

智慧醫院 醫院的數位轉型

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戰爭 也要數位轉型

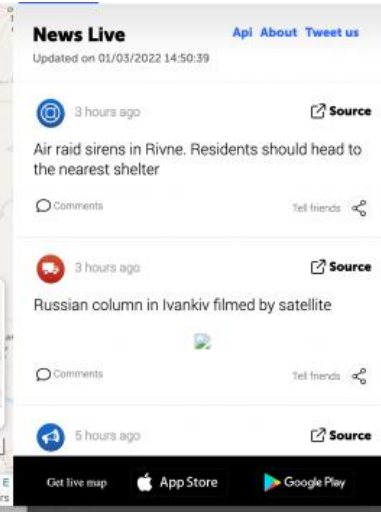
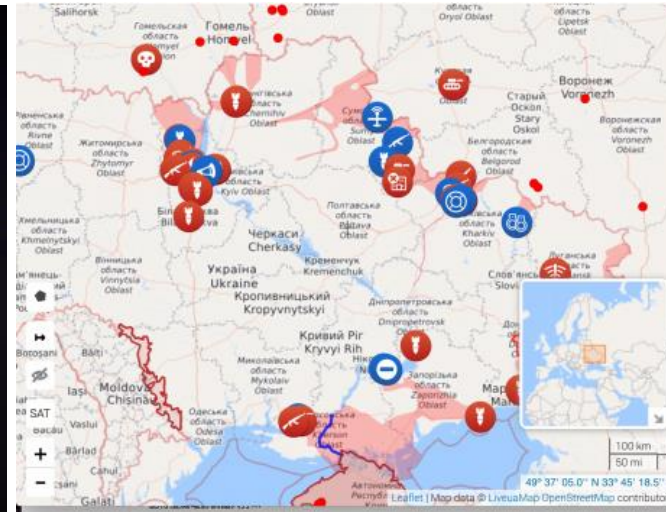
國際知名駭客組織「匿名者Anonymous」表示他們「正式與俄國政府打網路戰」

馬斯克的「星鏈」正協助烏克蘭軍隊贏得無人機之戰

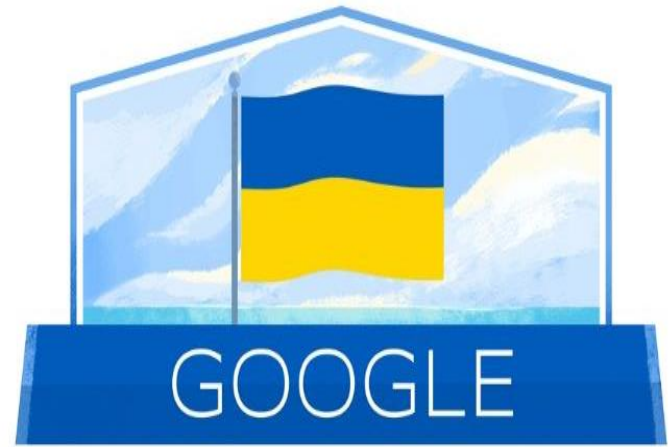
烏克蘭已收到超過9萬6000項捐贈的加密貨幣(價值4670萬美元)



