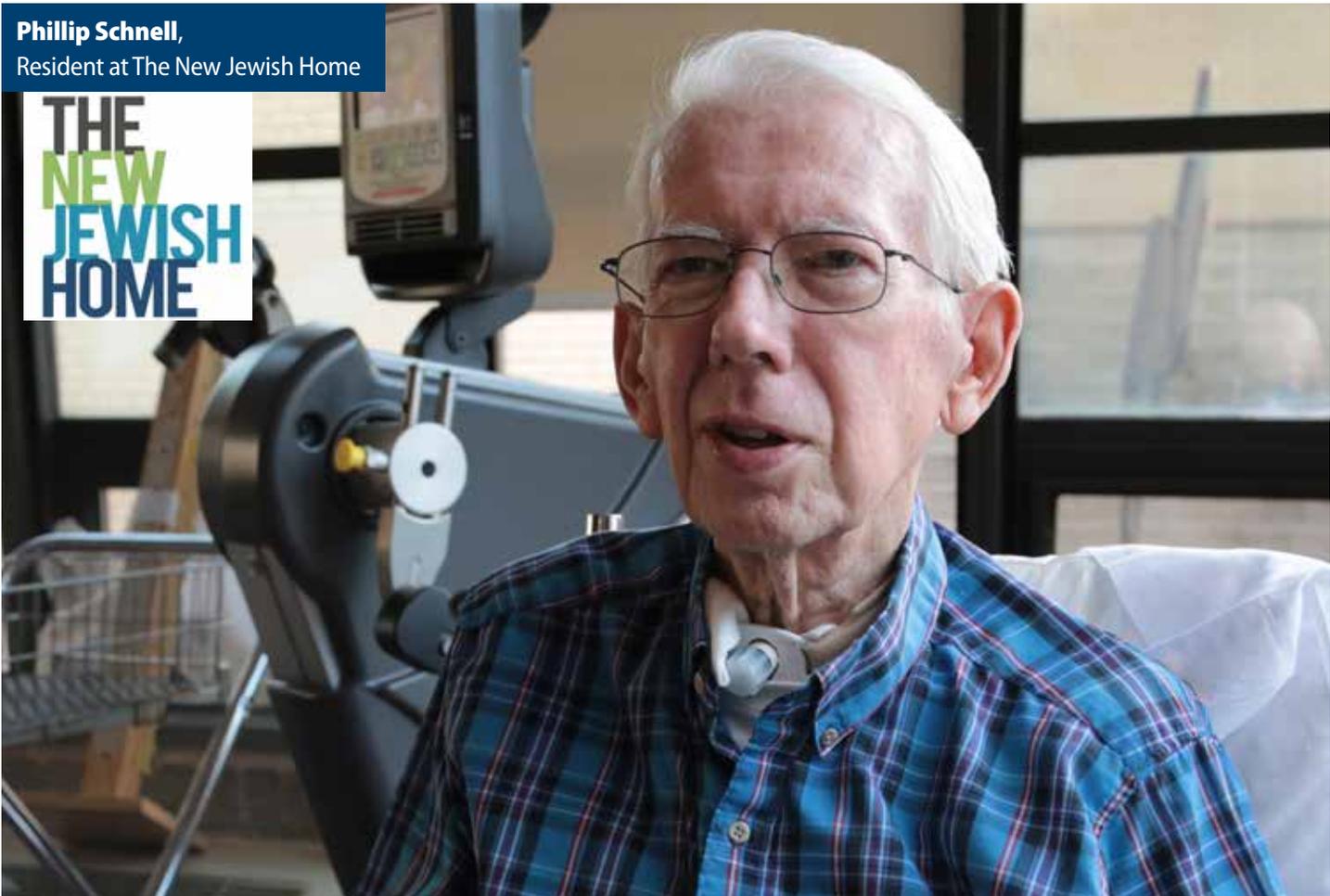


Phillip Schnell,
Resident at The New Jewish Home



JINTRONIX

**ENGAGING RESIDENTS & EXPANDING THERAPY
TO ACHIEVE A REDUCTION IN READMISSION**





Regina Melly, Main Contributor
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ABOUT THE NEW JEWISH HOME

With more than 160 years of experience as a not-for-profit rehabilitation provider based in New York City, The New Jewish Home (TNJH) strives to deliver innovative new approaches to elder care.

