."
- "Last year, we talked in great detail about change. The introduction of e2Boston has <u>revolutionized</u> how we utilize the significant amount of program data we generate. We have
  - eliminated the need for paper submissions of service data and quarterly reports,
  - sped up turnaround time for performance feedback with real-time data reports,
  - and given many frontline staff the powerful tool of visual analytics to show clients their individual progress towards improved health outcomes, including HIV viral suppression.

The responses from providers have been overwhelmingly positive and we are very happy that our efforts have resulted in a product and resource that have enhanced programs' capacity to do work. Our next innovation for e2Boston will be the rollout of an Outcomes Measurement modules. Replacing the previous method, we will train every agency on how to use this new component to track health and quality of life indicators via an online submission process. I hope this direction in meaningful use of technology will continue to make our jobs easier and help in the delivery of service and care to our clients."

• "I want to say thanks to you and your team again for your hard work and dedication to making e2Boston a great site."



## FAST TURNAROUND IN CALIFORNIA

e2Community enables TGA to survey population with less staff and in record time

"RDE Systems just has so much experience working with the Ryan White community and understanding our needs and requirements. With e2Community, you're getting that unique expertise. [RDE] can brainstorm with you and try to figure out what the solution to your problem is. And they are so responsive in working with you to figure it out. That part is amazing. Survey Monkey certainly doesn't have that."

—Claire Husted, Health Planning and Grant Writing Consultant

#### **The Challenge**

As a Part A Ryan White HIV/AIDS
Program grantee, the Riverside-San
Bernardino Transitional Grant Area (TGA)
must perform regular, comprehensive
needs assessments at least every three
years. In 2008, the TGA distributed a
paper survey, partly because that was
how it was done previously.

"It was an awful experience," says Claire Husted, an independent health planning and grant writing consultant who worked with the TGA from 2005 through the end of 2011. "It took 6 to 8 volunteers to assist in collecting surveys, and then I had to hire somebody to do all the data entry for more than 400 surveys," Husted says. "And there was data cleaning on top of that. It was an extremely labor intensive process."

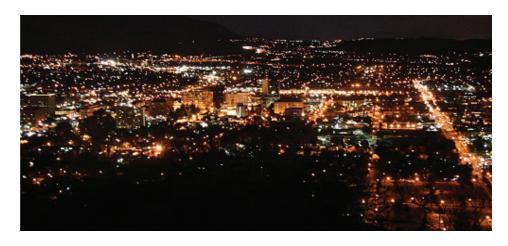
Shortly after that experience, Husted attended a Ryan White All-Grantee Meeting and heard about another TGA's experience with the e2Community platform. "I fell in love with the idea of an online survey system," she says.

#### The Solution

The Riverside-San Bernardino TGA began implementing its next needs assessment in early February of 2011. Survey administrators based the questions on the previous survey; however, they did add several "prevention questions" in an effort to reach out to a high-risk, HIV-negative population.

Using the e2Community audio feature, they created an English-language recording to assist survey participants in completing the survey.

The TGA launched its survey just six weeks after contracting with RDE Systems, developers of the





#### WHAT IS e2COMMUNITY?

The e2Community Platform is a web-based, fully customizable survey platform that you can use to better understand your populations' needs or measure service satisfaction.

#### Features include:

- No set-up (survey building done for you)
- Multiple languages
- Audio reading of survey questions
- Video introductions
- Skip logic
- · Easy, ongoing question editing
- Raw data downloads to Excel
- Web-based access from multiple locations
- Automatic data processing
- Real-time, on-demand access to data analytics
- Data presented in easy-to-understand graphs and charts
- Rolling survey collection as needed
- · Comprehensive technical assistance

Plus, RDE Systems has worked with HIV/AIDS providers and planners for many years.

We understand the complex needs of Ryan White recipients and apply lessons learned and best practices to your unique situation.

**e2Community platform**. To prepare for launch, the TGA took the following steps:

- 1. Created a domain name for the survey.
- 2. Developed marketing brochures and cards for broad distribution.
- Sought community input on marketing materials to ensure that they incorporated a colorful, vibrant design that would capture attention from the Latino and African-American communities.
- 4. Worked with community-based organizations to promote the survey.
- 5. Distributed a press release to announce the survey in local papers.
- Worked with Walgreens' community program to print and distribute flyers (with the Walgreen's logo) in select locations.