烏克蘭數位轉型部長Mykhailo Fedorov: 科技才是打敗坦克的最佳解決方案



Live Universal Awareness Map



Android將內建空襲警報推送功能

Smart City

WORK

健康職業場域

1. 遠距健康諮詢
2. 員工健康管理
3. 增值個人化健康計畫
4. H2U健康銀行+

COMMUNITY

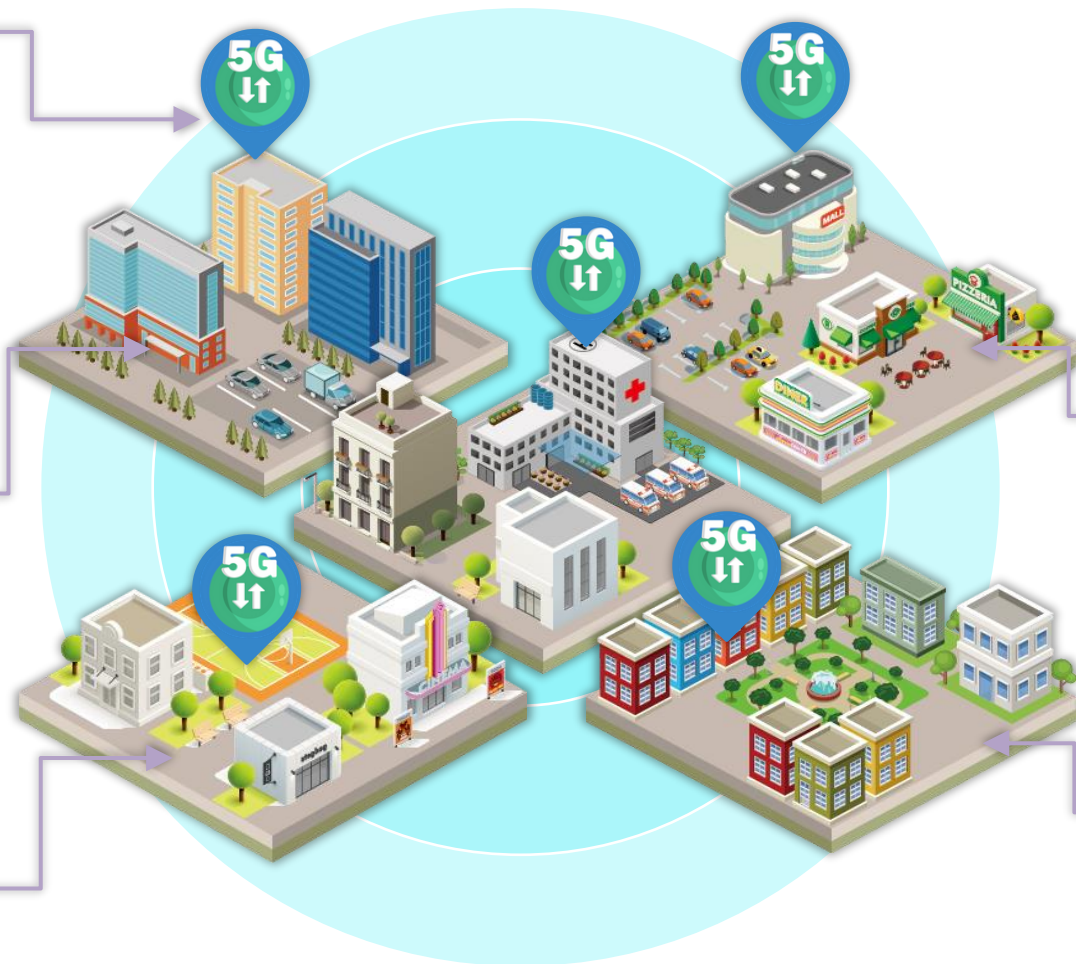
健康社區場域

1. 健康ATM身體數據檢測站
2. 遠距醫療諮詢
3. 老年活動/日托中心
4. 老年大學

FITNESS

休閒健身場域

1. 運動諮詢（遠距／實體）
2. 線下運動活動（賽事／課程）
3. 線上運動商城
4. 企業運動會



HEALTHCARE

智慧醫療場域

1. 智慧醫事系統
2. 智慧醫療系統
3. 智慧醫技系統
4. 智慧行政系統
5. 智慧後勤系統

- 綜合醫院
- 專科醫院
- 康復醫療中心
- 數位化健康管理中心
- 傳統醫學健康管理中心
- 醫美月子護理中心
- 獨立急診中心

WELLNESS

社區照護場域

1. 智能健檢平臺
2. 遠距醫療服務
3. 增值離院照護服
4. 天天健檢App

- 家庭醫學門診
- 健康管理/體檢中心
- 零售藥局/診所
- 門診手術中心
- 檢驗中心
- 影像診斷中心
- 復健中心

HEALTH

智慧健康居家場域

1. 遠距營養諮詢
2. 健康飲食計劃
3. 健康內容推播
4. 線上健康商城

- 智能健康服務
- 居家康復
- 居家護理
- 居家醫療
- 居家保健
- 居家護理
- 居家護理長照
- 老年智能居家



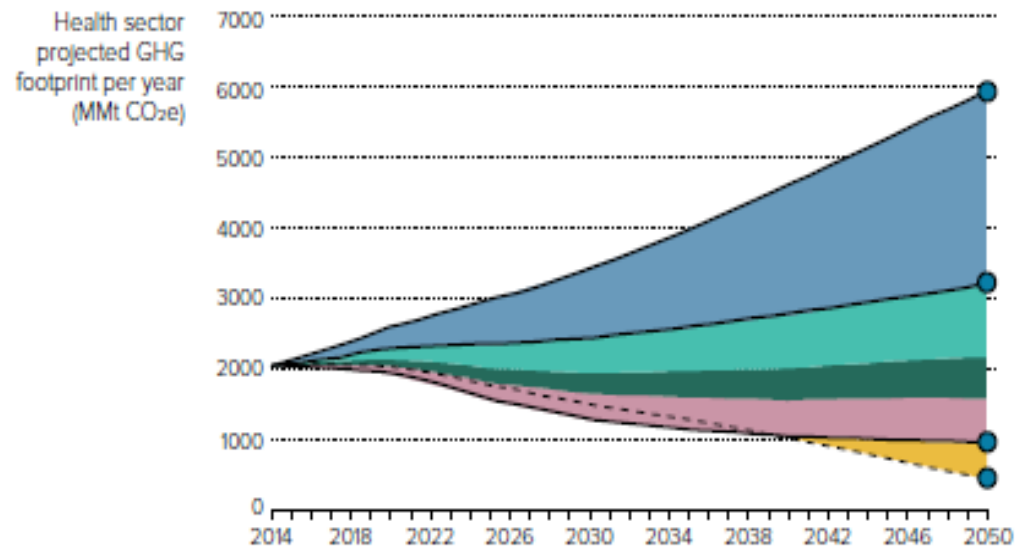
ANNOUNCEMENT / 26 MAY, 2021

Health Institutions Join the United Nations Race to Zero Campaign



Health care institutions representing over 3,000 facilities in 18 countries commit to halving climate emissions by 2030 and achieving net zero by 2050

Toward zero emissions health care



Business as usual

Progress in line with governments' energy and climate commitments up to 2017

Further health care decarbonization opportunities through the three pathways and seven actions in this Road Map

Uncharted territory



Pathway One:
Decarbonize health care delivery, facilities, and operations



Pathway Two:
Decarbonize health care's supply chain



Pathway Three:
Accelerate decarbonization in the wider economy and society

Seven high-impact actions



Action 1. Power health care with 100% clean, renewable electricity.



