

# Hospitals may harness AI to deal with nurse shortage

By **Beatriz Marie D. Cruz**  
Reporter

TAIPEI — Artificial intelligence (AI) could help hospitals manage the shortage of nurses in the Philippines, a hospital industry executive said.

“Temporarily, that may be one of the solutions for the lack of nurses. (If) you don’t have night staff to provide information, for instance, you can use AI,” Jose Rene D. de Grano, president of the Private Hospitals Association of the Philippines, Inc., told *BusinessWorld* on the sidelines of the Healthcare+ Expo in Taipei.

Mr. De Grano said he toured a hospital in Taiwan with one nurse

attending to up to 20 patients, who usually require nurse staffing of three to five, with the help of AI.

Possible AI applications include answering inquiries and dispensing medication, he said. The real-time monitoring of multiple patients can also be performed with the aid of Radio Frequency Identification systems.

At the Expo, ASUSTek Computer, Inc. (ASUSTek) demonstrated its health tracker watch, known as VivoWatch, which it plans to distribute more extensively across global markets next year as a tool to help healthcare professionals track patient activity and make diagnoses, according to ASUSTek Associate Vice-

President for Product Marketing Pei-Wen Hsu.

“Before, when you go to the doctors, doctors always ask you, oh, do you sleep well? Did you take medicine? But if you have this data that can connect through the cloud, the doctor can check the data and to compare it to the chart at the hospital,” Ms. Hsu told *BusinessWorld*, also on the sidelines of the expo.

The new VivoWatch integrates electrocardiogram (ECG) sensors to help diagnose certain heart conditions, as well as Photoplethysmography (PPG), which detects blood volume changes.

ASUSTek is also promoting its speech recognition transcrip-

tion application, Agility, to help healthcare professionals record checkups with patients faster.

“For example, I’m the patient and the doctor has a question for me. The speech recognition function can record what I’m saying,” Ms. Hsu said.

Citing the Taiwan government’s New Southbound Policy, ASUSTek is considering future market expansion in the Philippines, according to Ms. Hsu.

## NURSE MIGRATION

Philippine hospitals have now fully accepted the inevitability of nurse migration, Mr. De Grano said.

“That is the thinking of the new generation of nurses... they still want to go out,” he said in

Filipino. “We’re not against that because it will improve our economy... and the quality of life of our nurses.”

Jose P. Santiago, Jr., incoming president of the Philippine Hospital Association, said nurses are also attracted to countries with strong education systems for the sake of their children.

“I have interviewed several nurses, mostly single mothers... they want to leave because they want to provide a better education to their kids. They also consider their families when they migrate,” he told *BusinessWorld* separately.

Mr. Santiago said that a healthy working environment, subsidized post-graduate schooling, competitive salary, incentives, and

training could help nurses stay in the Philippines.

Mr. De Grano noted that Cambridge-based Occupational English Test is set to conduct free English proficiency training in hospitals and medical schools especially for nurses who want to work in the United Kingdom.

“We agreed... we’ll (pursue such arrangements) in order to persuade our nurses to stay a while before they leave the country,” he said.

The Commission on Higher Education last year lifted the moratorium on universities and colleges seeking to open new nursing programs.

“We’re now really looking forward for better supply of nurses,” Mr. Santiago said.

## OPINION

# Dealing with Monday and Friday sick leaves

**I have a long-time worker who is notorious for filing for sick leave on Fridays, Mondays, and the day before or after holidays. I consulted our human resources (HR) manager who advised me to ignore such minor issues. But we have important work to do and can’t afford emergency absences in our understaffed department. What can we do? — Blue Mountain.**

I have encountered two such problem employees in companies I worked for, except that they were motivated for the wrong reasons. I suspect they were also trying to test my patience. In Company A, we were in charge of publishing a two-page weekly newsletter which needed to come out early Monday. The mandate was clear.

The newsletter had to be put together no matter what, even to the extent of working weekends. No ifs, no buts. When I moved to Company B, I was assigned a much more difficult task — to

publish a biweekly eight-page newsletter that must also come out Mondays.

This task came on top of everything else that was assigned to me. I handled labor relations, managed employee discipline, did public relations work, coordinated with the labor union, organized sports and socials, handled corporate social responsibility, managed employee benefits, and many others.

In publishing the newsletters, we did research, conducted interviews, took photographs, wrote and edited the content, laid out the articles, and coordinated with the printer. Unfortunately, the burden was not shared by my two publication assistants in companies A and B.

