

## **TMT Interview: Gary German, President, Nonnatech**

*Editor's note: On March 16<sup>th</sup> and 17<sup>th</sup>, 2017, Telehealth and Medicine Today convened a national conference of opinion leaders to discuss and debate "Technologies and Tactics Transforming Long-term Care." What follows is an interview with Gary German, who is President of Nonnatech, a digital health solution leveraging machine for learning and remote patient monitoring to enable identification of patient deterioration at an early stage. Mr. German entered his Nonnatech experience in the Conference "Innovation Ignition Competition," and his work was recognized with the first place award.*

### ***TMT: Briefly tell us about Nonnatech.***

**Mr. German:** The Nonnatech team has expertise across the spectrum of healthcare delivery. We not only have hands-on clinical experience, but also have experience in IT, technology, operations, physician management, and health plans. This experience allows us to understand and anticipate the needs of our clients and build platforms that are solutions for "real world" issues.

Members of Nonnatech's team have had loved ones that were in and out of the emergency room (ER) due to infections, heart attacks, strokes, etc. Some returned home, but were unable to live independently and others had to move into higher levels of care (i.e., skilled nursing facilities). It's these experiences that inspire us with our work at Nonnatech. Our machine learning platform passively collects patient data from unobtrusive sensors and continually runs the data through our models that look for patterns predictive of an emergency room visit or hospitalization.

### ***TMT: What is the vision for your company?***

**Mr. German:** Our vision—and what we do—is to accurately predict when a patient has a health condition before symptoms appear in order to prevent hospitalizations, institutionalization, and death. To do this, we created new methods in monitoring patients and enabling earlier intervention. And this creates a pathway to more quickly

and accurately identify patterns predictive of a hospitalization to reduce unnecessary admissions to higher levels of care.

***TMT: In addition to providing clinical advantages in healthcare, what is the potential for fiscal savings for institutions?***

**Mr. German:** Quoting our Chief Medical Office, Dr. Robert Frank, “Nonnatech's platform has the potential to impact some of the most difficult and resistant parameters for which health systems, health plans, and providers are now being held financially accountable. We believe that Nonnatech will revolutionize the care of patients in settings we are currently unable to assess.”

The Nonnatech machine learning engine provides actionable insights to create a pathway to early intervention, improve health outcomes, cost containment, and a reduction in emergency room visits, hospitalizations, and admissions into higher levels of care. Nonnatech's solution can be used in acute, post-acute, and home settings.

***TMT: Is there a connection between nanotechnology and Nonnatech?***

**Mr. German:** We do not use nanotechnology. “Nonna” is Italian for “grandmother”. My grandmother was my inspiration for the company (although I call her “babushka”). But my wife is Italian, and that's the inspiration for the name.

***TMT: What is the niche that the Nonnatech platform fills in telehealth?***

**Mr. German:** Without Nonnatech, caregivers struggle to effectively monitor patients and residents. This results in the wasteful use of valuable resources in trying to keep these people out of the hospital and living in their own familiar environment longer. Examples include using technologies that focus on when an emergency event has already occurred (instead of prevention or early intervention) using only hard coded rules that are required to be manually created for each patient.

Clinicians currently rely on self-reported data from the patient or from a caregiver, which many times is inputted incorrectly. Many of these solutions require patients to use

uncomfortable wearable sensors and additional invasive methods in order to gather patient data. In fact, the compliance rate is in the teens with these methods in addition to being unsuccessful in reducing hospitalizations. However, with Nonnatech, there is a nearly 90% participation rate among users.

Not only does Nonnatech provide enhanced and extended monitoring, it allows for a direct impact on the cost and quality of care at a point that is now the most costly “blind spot” in healthcare delivery.

***TMT: Please discuss, in greater detail, an example of the significance of these benefits.***

**Mr. German:** The use of the Nonnatech platform has demonstrated improved health outcomes and overall cost savings. Nonnatech has data showing that elderly and chronically ill participants using our technology experienced the following:

- 35% fewer ER visits
- Nonnatech provided a 10x return on investment, with an average savings of over \$600 per patient per month.

Included among 100 participants were with 2+ chronic conditions, mild cognitive impairment, dementia, or Alzheimer’s, 2+ emergency department visits within a 12-month period. The majority were ages 60 to 80 years.

Pilots were done or are ongoing with a Senior Living Community in Westchester County, New York. Other examples include SmartAmerica and the Pilot Health Tech NYC winner.

Nonnatech was the only remote patient monitoring platform chosen to participate on the SmartAmerica Closed Loop HealthCare Team,<sup>1</sup> which was launched by the White House Presidential Innovation Fellow and NIST (National Institute of Standards and Technology).

In addition, as a Pilot Health Tech NYC winner, Nonnatech was awarded \$100k and approved for a \$250k budget to partner with a Health Plan and Senior Living Provider.<sup>2</sup>

Additional participants included home care patients and those discharged from rehab facilities. In each case, the goal is to help older adults and those with chronic health conditions stay in their current living environment for as long as possible. And this is accomplished through non-invasive monitoring without undermining their dignity and privacy.



*Gary German is passionate about helping people with functional impairments and persons with disabilities from the time he began volunteering in nursing homes while attending the Bronx High School of Science. Mr. German graduated from the State University of New York at Albany and entered the world of finance. He has also been involved in several healthcare businesses from home health care to senior housing, as his passion for healthcare and helping older adults never diminished. Several years ago, Mr. German became more involved in the care of his grandmother (babushka) when she suffered a stroke. He used his experience to found Nonnatech. He participated as a member of the SmartAmerica Closed Loop HealthCare team launched by the White House Presidential Innovation Fellows and the National Institute of Standards and Technology. The team demonstrated how data can move seamlessly from home to ambulance to hospital and back home, producing overall cost savings and improved health outcomes.*

## **References**

1. Smart America. Closed loop healthcare. 2014. URL: <http://smartamerica.org/teams/closed-loop-healthcare/>.
2. Baum S. Which early stage IT companies won Pilot Health Tech NYC? MedCity News. 2014. URL: <http://medcitynews.com/2014/07/developers-smartphone-eye-exam-predictive-analytics-blood-donors-will-collaborate-hospitals/>.

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Tags: cost savings, emergency room, Gary German, health outcomes, healthcare delivery, Nonnatech, senior living community