Action 2. Invest in zero emissions buildings and infrastructure



Action 3. Transition to zero emissions, sustainable travel and transport



Action 4. Provide healthy, sustainably grown food and support climate-resilient agriculture



Action 5. Incentivize and produce low-carbon pharmaceuticals



Action 6. Implement circular health care and sustainable health care waste management



Action 7. Establish greater health system effectiveness:

未來醫院的數位轉型

智慧手術室



遠距醫療



智慧病房



病人安全



用藥安全



科技清消





(1) 智慧手術室

智慧手術室方案

中心控台



OR Management

Maximize resource utilization and enhance coordination with our OR management solution. We can help you plan, manage and optimize the surgical workflow.



Patient Flow Management

Our patient flow management solution ensures you complete coordination, collaboration and communication in and across departments, optimizing processes.



OR Integration

With our OR integration solution, we deliver video, device and data integration for a simpler, safer and more streamlined working environment.



Sterile Supply Management

We offer solutions to simplify processes within sterile supply management to give you complete traceability and ensure just-in-time instrument delivery for surgeries.

人事動向

- 排班
- 派班
- 排休
- 職位
- 職等
- 專科類別

病人動向

- 刀種
- 科別
- 檢驗
- 病房
- 病人資訊
- 手術資訊
- 使用醫衛材

刀房動向

- 刀房使用狀態
- 專科科別
- 使用儀器
- 資訊整合
- 手術進度
- 緊急呼叫

醫衛材動向

- 儀器
- 器械
- 衛材
- 清消狀態
- 數量盤點
- 準備狀態

系統架構



智慧手術室中心端
iMOR-SVR



醫院資訊系統
HIS / NIS / PACS



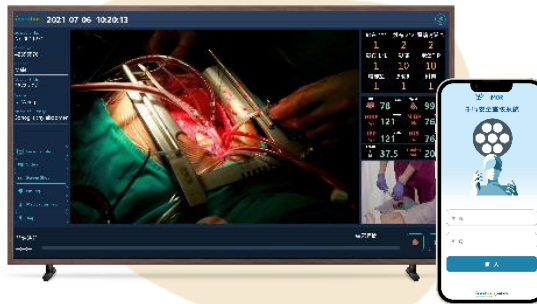
Cloud/Local Computing Layer (Data Center)