Or at least, that’s how I felt at the time. They resorted to emergency leaves and sick leaves for dubious reasons, most of the time without informing me directly and instead relaying the message through our department secretaries.

This was when mobile phones were not yet in wide use. When deadlines

approached, my work schedule was thrown into disarray. I also had to work during weekends without extra pay because I was salaried.

## FIVE OPTIONS

I communicated this problem to my bosses, whose advice was similar to the position taken by your HR manager: grin and bear it. Somehow, I managed the situation by spending long hours at work, in the process proving that I could do it without their assistance. I turned the tables by outsourcing the task to on-call writers, cartoonists and layout artists, even spending my own money to do so.

It was all worth it. My assistants started to feel insecure about their jobs.

I’m not sure if such a solution works for you. Our situations may vary and require different approaches. If that’s the case, let me share with you the following options:

**One, establish a pattern of emergency leaves.** “Emergency leaves” mean any absence from work without prior management approval. This includes any situation like a broken-down vehicle of an employee, fire in the neighborhood, assisting a family member who

is hospitalized — in other words, events that are difficult to predict, including illnesses that require sick leave.

The challenge is to determine the reasonableness of these leaves in a given year.

**Two, calculate the damage or losses.** This includes the amount of overtime pay for other employees who are required to pitch in, professional fees of subcontractors and other related expenses, like the use of utilities (electricity, etc.) in the office. That’s not all. You may have to include other non-quantifiable expenses or any amount that you are forced to absorb.

**Three, engage a physician to do house calls.** The doctor may be assigned by a Health Maintenance Organization (HMO). This face-to-face visit could pose additional cost for the organization and can only be used sparingly depending on the situation or the employee’s notoriety. If medically feasible, “arrange” with the HMO to bring a sick worker to a hospital to deliver a message.

**Four, connect habitual sick leaves with the medical exam.** Include a provision in the HMO contract giving the latter the right to conduct physical

check-ups on those accumulating excessive sick leaves. This may discourage people from calling in sick if they know that the HMO will conduct a mandatory check-up and withhold medical benefits to those who refuse.

**Last, conduct regular engagement dialogues.** Maintaining open communication is very important. However, you must come prepared with data on the frequency of the worker’s emergency leaves and how they are adversely affecting company operations. Explain the issue and secure a commitment from the concerned employee.

If the problem persists, disallow the “emergency” or “sick” leave as a last resort. If you’ve reached this stage, monitor the employee’s reaction and prepare for a more difficult situation. When you do this, be honest with yourself. Who knows? You might be part of the problem.

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FATF,  
from SI/1

“(The incident) makes the (FATF) more demanding. They’re scrutinizing the terrorist financing. The bombing implies there was some terrorist financing,” he said.

“But the other side of the story is, the bombing was in retaliation for us being more strict on terrorist financing. We can

argue that that shows we’re trying harder, but we don’t know how they will see it,” he added.

A deadly blast killed four people during a Catholic mass at a gymnasium in the Mindanao State University campus in Marawi City on Dec. 3. — **Keisha B. Ta-asan**

Unemployment,  
from SI/1

This brought the labor force participation rate (LFPR) — the share of the Filipino workforce to the total working age population of 15 years old and older — to 63.9% in October. This was lower than 64.1% in the same month last year.

For the January-to-October period, the average LFPR stood at 64.6% which is higher than the records for the previous years, PSA Undersecretary and National Statistician Claire Dennis S. Mapa said at a news briefing.

The employment rate climbed to 95.8% in October, which the PSA said was the highest rate since April 2005 and the same rate in November 2022. This meant 47.8 million Filipinos aged 15 and older had jobs, higher than 47.06 million in October 2022.

On average, an employed Filipino worked 41.2 hours a week in October, higher than the 40.2 hours logged in the same month in 2022.

Antonio A. Ligon, a business and law professor at De La Salle University in Manila, said the jobless rate dropped in October amid higher demand for workers from labor-intensive industries and the government’s infrastructure projects.

“There is high demand for skilled and construction workers nowadays,” he said via Facebook Messenger.

Sonny A. Africa, executive director of think tank Ibon Foundation, said the unemployment figures may be underestimated since only those actively seeking employment in the past six months and ready to immediately take up work are considered part of the labor force.