Its network provides a broad spectrum of post-acute and long term care at three campuses as well as home care.

TNJH features two specialty rehab centers:

- » The Cardiac Rehabilitation Center, affiliated with NYU Langone Medical Center.
- » The Center for Advanced Rehabilitation Medicine, affiliated with Mount Sinai Hospital.

Both **NYU Langone** and **Mount Sinai Hospital** are under the **CCMI** pilot bundle program for **Orthopedic and Cardiac conditions**, and are seeking interventions to reduce rate of readmission.

PROJECT DESCRIPTION

Between October and December 2015, TNJH implemented Jintronix, in their Manhattan campus' Orthopedic and Cardiac rehab floors.

Jintronix therapy-focused games were incorporated into patients' rehab program in two ways:

- » During regular therapy sessions with their PT/OT, and
- » Outside regular therapy time, with the help of an aide

The objective in implementing Jintronix was to improve ROI by reducing the rate of readmission under the bundled payment programs, by providing more hours of intensive therapeutic exercise during the patient stay in a cost-efficient way.



JINTRONIX

HOW JINTRONIX WORKS



Phillip Schnell, TNJH resident, is playing a foot-eye coordination game. The game provides audio and visual feedback to kick a football right or left. As Phillip kicks, his movement is recognized by the sensor, measuring his accuracy and progress.

Jintronix is a kiosk that includes a TV screen, a computer, and an optical motion-tracking sensor called the Microsoft Kinect.

Patients engage with Jintronix through therapy-focused games and coach-guided exercises, which provide interactive feedback and challenge patients to achieve therapeutic objectives.

Each patient's rehab program is customized and prescribed by their therapist according to the patient's unique profile. Patients can engage with Jintronix during regular therapy hours, as well as at any time, either independently or with the help of an aide. As patients play, Jintronix monitors their physical movement, and collects objective outcomes data.





Peter Kaufman, TNJH resident,
posing with his Jintronix progress report

“When I go home, I have to climb up five flights of stairs, it’s going to be one step at a time, but it’s going to get done.”

Peter

TNJH used two Jintronix kiosks on the Cardiac and Orthopedic therapy floors.

- » The facility provided staff training, and assembled an interdisciplinary team to oversee the project.
- » Staff met weekly to review compliance, identify and resolve challenges, and share best practices. They also solicited feedback from all staff, and nurtured champions informally.

Patients were referred to Jintronix at admission on the basis of relevant diagnosis (Orthopedic, Cardiac and Stroke).

- » An evaluating therapist then assessed each patient to determine eligibility. Patients with low English-speaking skill, low cognitive skill, or visual impairment were excluded from the study.
- » For all other patients, Jintronix was included in their plan of care.

In total, 139 patients were recruited to use Jintronix.

- » Of these, 58 had orthopedic conditions (hip, knee, or shoulder) and 36 had cardiac conditions.
- » During scheduled rehab hours, patients used Jintronix as one of the modalities with their therapist.
- » Outside of scheduled rehab hours, patients spent additional time engaging with Jintronix with the help of an aide.
- » On a regular basis, patient outcomes data, automatically measured by Jintronix, was reviewed by therapists, and exercise programs were adjusted according to the patients’ level of function.