手術室電子白板
iMOR-IDB

手術室中央控制台
iMOR-ICC

OR 護理站



手術資訊整合系統
iMOR-SDB

手術安全查核
iMOR-APP

OR



手術進度資訊
iMOR-IPB

OR 外

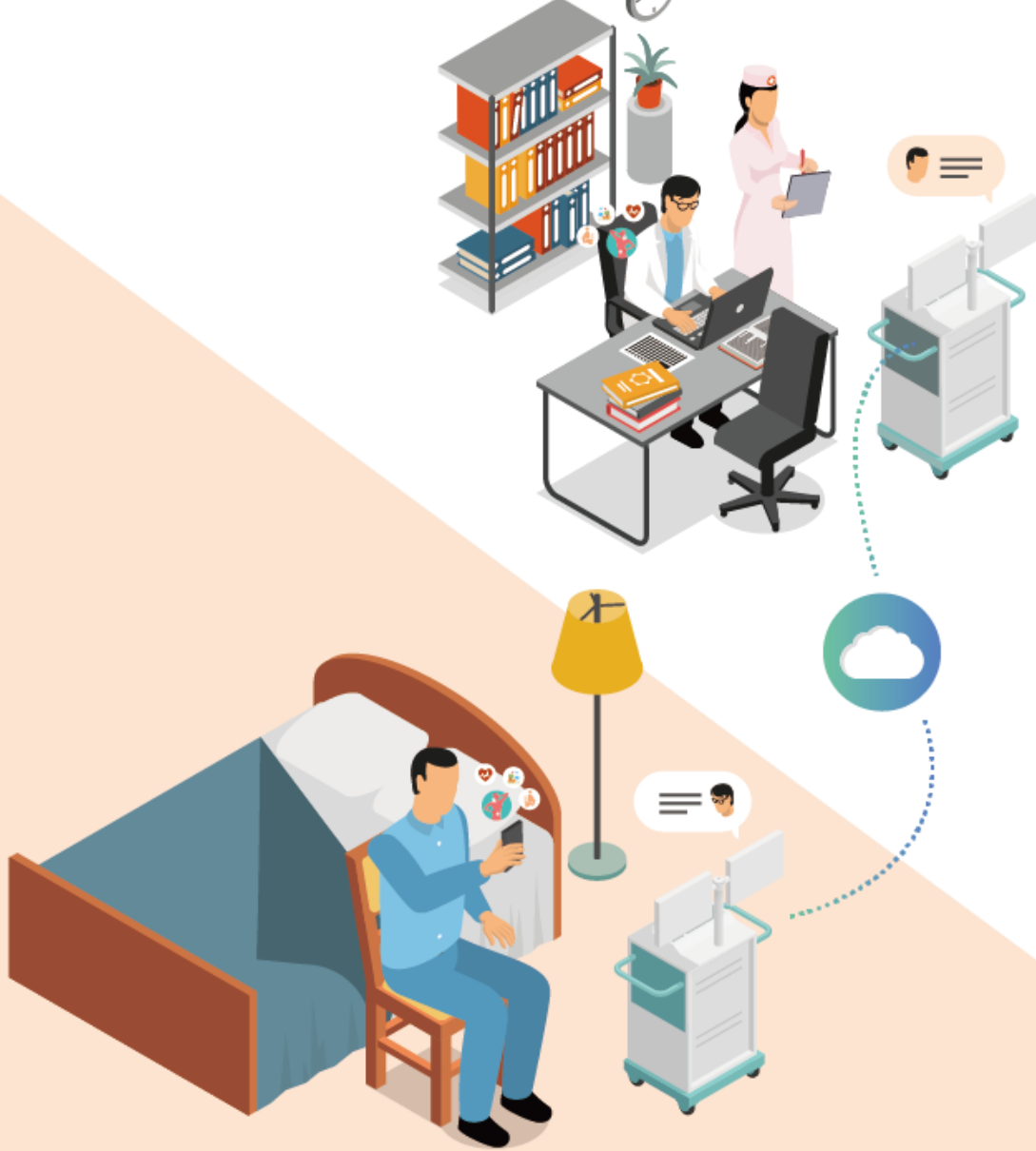


iMOR-APP 手術安全查核

確實記錄手術安全查核時間

- ✓ 報到 Check in
- ✓ 麻醉誘導前 Sign in
- ✓ 劃刀前 Time-out
- ✓ 送出手術室前 Sign out
- ✓ 手術點算物





(2) 遠距醫療

遠距視訊與生理數據 系統架構圖

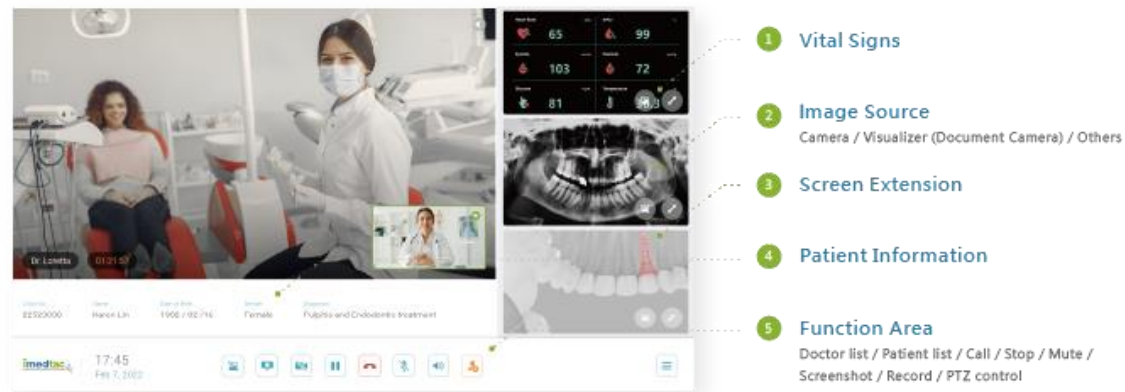


醫院視訊平台



端點視訊系列

