



Business challenge

As part of the UK's public health initiative to combat loneliness, NexJ Health Inc. and Call&Check Limited connected UK postal workers with isolated elderly citizens. The solution required a resilient virtual infrastructure.

Transformation

When NexJ Health, Call&Check Limited and the postal service in the UK received funding from the UK Home Office to create an outreach program to help isolated seniors, they had to overcome a few technological hurdles. Specifically, NexJ Health needed a dependable, security-rich local infrastructure upon which to launch the Call&Check program. IBM® Cloud™ helped provide that—and more.



William M. Tatham
 Founder &
 Executive Chair
 NexJ Health Inc.

Results

Supports data security requirements

including local data residency and data encryption

Offers seamless implementation

and can be up and running in hours, not days

Scales quickly

to support program growth

NexJ Health Inc.

A bold new service uses a digital platform to combat loneliness among seniors

NexJ Health is a provider of virtual care solutions that deliver patient engagement for chronic disease prevention and management. NexJ Health empowers patients, with the support of their families, friends and healthcare professionals, to actively participate in managing their own chronic conditions. By engaging patients through NexJ Connected Wellness, the company helps to achieve healthcare's quintuple aim: improve the patient experience, improve population health, lower the per capita cost of care, increase provider satisfaction and deliver business efficiency.

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—William M. Tatham, Founder & Executive Chair, NexJ Health Inc.

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Teaming up to tackle loneliness

In January 2018, Her Majesty's government commissioned a strategy to tackle loneliness in the UK. This strategy aims to build a more socially connected society in the context of our rapidly changing, increasingly digital world. It focuses on the role that government can play in combatting loneliness, as well as the role of individuals and communities to create strong and connected communities.

With this announcement, Her Majesty's government was acknowledging the growing evidence that loneliness can have a serious and devastating impact on public health.

Nowhere is this impact felt more than among the elderly population. Sadly, as people age, their social circles begin to dwindle, and many elderly people find themselves increasingly isolated as their health begins to deteriorate. Although many programs exist to bring seniors together, the more isolated among the senior population often don't hear about the programs or struggle to find transportation to them. For these valuable and vulnerable members of society, even a brief touchpoint with someone from the outside world can make a big difference.

The UK Minister of Loneliness is charged with connecting citizens with these programs, whether

through their physicians or other regular touchpoints in their lives. That's where the Call&Check program comes in. By partnering with the local postal service and Call&Check Limited, NexJ Health seeks to take advantage of an already existing infrastructure, an already familiar and trusted face and an already familiar uniform to help bring isolated seniors back into the arms of society.

"The IBM Cloud is a great support for NexJ Connected Wellness, helping to transform healthcare one postal worker at a time."

—William M. Tatham, Founder & Executive Chair, NexJ Health Inc.

NexJ Health Founder and Executive Chair William M. Tatham explains: "One of the strengths of this model is that postal workers are amongst the highest trust rating, especially if you're an older adult. Posties are typically very familiar to you. They already walk your street, already go to your doorstep and are already carrying digital terminals that they use for registered mail."

Empowering postal workers to check in on elderly customers twice a week seems like a natural progression and an ideal way to combat loneliness. And NexJ Connected

Wellness—NexJ Health's unique virtual care platform—is perfectly suited to this type of program. The software asks five basic questions about mood, medical concerns and social needs to assist wellbeing and the need for support. Answers are then used to connect older citizens back to their families, primary care physicians and other community resources. For Call&Check, the postal worker simply uses a handheld device to record the participants' responses, and Connected Wellness takes care of the rest.

However, creating an infrastructure that would satisfy the UK postal service's requirements and those of the UK health ministry proved to be a challenge.

A successful rollout

NexJ Health chose the IBM Cloud Infrastructure as a Service (IaaS) platform to support the inaugural Call&Check services, which the team rolled out on the Island of Jersey and in New Malden, Whitby and Liverpool as part of the Safe&Connected project funded by the UK government's Home Office department. The company provisioned a local stack on IBM Cloud in London to ensure local data residency in keeping with postal and healthcare requirements. Because the majority of NexJ Health's business runs on IBM Cloud, deploying the solution was straightforward. Says Tatham: "We were able to spin up our IBM Cloud

solution very quickly, with the ability to configure our runbook to be the same and in parallel to our Canadian deployments. Every single thing that it had to do, we could configure without changing our technology stack."

The only complexity, he says, was making sure that it met all the various regulations. This included General Data Protection Regulation (GDPR) in the EU along with privacy, security and management controls consistent with ISO 27001 requirements. The Tier IV IBM infrastructure also facilitated safeguards such as multiple firewalls, strong passwords and data encryption at rest and in transit.

In addition to the IaaS foundation, the solution features IBM Cloud Block Storage, which provides NexJ Health with flash-backed Internet Small Computer System Interface (iSCSI), transparent encryption and automated snapshots. IBM Cloud Object Storage, too, plays a key part by storing encrypted backups.

With all these security and resiliency measures in place, the solution's rollout was a resounding success. In New Malden, Whitby and Liverpool, where NexJ Health performed test trials, 93 percent of participants agreed or strongly agreed that they valued postal workers' visits and were satisfied with the program. The postal workers enjoyed knowing they were helping their fellow citizens, and the visits became a high point in the

week for the elderly participants. One remarked: “It was nice to know they were checking I was OK. I felt happier knowing they were there if something did happen.”

Tremendous potential

With the rapidly scalable IBM Cloud supporting it, the Call&Check program is well on its way to expanding both within the UK and beyond. NexJ Health currently has IBM Cloud instances in Canada, the US, the UK, Singapore and Australia. There are several different directions the program may take. Tatham explains: “There is a range of needs for the frail to live safe and independently at home. The Call&Check program on NexJ’s platform allows these disparate community services to be joined up as a seamless set of doorstep and virtual services. These innovative services cross over both health and social care in a person-centered model. The scale and spread of

these services across the Island of Jersey will serve as an exemplar for global application.”

The Call&Check concept has also had expressions of interest from around the world. In Toronto, where NexJ Health is based, Tatham says that approximately 30 percent of people in acute care are there for preventable reasons. He believes that a Call&Check or a similar program, along with a little help from IBM, may be able to help reduce that figure. “Allied with IBM’s larger cloud brain, we see this capturing action/ interaction responses and outcomes. The system prompts to ask different questions based on previous responses. Coupled with NexJ Health’s virtual care programs for chronic disease prevention and management, the solution has great potential to improve outcomes throughout the community,” he says.

Regardless of the direction the solution takes, with the IBM Cloud IaaS platform, Tatham and his team are confident that their infrastructure

needs will be met and look forward to continuing in lockstep with IBM Cloud. “The IBM Cloud is a great support for NexJ Connected Wellness, helping to transform healthcare one postal worker at a time,” Tatham concludes.

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Solution components

- IBM® Cloud™
- IBM Cloud Block Storage
- IBM Cloud Infrastructure as a Service
- IBM Cloud Object Storage

Take the next step

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