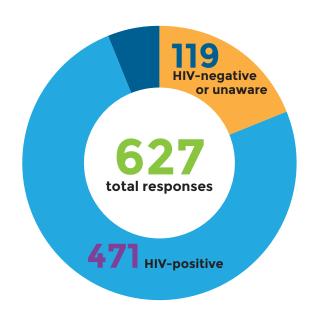
During survey implementation, the e2Community platform enabled the TGA to track demographic characteristics and regional location for respondents in real time. That allowed survey administrators to increase promotion efforts for any regions or populations that appeared underrepresented.

Because e2Community is a Web-based platform, survey administrators also were able to provide on-site access to the survey for respondents who lacked access to computers. The TGA purchased two laptop computers, so two people (one of whom spoke Spanish) could travel extensively to assist people in completing the survey. The survey assistants focused primarily on San Bernardino County, because computer access is more limited in the area. "We definitely were able to increase response in that county," says Husted.

The e2Community platform also enabled survey administrators to edit and adjust questions as needed. For example, one question asked participants to rank the importance of support services by clicking on a service and moving it up or down the list.

"What we found out within the first two weeks was that many people were skipping the question, so the services just remained in the order that they were originally listed," says Husted. Working with RDE, the TGA devised a workaround. "People could just click on the services that were important to them. It wasn't a weighted priority, but it indicated when 100 people, for example, selected medical care as important."

The survey closed on May 15, 2011. Total responses numbered 627 (which included 119 from the HIV-negative or unaware population and 471 from the HIV-positive population).



#### Results: Fast Turnaround

The survey response exceeded previous efforts within an extremely short timeframe. What's more, the effort was considerably less labor intensive for the TGA — eliminating the need for separate data entry and reducing the number of people needed to assist with survey administration. It also boosted survey response by making it easy to track demographic data of survey respondents in real time. In addition, the Web-based platform made it more convenient for participants and provided increased anonymity. That's because as long as survey respondents had computer access, they could take the survey at a time and location of their choosing.

#### **Access to an Expert Partner**

More recently, Husted was able to compare using the e2Community platform with less feature-oriented applications like Survey Monkey. After moving to Denver, she assisted that TGA with a survey to assess the impact of the Affordable Care Act on people living with HIV. To implement the survey, they chose to use a combination of paper and a HIPAA-compliant version of Survey Monkey. She still needed to hire people to do data entry, because so few responses were received online. What's more, Survey Monkey provided limited visual analytics and very little customer service.

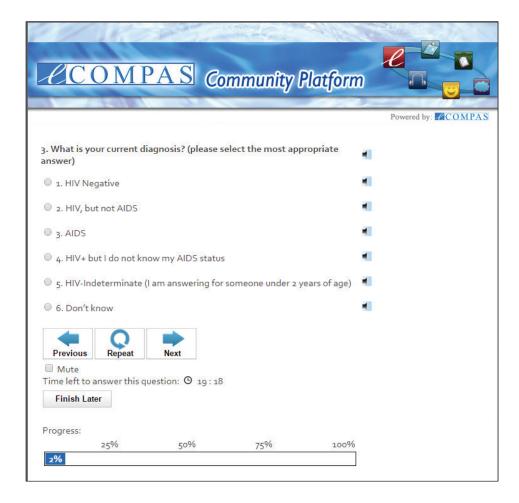
This provided a stark comparison to Husted's experience working with RDE. "RDE had the experts available who I could call directly and say, 'this is what I want,' and they worked with me to figure it out," she says. "It was an individual tailoring of the survey questions [and implementation]."



#### Importance of Needs Assessments

A needs assessment should be the foundation of planning for a jurisdiction. "Not just because it's a Ryan White requirement; it goes well beyond that," says Husted. "The needs assessment process not only tells you what services your area needs, it also can tell you what the barriers to care are. And it serves as a fundraising tool, because so many funders today want evidence-based decision-making," she adds.

