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# AcuteNet Pioneering the Sharing Economy Model



Fariba Anderson

Since its genesis in 2011, AcuteNet has ventured to leverage the power of cloud computing to solve some of the toughest problems that frontline healthcare providers face every day—increasing cost pressures and filling multitude of forms in order to comply with regulations—rather than delivering effective patient care. Moving from a CIO role to CEO at AcuteNet, Fariba Anderson—well known for her strong business acumen and reputation for creating value through innovative solutions, transformed AcuteNet to enable CIOs in the health care industry to take advantage of Software as a Service (SaaS) capability. “As a standard offering, we digitize multitude of clinical assessment standards and forms by utilizing interRAI Clinical Assessment Instruments and provide workflow automation through AcuteNet Private Cloud in customer’s specific jurisdiction with full compliance,” says Fariba.

With form digitization and workflow automation, AcuteNet’s SaaS capability can be correlated to “Uber” solution for addressing the technology requirements of clinical assessments, care plans and outcomes—delivering the right care to the right patient at an economic rate. Beyond technology innovation, AcuteNet offers

an innovative licensing model based on patient record with unlimited user-access—enabling organizations of all sizes to take full advantage of AcuteNet’s underlying open-source technology. “As a result, our customers can create as many clinical assessments as they need on our platform and pay a service fee based on number of patients starting at \$5 per patient to less than a penny with increased utilization,” affirms Fariba.

AcuteNet has successfully embedded security and protection of patient data into the DNA of its cloud-based SaaS capabilities with multiple layers of encryption enabling for both online and offline access via any device. Fariba recollects a major challenge faced by a 6000 user based customer—where nurses could not rely on internet connection to access cloud based capabilities. With AcuteNet’s offline feature, the customer was able to down load encrypted FIPS 197 patient data and automatically synchronize the patient data to their corporate systems.

In addition, AcuteNet framework accommodates two-way data interchange and single-sign-on feature as well to help large enterprise customers such as government organizations and insurance companies to fully control AcuteNet SaaS offering as an extension to their corporate systems. In one instance, a private healthcare provider required AcuteNet to be accessed through their corporate VPN infrastructure and Single Sign On environment with patient data fed to AcuteNet on demand at the time of assessment. Upon completion of care delivery by the nurses, a number of forms are completed and signed electronically for regulatory purposes. These digitized forms are connected to customer’s ERP system bi-directionally, whereby clinical

assessment conducted on AcuteNet’s private cloud is fed to Corporate ERP system in real time. “Through AcuteNet SaaS capability, the client was able to monitor the status of patient care and nurse’s care delivery with full protection of patient data,” affirms Fariba.

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**As a standard offering, we digitize multitude of clinical assessment standards and forms by utilizing interRAI Clinical Assessment Instruments and provide workflow automation**

AcuteNet’s SaaS products are empowered by AcuteNet Form Digitization and Workflow Automation Framework to ensure the protection of sensitive information in accordance with privacy legislation and industry standards. This is delivered in collaboration with: GeeksForless for technology talent, Red Hat for open source platform and Dell / CogecoPeer1 for secured private cloud infrastructure.

“Simplifying life, improving efficiency, and reducing costs is at the heart of AcuteNet Healthcare Information Systems; we open the doors to the future as a trusted partner for every nurse and clinician to deliver care to their patients with a sharing economy model,” concludes Fariba. **CR**



Ontario, Canada-based AcuteNet doesn't just provide software solutions for healthcare providers — it offers a new business model and an open-source technology platform. "With our sharing economy, the cost of application infrastructure is shared across all our customers," says Fariba Anderson, the company's CEO. "As a result, customers can significantly reduce costs, and they have unlimited user access and clinical assessment on our platform."

However, AcuteNet and its customers have not always been able to take advantage of the sharing-economy model. When AcuteNet was formed, it relied on a data center-based strategy to host its software-as-a-service (SaaS) application. "We owned and managed our own servers and other hardware, and that was not a sustainable way to grow our business," Anderson says. "It wasn't possible for us to efficiently scale, and it was very cost-prohibitive. We needed to get out of the hardware game, so we moved to the cloud."

AcuteNet sought to partner with a cloud provider that was focused on security and compliance with HIPAA and other healthcare regulations. "In the U.S., for example, every state has its own regulatory requirements," says Anderson. "For our customers, we needed to ensure that patient data resides physically in that state and that only authorized users can access patient data."