“Over the last year-and-a-half from March 2022 to October 2023, the labor force stayed stagnant at a little less than 50 million despite the working age population growing by 1.8 million or a 2.3% increase to 78 million. This is likely from so many jobless being dropped from the labor force and no longer counted as unemployed by official statistics,” he said in a Facebook Messenger chat.

PSA data showed the number of Filipinos classified as “not in the labor force” increased to 28.1 million in October, higher than 27.6 million in the same month a year ago.

“Job creation is weak. Moreover, jobs available are evidently of poor quality. One indicator of this is that poverty is increasing. Another indicator is the irregularity of work as shown by extreme volatility in net employment creation on a month-to-month basis,” Mr. Africa said.

PSA data showed the services sector employed 47.8 million, accounting for 60.1% of the total. Agriculture and industry sectors made up 22.2% and 17.8% of employed persons, respectively.

Year on year, employment rose significantly in accommodation and food service activities (up by 291,000), administrative and support (up by 224,000), and transportation and storage (up by 149,000).

However, employment declined in wholesale and retail trade and repair of motor vehicles and motorcycles (down by 193,000), mining and quarrying (down by 75,000), and manufacturing (down by 73,000).

PSA data showed agriculture and forestry industry saw a 1.09 million increase in employment at the start of the fourth quarter in October from the start of the third quarter in July.

PSA’s Mr. Mapa said the agricultural sector helped boost employment in the Davao Region which holds the highest regional employment rate of 97.1%, and in Bangsamoro Region which holds the highest regional LFPR of 74%.

However, Roehlano M. Briones, a senior research fellow at the Philippine Institute for Development Studies, said agricultural jobs typically increase in October as harvest season begins in some regions.

“October marks the start of the harvest season for key crops such as rice, the planting season for maize, and rice in some areas,” he said in a Viber message.

# Daikin and Mandaue City ink landmark deal for energy efficiency

by **Kara Santos**

Daikin Airconditioning Philippines Inc. and the City of Mandaue forged a strategic partnership to boost technology cooperation for sustainable urban development and energy efficiency. The two parties signed a Memorandum of Understanding (MOU) at the Technology and Innovation Center (TIC) at Daikin’s Yodogawa Plant in Osaka, Japan on November 16, 2023.

Daikin Airconditioning Philippines, a subsidiary of Daikin Industries, Ltd., the world’s largest air conditioning manufacturer headquartered in Osaka, will support the City of Mandaue with its Green Building Ordinance to ensure it retains its investment location potential.

Mandaue Mayor Jonas Cortes stressed how the partnership with the technology leader in the HVAC industry signifies a commitment to meet global standards and build a better urban landscape.

“At the heart of our collaboration lies an unwavering commitment to tackle the hurdles posed by the swift urban growth in our beloved city of Mandaue. We are diving into challenges like traffic management, waste control, environmental protection, and flood resiliency head-on. Daikin Philippines Inc., with its cutting-edge air conditioning solutions and strong devotion to energy efficiency, becomes an invaluable partner in our quest for a city that’s not just livable but sustainable,” said Cortes, speaking remotely from Mandaue City.

Daikin Airconditioning Philippines President Takayoshi Miki likewise praised the local government for taking steps to lower their carbon footprint during the event.

“Last year we had a meeting in your office where we learned of your pride and passion in attaining sustainability and efficiency in your city. We are lucky to find such good partners who are purposely driving to achieve progress for the City of Mandaue,” said Miki.

Present at the signing ceremony were Philippines Green Building Council (PHILGBC) Chief Executive Officer Christopher Dela Cruz, Mandaue City Councilor Jennifer del Mar, and Daikin Industries General Manager of Global Operations Division Junichi Ohmori.

The MOU signing was also witnessed by representatives from PHILGBC, Daikin Philippines, officials of Mandaue City, and select media representatives, who were given a background on the Japanese multinational conglomerate’s history and updates on the latest technological advancements in the field of air conditioning.

**Inside the Technology and Innovation Center (TIC)** Delegates were given a first-hand tour of the award-winning Technology and Innovation Center (TIC) in Daikin’s Yodogawa Manufacturing Plant Complex, in Settsu City in Osaka.

The core facility provides a venue for showcasing advancements in environmental technologies since Daikin was first established in 1924 that can be used as models for energy efficiency around the world.

