

AI Nurse evolving for heart failure patients in China

Improved versions of our new digital platform for heart failure disease management in China have been developed since April, 2020 rollout.

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Dozens of improved versions of our new digital platform for heart failure disease management in China have been developed since roll-out a few months ago.

Why? Because the digital product team in Novartis China has quickly learned from user feedback – evolved its approach to Health Care Professionals (HCPs) - and rapidly developed product enhancements.

Realizing the onboarding experience for patients was too complicated in a busy hospital environment – and patients were struggling to manage their condition in lockdown during the COVID-19 pandemic, the AI Nurse product team made it easier to start a patient on the platform, incorporated COVID-19 risk mitigation, and boosted training support for doctors and nurses.

AI Nurse is one of the Novartis global digital ‘bold move’ projects, developed through the strategic partnership of Novartis and Tencent, once of the world’s largest internet companies.

“I don’t think Tencent had ever had to develop so many iterations of a new product before,” said **Christian Hein, Novartis Executive Director, Digital Products**, “but this digital AI Nurse team has been the perfect example of an agile digital team in action – trying, learning and changing course as needed.”

“They’ve followed the number one rule of any start-up – listen to your customers – and make it as easy as possible to use a new product you’ve developed.”



The healthcare challenge

AI Nurse is an AI-enabled disease management tool, created to tackle a vast healthcare challenge:

- China has 13.5 million patients with heart failure
- Heart disease is the leading cause of death – 2 out of every 3 deaths
- An aging population means morbidity and mortality are increasing
- With no established primary care structure, prescription adherence is poor once patients leave hospital. Many patients are re-hospitalized several times within a year.

The digital solution



The AI Nurse digital health platform was developed for physicians and patients to better manage heart failure, improve prognosis and reduce hospitalization.

Since official rollout began in July, 300+ China's leading hospitals in over 100 cities have started to embed the digital solution in standard discharge protocol, with over 25 000 patients recruited. AI Nurse helps patients track their health at home on a daily basis, and interact with their hospital-based HCPs.

However, there were challenges with the initial roll-out:

- In-hospital patient recruitment was hit by COVID-19. With many regions in lockdown, fewer heart failure patients were going to hospital.
- The onboarding process - involving simultaneous doctor, nurse and patient involvement - proved too complex in a busy hospital environment.
- The novelty of the approach – a disease management platform for elderly patients – needed more explaining than envisaged

Fast course correction

To meet the recruitment challenges, the AI Nurse team:

- Made it far easier to onboard the patient – reducing the time needed from ~25mins to ~3.5mins
- Accelerated the hospital rollout speed from previously planned 50 hospitals per month to 200+ hospitals in the 1st month to expand access
- Developed 'AI Nurse Lite' – a faster, less complex patient onboarding system for outpatients
- Provided in-hospital training sessions for doctors and nurses, including role play, plus virtual technical support

The AI Nurse team also acted quickly to remodel the platform for COVID-19. AI Nurse was given a 'pandemic make-over' to enable patients to better manage their heart failure under lockdown. Basic facts on COVID-19

were embedded, as was a quick guide to self-detection and up-to-date guidance on mitigating virus risk.

Now the team is busy developing a self-service enrolment version – for patients to enroll themselves online.

“This was a first for us,” said Stella Ji, Head of Business Transformation Enabler & Digital, Novartis China. “Through the collaboration with the Beijing Society of Cardiology, the whole healthcare ecosystem was activated - from top national KOLs, to hospital heads, then department heads, then physicians, and finally, nurses, who are in charge of patient recruitment.”

“Part of the success comes from delivering different value propositions to each HCP type – understanding their pain points and showing how AI Nurse would help. We’re not only introducing a new digital platform but a whole new process – a new way of benefiting patients.”

To find out more about our digital strategy, [click here](#).

Related story

[AI Nurse set to transform standards of care for heart failure patients in China](#)

Read about Novartis’s AI Nurse digital health platform, developed for physicians and patients to better manage heart failure.

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