Meeting those goals, however, requires having a well-designed survey tool and a convenient, effective method for collecting and analyzing the data. That's the e2Community advantage.



#### **LESSONS LEARNED**

### Allow sufficient time for planning

Allow three months or longer to plan the needs assessment process.

### Address survey fatigue up front

Limit questions
to 125 or below to
boost completion
rates. Even though
the Riverside-San
Bernardino survey
allowed participants
to enter a code to
finish the survey
later, shorter is still
better.

#### **Keep it ongoing**

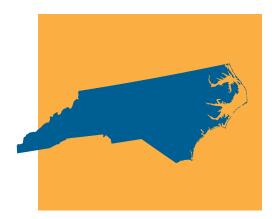
If you can afford to, keep the survey open indefinitely. By keeping it ongoing, you begin to embed it in the culture of the jurisdiction.

### Create practice questions

Provide sample questions in the introduction, so respondents can get used to how to use the computer in answering questions.

## Consider what you're really asking

For example, older surveys tended to ask people if they "needed" a service. But people don't identify a service as needed if they're already receiving the service.



## EXCEEDING EXPECTATIONS IN NORTH CAROLINA

e2Community helps Region 6 increase survey response and better target participation

"Implementing e2Community went way beyond just the product. It was a real partnership . . . with people who truly wanted us to be successful. [RDE Systems] just brought a wealth of history in HIV and Ryan White surveying to the table."

—Michael McNeill, Administrator, North Carolina's Access Network of Care

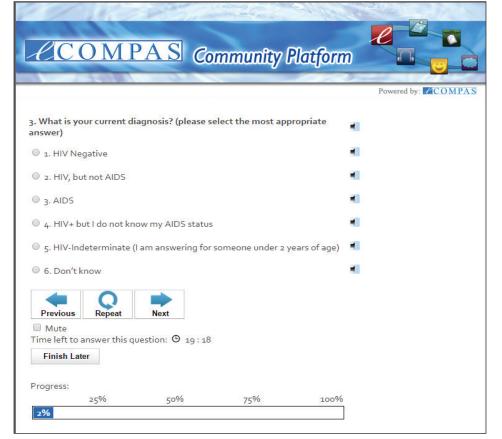
#### **The Challenge**

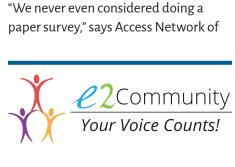
As a Ryan White Part B subrecipient, North Carolina's Region 6 — located in the north-central part of the state and called the Access Network of Care — must complete regular needs assessments for its HIV patient populations. Access Network of Care—Region 6—provides service for the highest concentration of people living with HIV in the state. It comprises

of the state, including the cities of Raleigh, Durham, and Chapel Hill. Thus, Region 6 needed a way to gather data on a large scale. And it had to do so across multiple counties and providers, and in both English and Spanish.

With a minimum goal of 250 surveys, Region 6 estimated that it would take 1500 staff hours and five months to collect, translate, and enter the surveys into a system for analysis.

What's more, that was just the immediate problem. The state requires each Region to "maintain and update" its needs assessments annually, resulting in a need for an ongoing system and additional staff time each year.





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- Rolling survey collection as needed
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RDE Systems has worked with HIV/AIDS providers and planners for many years. Thus, they understand the complex needs of Ryan White recipients and can apply lessons learned and best practices to customize systems to unique local environments.



Care Administrator Michael McNeill. "We are just too large [serving 21.5% of the state's HIV-positive population, which is twice as large a percentage as the next largest region in the state] and it is just too expensive to send out enough paper surveys to get an adequate response." Also, the area includes two major research universities, so the provider community is very progressive and tech savvy.

In 2008, Region 6 hired a consultant to implement its needs assessment. They developed a 27 question survey that failed to meet the area's needs in several critical areas. In January of 2009, Region 6 fired the consulting company, and instead adapted a survey from another jurisdiction. Once that survey was in place, it still needed a way to collect and capture the data.