## Taking advantage of a turnkey cloud solution

AcuteNet chose to work with NTT DATA to implement the NTT DATA Cloud on Demand and Cloud Dedicated solutions to host the AcuteNet SaaS platform. "We didn't consider working with anyone else," says Anderson. "NTT DATA provides a turnkey solution, as well as a secure and robust cloud infrastructure that was perfect for our requirements."

The AcuteNet SaaS application runs Red Hat Enterprise Linux Server on the NTT DATA Cloud on Demand solution. Through this platform, AcuteNet delivers and supports 7 million clinical assessments, growing at 15 percent annually for its U.S. and Canadian customers, delivering the right care to the right patient.

By relying on NTT DATA to host its application, AcuteNet can focus more time and resources on the software development. "We are no longer distracted by managing servers," says Anderson. "Because NTT DATA takes care of hosting the platform, we can focus on helping our customers solve their business problems."

## Driving new business growth through rapid scalability

AcuteNet can now scale its SaaS platform quickly and efficiently, which is enabling new business growth. Using NTT DATA Cloud on Demand

and Cloud Dedicated, the company is supporting more than 2.3 million patients, is growing at 10 percent annually and has more than 10,000 application users, compared with 20,000 patients and 1,000 users previously. "We have significantly grown our business by relying on NTT DATA," Anderson says. "As a result, we can provide unlimited usage on our platform."

*"We can bring new customers online in several weeks and meet all our customers' compute requirements in hours because of the agility of the NTT DATA cloud solution."*

**Fariba Anderson, CEO,  
AcuteNet**

The organization has also gained business agility, which helps speed time-to-market. "We can bring new customers online in several weeks and meet all our customers' compute requirements in hours because of the agility of the NTT DATA cloud solution," says Anderson.



## Saving \$750,000 in annual operating costs

By taking advantage of the cloud, AcuteNet does not need to invest in hardware and other resources to support its platform. "If we weren't using NTT DATA's cloud solutions, we would have to pay for hardware as well as security and infrastructure personnel in the locations where our customers are," says Anderson. "By avoiding those costs, we are saving \$750,000 annually."

The organization's customers also save money through the sharing economy model. "Our customers

only pay us for application usage based on the number of patients they have, because we distribute the cost to our entire customer base," says Anderson. "The only way we can do that is by embracing the power of cloud computing."

## Protecting private patient data

AcuteNet can ensure compliance with HIPAA and other healthcare regulations by running its solution within the NTT DATA cloud. "We are helping our customers protect their patients' data by using the NTT DATA cloud services," Anderson says.

"Each AcuteNet customer gets its own container that has a copy of our application code with the customer's encrypted patient data. Customers' containers can only be unlocked and decrypted by authorized users in that state or region, while patient data is locked and encrypted to everyone else — including AcuteNet. To offer the right level of compliance and security, we require a trusted partner who we know can provide us with the most reliable, scalable and affordable cloud computing capability. Our business would not be viable without strategic partners like NTT DATA."

## CIO Review 50 MOST PROMISING HEALTHCARE SOLUTION PROVIDERS 2016



AcuteNet was named to the CIO Review's 50 Most Promising Healthcare Solution Providers 2016. This award places AcuteNet at the forefront in tackling the challenges prevailing in Healthcare.



AcuteNet is the recipient of 'Best Patient Data Consultancy Award' by Corporate Vision in recognition of its technology leadership for cloud computing and open source technology to deliver right care to right patients through robust clinical assessments.



AcuteNet is the recipient of 'Innovation & Excellence Award' by Corporate LiveWire in recognition of its patient-centric licensing model with unlimited user access and unlimited clinical assessments from \$5 to €1 per patient per month.



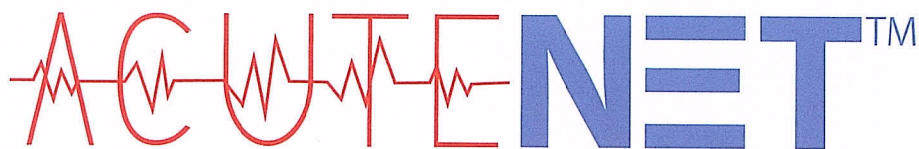
AcuteNet is the recipient of 'Healthcare Software Provider Consultancy of the Year' by ACQ5 in recognition of its sharing economy strategy to embed security and protection of patient data into the DNA of its cloud-based Software as a Service capabilities.