Kathleen Dublirer, TNJH resident, in conversation with **Mark Evin**, Co-Founder and CEO of Jintronix

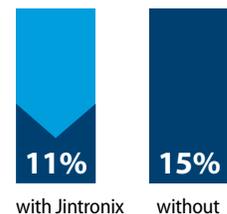
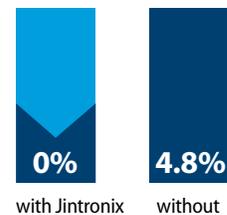
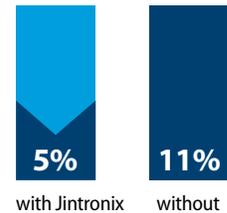
“ Taking what is otherwise boring rehab and putting a twist on it so it’s not boring anymore is wonderful. From the point of view of somebody in rehab, let me tell you, it’s very diverting to have this kind of challenge. I’m very pleased. ”

Kathleen

OUTCOMES

- » The rate of readmission for the total of 139 patients who used Jintronix was reduced to 5%, compared to a rate of 11% for patients who met the same inclusion criteria but did not use Jintronix between Jan-Sept 2015.
- » The rate of readmission for the 58 patients with orthopedic conditions was reduced to 0%, compared to a rate of 4.8% for patients who met the same inclusion criteria but did not use Jintronix between Jan-Sept 2015.
- » The rate of readmission for the 36 patients with cardiac conditions was reduced to 11%, compared to a rate of 15% for patients with who met the same inclusion criteria but did not use Jintronix between Jan-Sept 2015.

READMISSION RATES



CHALLENGES AND PITFALLS TO AVOID

Two important challenges were staff training and patient recruitment.

Training

- » Initial training was provided by Jintronix staff, however it is critical for each organization to develop internal training capacity. Since staff turnover is common, frequent retraining and demonstration was needed.
- » Leveraging informal champions was an effective way to maintain staff engagement.

Patient Recruitment

- » Patient adherence and motivation increased when patients were introduced to the technology by a trusted clinical source, and the intervention was integrated directly into their plan of care.
- » Patients tended to be less eager to participate when the technology was introduced to them by non-clinical staff, away from the therapy floor.



» *As an early adopter of Jintronix, TNJH committed itself to iterating and adapting at an organizational level in order to leverage the value of the new technology. Along the way, the facility learned valuable lessons:*



Stacey Lefkowitz, Jintronix champion, supporting **Peter Kaufman**, as he plays a sit-to-stand exercise.

Identify and nurture champions

- » Therapists were encouraged but not obligated to use Jintronix with patients.
- » Voluntary participation created positive feelings around the project.
- » Several therapists emerged in the early stages as champions, learning as much as they could about the technology, and sharing their knowledge with others.
- » One champion was formally recognized as the “point person”. She was invited to join project meetings, and was allotted one hour per day to provide support to other therapy staff, as well as to review patient outcomes and customize their rehab programs.

Create a clear pathway to care

- » Organizations must establish a clear process to ensure that each patient who may benefit from Jintronix is given access to the technology.
- » At TNJH, patients were first referred to Jintronix during the admission process on the basis of relevant diagnosis. The evaluating therapist then assessed patient suitability based on the acceptance criteria (English language and cognitive skill).
- » Jintronix was added the plan of care for patients that met the criteria, and they were given an information sheet on the technology.
- » Compliance and patient engagement could be further improved by formalizing the integration through a “contract of accountability”, committing the patient to use the technology outside of regular therapy hours at least three times per week.

Remain flexible and focused

Weekly calls that included staff drawn from across the organization, helped identify barriers and opportunities. For example, the referral process was done at admission. Some patients, particularly those with CVA diagnosis were excluded at admission due to low levels of function, but became suitable candidates for Jintronix as their function improved. In these cases, cross-organizational communication and flexibility were critical to facilitate a patient benefiting from the intervention.

**TO SEE A VIDEO OF THE JINTRONIX PROJECT AT TNJH VISIT
JINTRONIX.COM OR CONTACT INFO@JINTRONIX.COM**