遠距視訊與生理數據 移動推車





(3)智慧病房



智慧病房解決方案

透過AIoT及HIS/NIS整合，即時呈現病患動態，有效調度人力配置

 床旁資訊終端

 電子床頭卡

 電子房門卡



 電子白板

即時查看病患資訊
交接不遺漏

 行動照護APP

 護士控制台

排班管理、門禁管制等
一次整合

數位床頭卡



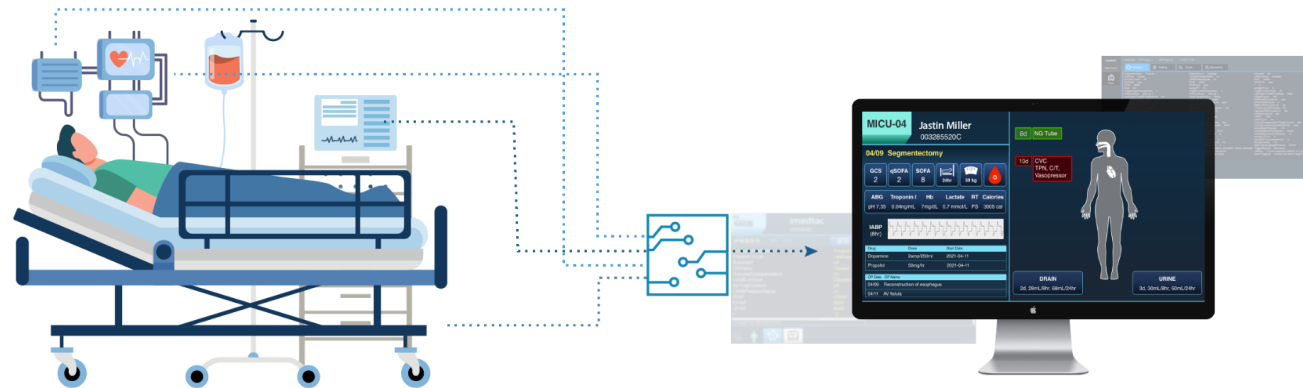
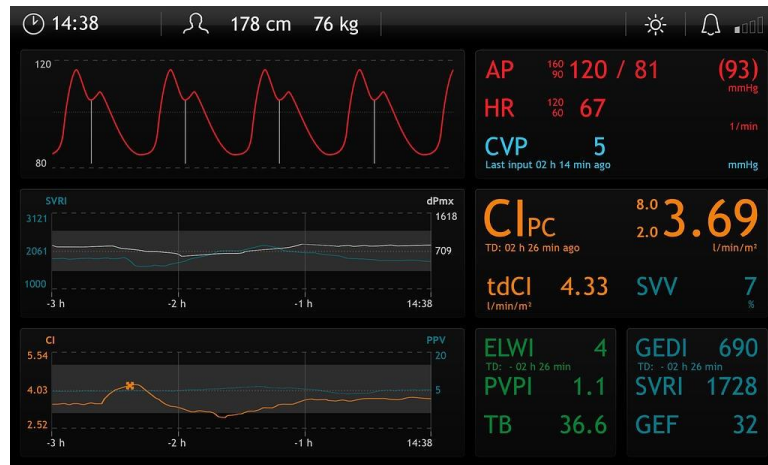
- ✓ *Provide real-time reminder to reduce workload and better care quality.*
- ✓ *Connected*
- ✓ *Green Hospital*