Visit [nttdataservices.com](http://nttdataservices.com) to learn more.

NTT DATA partners with clients to navigate the modern complexities of business and technology, delivering the insights, solutions and outcomes that matter most. We're a top 10 global IT services and consulting provider that wraps deep industry expertise around a comprehensive portfolio of infrastructure, applications and business process services.

**NTT DATA Services**  
formerly Dell Services





# FACT SHEET

AcuteNet is a sharing economy software as a service capability for nurses, clinicians and frontline healthcare providers. Over 10,000 nurses and clinicians use AcuteNet to deliver care to over 2.3 million patients through 7+ million clinical assessments in New York, New Jersey, Hawaii, Ontario, Quebec and Singapore. AcuteNet utilization statistic is published daily at [www.acutenet.com](http://www.acutenet.com).

AcuteNet is used in various patient care settings spanning hospitals, home care, long term care facility, community care, palliative care, hospices and mental health institutions. AcuteNet customers span government, not-for-profit and for-profit healthcare providers including the insurance sector. With AcuteNet, nurses and clinicians spend their time caring for patients as opposed to being consumed by technology.

AcuteNet is not a typical software application dictating a set of predefined tasks for a user to perform. Rather AcuteNet is a highly visual framework enabling for standardized and flexible clinical assessments, care plans, reporting and administration through 4 innovations:



Clinical Assessment Form  
Digitization and Workflow  
Automation

1

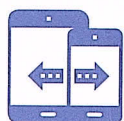
With AcuteNet, digitization and automation of clinical assessment standards and forms such as InterRAI Instruments are delivered rapidly from a couple of weeks to 3 months. Led by our customer requirements and industry standards, we deliver software as a service private cloud solution accessible through any device, anytime and anywhere.



Private Cloud Computing  
available via any device at all  
times

2

Our cloud enabled framework eliminates the need for IT infrastructure. We deliver and support digitization and automation through our own secured private cloud infrastructure or within customer's own data center while fully compliant with patient health information privacy requirements.



Web Service Integration with  
any computing infrastructure  
anywhere

3

CIOs control AcuteNet as an extension to corporate IT. We accommodate two-way data interchange with any system including single-sign-on. AcuteNet utilizes industry databases such as ICD (International Classification of Diseases), Health Canada Drug Product Database and FDA Drug Database to provide nurses and clinicians with secure and real-time access to list of illnesses and medications needed to deliver the right care to the right patient.



Multi Layer Encryption at  
application and infrastructure  
level for online and offline use

4

AcuteNet framework is architected based on the seven principles of Privacy by Design and Security by Kill Chain with multiple layers of encryption providing maximum protection of patient data including offline access when internet is unavailable and flexible reporting.

We drastically reduce costs and deliver superior services through our patient record licensing model. This offers our customers unlimited access and clinical assessments from \$5 to less than a penny per patient per month with full access to industry standards such as InterRAI.



# CIOReview

The Navigator for Enterprise Solutions

HEALTHCARE SPECIAL

NOVEMBER 24, 2016

CIOREVIEW.COM

## 50 Most Promising Healthcare Solution Providers 2016

**T**he omnipresence of mobile devices and their applications have ushered a paradigm shift in healthcare settings. The infusion of novel technologies and new participants in the market are introducing better ways to assimilate knowledge from disparate fields for delivering unparalleled care experience.

Technologies like big data, cloud computing and Internet of Things are facilitating better communication and collaboration across the entire care continuum and are enhancing care delivery. Along the same lines, healthcare industry is gearing towards a more value-based business approach, building analytics competency to accelerate care quality and drive operational and clinical developments. From smart algorithms, wearables to smart sensors and innovative practices, the new technology entrants are making big strides in the world of overwhelming data to improve management of chronic diseases as well as to contribute efficiency and productivity in diverse operations. Few other big components at the forefront of this transformation are electronic health records, drug dose calculators and digital

medical records, paving way for enhanced care delivery with better, holistic and real-time view of a patient's health.

As more healthcare organizations invest in these technologies and system capabilities, they're seeing proven results. Consequently, the market, today is replete with multitude of technology solution providers to assist companies improve performance and productivity. To help organizations select the best vendors that offer the most promising solutions, CIOReview presents the "50 Most Promising Healthcare Solution Providers"

A distinguished panel of prominent CEOs, CIOs, VCs, and analysts, along with the CIOReview's editorial board has assessed hundreds of security solution providers and shortlisted the ones that are at the forefront of providing cutting-edge technology solutions. The listing provides a look into how the solutions in this domain are put into use, so that you can gain a comprehensive understanding of how they will optimize business processes.