#### The Solution

Region 6 contracted with RDE Systems to adapt the e2Community platform to meet their unique needs and vision. RDE created a prototype site so that Region 6 could test the survey with a focus group of consumers. And the survey launched in September of 2010.

Even though the survey included more than 100 questions, median completion time was about 18 minutes, with a 95% completion rate. "When we hit 250 surveys, we thought wouldn't it be great if we got to 300," says McNeill. "When we got to 300, we thought, well, 350 would be really phenomenal."

By December 31, Region 6 had collected 395 surveys, about 7% of the Region 6 HIV patient population. This total greatly exceeded their expectations, which McNeill attributes to the following factors:

- Audio reading of questions. Region 6 took advantage of the platform's audio recording feature. Region 6 used a local English-speaking health educator and a local Spanish-speaking health educator to read the questions. "We wanted voices that were familiar, so both of them were pretty high profile health educators within our communities," says McNeill.
- Welcome/instructional videos. They also took advantage of e2Community's video feature, creating two welcome videos — one in English and one in Spanish — also with recognizable

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health educators. "We actually went to a coffee bar, and they let us film in there. It's just this very casual thing where they welcome you and go through the process of what you're supposed to do, and how you could be reimbursed for taking the survey," he says.

 Wide distribution of promotional postcards.

Printed postcards included the Web address for the needs assessment and a brief statement about the importance of making your opinions heard. "We left them at all Ryan White and otherwise funded clinics, at all of our case management agencies, at our food pantries, with our transportation delivery provider, in local gay bars, and in bookstores," says McNeill. "Anywhere we thought most of our people congregated."

 Incentives. The back of the postcard provided space for survey participants to record a code and address after completing the survey. As soon as survey administrators received the

- card in the mail and verified the code was correct, they sent a \$10 gift card to the indicated address.
- Volunteers to assist with survey completion. Several volunteers and interns arranged to spend time each week at a few communitybased organizations to assist with survey completion.

#### Results: Real-time data

Access to real-time information enabled survey administrators to assess participation rates early on and on an ongoing basis.

"Ten days after launch, I sent an e-mail out to every provider in my region, saying we already had 75 surveys so far, but we didn't have anybody from [this county] yet," says McNeill. He could then ask pointed questions and give direction about how to boost participation in specific areas or among certain populations.

Survey administrators could edit questions at any point, which also improved completion rates and accuracy. "For example, we realized after just two weeks that many of our teenagers weren't familiar with the term 'case manager.' They may have had a case manager," McNeill says, "but she was just 'Linda' to them."





#### **Access to an Expert Partner**

RDE's expertise in HIV/AIDS, and particularly in the requirements of the Ryan White Program, was invaluable. "RDE pulled us along rather than us having to explain what we needed," says McNeill. "They also were able to cite best practices and connected us with their other clients, so we could ask and share experiences about survey questions and methods."

#### **Going Forward**

Based on lessons learned, Region 6 plans to make some changes to the next survey to capitalize on the success of the original e2Community survey. "We also have to do a satisfaction survey every six months, and being able to incorporate that into the same survey is a tremendous benefit," says McNeill.

Region 6 is making some changes to the survey, but says that the changes "are a result of the survey's success." They plan to alter some questions to trigger referrals for common services such as mental health, substance abuse, or food assistance.

It's so important to be responsive to client needs, and e2Community is an integral part of that process. "I absolutely love the e2Community system and am very proud of the results that we can submit," says McNeill. "We can identify the needs within our region and then 'justify the hell out of them,' and that's something our state has never really had before."

#### **LESSONS LEARNED**

Check your assumptions. For example, Region 6 offered a \$10 gift card for survey completion on the recommendation of clinical trial providers in the area. Yet, as many as 12% of participants chose to opt out of the incentive. "We also didn't think participants would be computer savvy," says McNeill, "but we got people of all age ranges, of all education backgrounds, of all languages who completed the survey."

Understand what responses really mean. For example, clients don't always rank substance abuse counseling as important to them; they don't necessarily value that service. However, it is extremely important to people living with HIV who are using substances. "It becomes a marketing problem [for us]," says McNeill. "How do we get people engaged in something that they obviously need [but don't necessarily want]?