The research and development center is the first large-scale office building in Japan to achieve the highest rank of Platinum Certification in the LEED (Leadership in Energy and Environmental Design) for New Construction (LEED-NC) rating system.

Developed and managed by the U.S. Green Building Council (USGBC), LEED is a green building certification system that has expanded globally as an evaluation system for environmentally responsible buildings and area development.

The six-floor building covering 49,000 m<sup>2</sup> of floor space was designed using Japan’s Zero Energy Building (ZEB) concept, utilizing tech and design features to reduce energy consumption while maintaining indoor temperature comfort.

In a tour of the facility, officials showed how Daikin’s exterior walls incorporate eaves that serve both an aesthetic and useful function by shielding 50% of direct sunlight, resulting in fewer shadows while still bringing in the natural light. The building also makes use of a centralized controller to control electric blinds and high-performance Low E double glass for thermal insulation to limit the building’s air conditioning load.

The large open-type office area makes use of a combination of VRV (or Variable Refrigerant Volume systems based on Inverter technology compressors developed by Daikin) and DESICA (which uses a heat pump to absorb and release moisture into the air) to process sensible and latent heat separately. The advanced models ensure ultra-high air-conditioning efficiency. The building also makes use of mechanical ventilation and outdoor air to help cool the air conditioning units.

The airy entrance hall has a unique air conditioning system that harnesses natural energy and infuses seasonal scents which are distributed through the ventilation system to provide a comfortable working area while saving energy.



Meanwhile, Daikin’s rooftop facility harnesses renewable energy through the use of fixed solar panels all around the building along with solar trackers which are programmed to move and face the sun throughout the day.

**Fostering collaborative innovation** Another highlight of the TIC tour was seeing the evolution of air conditioning systems from the past nine decades in the Daikin Discovery Hall and the laboratories and offices where engineers continue to develop new technologies for the future.

Considering the prevalent practice in Philippine offices featuring enclosed cubicles and conference rooms, it was notable how the shared office spaces in Daikin were designed to break down barriers among engineers and encourage joint efforts.

Experts in different fields work in an open office design with just a few glass walls to accelerate synergy and teamwork within the company. Everyone can see colleagues within a 30-meter radius and multiple meeting points in between desks provide venues for discussions.

At the center of the office space is the “Waigaya Stage” which enables meetings to be easily held across divisions. Nine hundred individuals can gather in a single space to promote a culture of collaboration.

Daikin also promotes collaboration among colleagues by installing vending machines that require simultaneous operation by two individuals to encourage them to discuss ideas together.

**Simple solutions for energy efficiency** In a media briefing, Daikin officials noted that global energy consumption due to air conditioning has risen sharply due to COVID-19.

In the Philippines, basic needs, like electricity are rapidly becoming more expensive for consumers and commercial operators, while climate change is causing temperature levels to rise.

Daikin officials also cited the “excessive cooling culture” in the ASEAN region as a major challenge. AC temperatures are normally set low in offices, at roughly 23 degrees, with workers wearing jackets and feeling chilly.

Replacing normal ventilation with Daikin’s energy recovery ventilation can reduce the load of heat and humidity from outside air, making indoor temperature comfortable even at 26 degrees, leading to energy savings and comfort.

Responding to *BusinessWorld*, Deputy Division Manager of Daikin Philippines Wesley Andre Chu explained that Daikin developed a “cooling-only VRV model” specific for tropical countries like the Philippines that doesn’t require heating.

While the VRV model that makes use of an inverter technology, which does not only control the cooling but also the humidity, is not yet popular in the Philippines, Daikin hopes to make it more widely known.

Chu stressed how the partnership aims to increase awareness regarding the latest trends and technologies in air conditioning, ventilation, energy efficiency, indoor air quality, and environment protection that are already available and can be used to reduce energy consumption in offices, residential, and commercial areas in the future given the economic expansion and potential growth of the area.

Citing a recent study, a representative from Mandaue noted that the heat index in the city has increased by 2% and they are considering Daikin’s new technology for a planned new government center in Mandaue, which they hope to turn into a green building.

Just like the art piece outside the Daikin Discovery Hall made from parts of an air conditioner, that reflects a shadow of a running man, Daikin’s efforts reflect the company’s collaborative goal for energy efficiency. The partnership forged by Daikin and the City of Mandaue is another leap forward in the journey toward sustainable urban growth.

Learn more about Daikin at [www.daikin.com.ph](http://www.daikin.com.ph).