We present to you 50 Most Promising Healthcare Solution Providers 2016.

### AcuteNet Inc

*recognized by CIOReview magazine as*

50 MOST PROMISING  
HEALTHCARE  
SOLUTION PROVIDERS 2016

*An annual listing of 50 companies that are at the forefront of providing solutions for the healthcare industry and impacting the marketplace*

**Company:**  
AcuteNet

**Description:**  
Designs and implements user friendly healthcare technology solutions at an economic rate

**Key Person:**  
Fariba Anderson,  
CEO

**Website:**  
acutenet.com

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# Home sharing is a solution for senior housing

Halton and Northumberland launch HomeShare programs that strive to allow seniors to stay in their homes by matching them with a person who needs housing.



Rose Devlin, left, was matched up with homeowner Pat Arato through Northumberland's two-year pilot HomeShare program. (TRACY HANES)

By **TRACY HANES** Freelance Real Estate writer  
Tues., Aug. 22, 2017

Pat Arato and Rose Devlin sip tea from china cups and contemplate their common interests in the cosy living room of Arato's century-old home.

"We both like watching documentaries," Devlin, 63, says. "When we get Netflix, we'll be crazy!"

"Rose likes cooking and I like eating," Arato, 78, offers.

The ease of the women's banter suggests they've been friends for years, though they just met recently. The two long-time residents of Cobourg, a town of 18,500 people about an hour and a half east of Toronto, were matched through a Northumberland County HomeShare project. The program strives to allow seniors to stay in their homes by matching them with a person who needs housing and is willing to help with household tasks in return for reduced rent. Companionship is another benefit.

The Northumberland two-year pilot program is a joint effort of Cornerstone Family Violence Prevention Centre, The Haliburton Kawartha Pine Ridge District Health Unit and Northumberland County and is geared only to women. Halton Region also has launched a HomeShare program, open to both men and women, through Halton Housing Help, a service that connects people to housing supports. The Burlington Age-Friendly Council initiated the idea and works with the region to promote it. The program will serve Burlington, Halton Hills, Milton and Oakville and the first match is pending, with the goal to make 10 matches within a year. Northumberland hopes to make 10 matches in two years.

### **Read more:**

Toronto's seniors are at high risk of ending up homeless, report finds

Devlin, 63, had been living with her son and his family in a rental house. But when they moved to a smaller house, there was no room for Devlin and her search for an affordable apartment proved futile. (The vacancy rate in Northumberland is 0.5 per cent and average rent for a one-bedroom suite is \$900, plus utilities. Approximately 20 per cent of the county's population is 65 years or older).

Devlin, who is diabetic, heard about HomeShare from her nurse. Arato's adult children were concerned about their 78-year-old mother living alone and urged her to try a six-month trial at a retirement home. It wasn't to her liking and she yearned to be back in her own house.

Arato founded the Aphasia Institute in Toronto, a centre that provides support for people affected by aphasia (loss of language) as a result of a stroke/brain injury after her estranged husband was affected. She moved to Cobourg 20 years ago. Devlin has lived in the area for 40 years and worked as a word press operator and typesetter. The women, both divorced and with two grandchildren each, were matched by HomeShare co-ordinator Taylor Collicott after a five-step screening and application process.

"Cobourg and Port Hope are experiencing a housing crisis because of the low vacancy rate and with the cost of rents, there are people who can't afford to live in the community," Collicott says. Senior women lack affordable quality housing, she says.

"I really liked the idea of having someone in the house for safety and companionship," Arato says. "The program fit my needs. My family was very concerned about me being alone. I had to find a way to make them feel comfortable," she says.

"The most important thing for me was to be somewhere safe and be matched with someone who is easy to get along with," says Devlin, who will pay Arato \$400 a month in rent.

HomeShare programs have been running successfully in other parts of Canada and around the world. Both Northumberland and Halton have taken cues from a successful 35-year program in Vermont as they both look to match people with common routines, lifestyles and expectations. They also provide followup monitoring and support. While Northumberland's program is a two-year pilot, Halton's is a long-term initiative.

"Long-term care facilities used to be the go-to solution for seniors," says Daryl Kaytor of Halton Region Housing Services. However, long wait lists and high cost mean they are no longer accessible to most Canadians.

"Barring having new development — and there's nowhere left to build in this area — we need to be creative to keep seniors in their homes," Kaytor says.

"Housing (for seniors) is a huge issue, not only in our community but across Canada and globally," says Heather Thompson, co-chair of the housing committee of the Burlington Age Friendly Council and manager of Age-Friendly Initiatives, Community Development Halton.

In Burlington, 19.3 per cent of the population is older adults. Many still live in their homes and want to stay there. Thompson says most homeowners expressing interest in the program are older women living alone, along with some senior couples who want to stay in their home but need some assistance to do so. Home seekers have included a young couple who want to help an older person and save money for their own future home and some single men with handyman skills. Most interest is from women in their 50s or 60s who still have to work and may be widowed or separated and still feel they can do a lot and want to give back.

Collicott says in Northumberland, most home seekers are mature women.

Devlin and Arato moved in together in late June and are adjusting to life as roommates. As Arato had been away for six months at the retirement home, they have some organizing to do and will work on the backyard gardens. Arato is also planning to get a cat.

"We fit pretty well and haven't had a fight so far," Arato says. "There's a comfort level."

"I'll help Pat with whatever she needs and we will look out for each and make sure we take our medications," Devlin says. "Pat wanted someone to be around in the evening and overnight, and I'm home a lot at night. We have similar bedtimes and we're both flexible and adaptable."

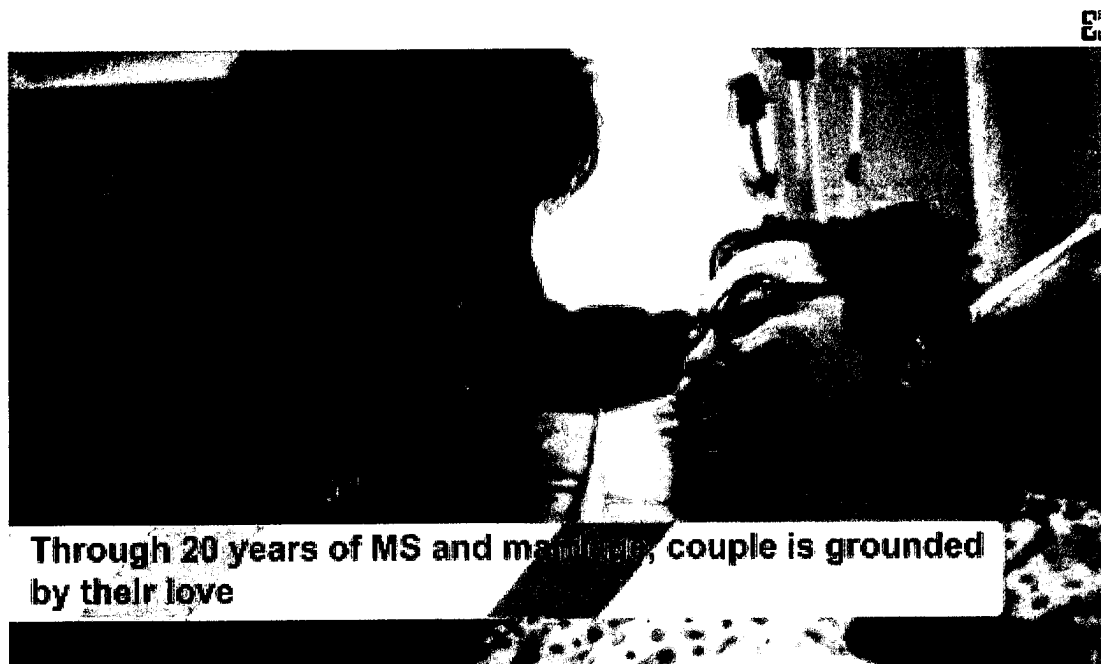
While the women will spend a lot of time in each other's company, they maintain their own circles of friends and much of the lives they had before. For example, Devlin will continue to care for her grandchildren on Mondays.



Each HomeShare agreement is unique, with the participants working out the terms, such as splitting grocery costs, preparing and eating meals together, what tasks the home sharer will do around the house and how many hours of help the homeowner will receive.

The Burlington Age-Friendly Council has created a HomeShare Toolkit for people to work through to determine if it's the right fit for them.

"It's good for many, but it's not for everyone," Thompson says. "It's nice for people to have different options to think about."



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