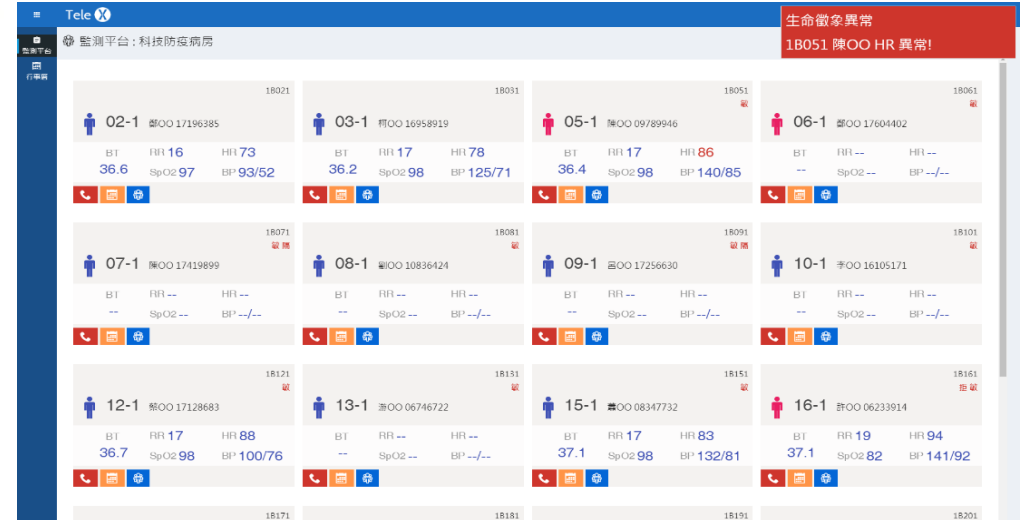
9.7" / 13.3" / 42" / CMS software platform

ICU 專科智慧病房

Know before it's low



專責病房

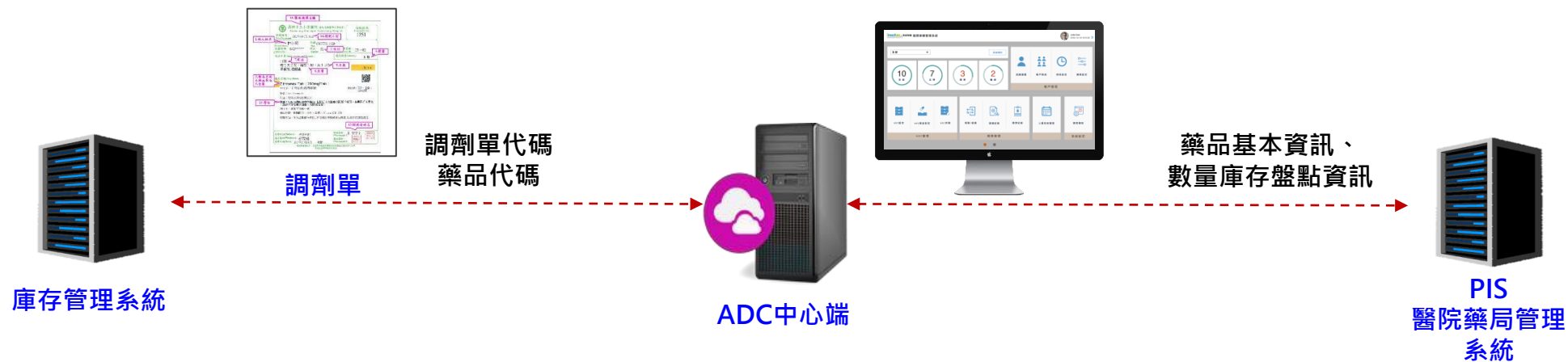


- Information dashboard:
 - Show the multiple indicators, provide contactless anti-pandemic comprehensive care
- Management platform
 - Vital sign data upload in real-time, able to manage patient's status without entering the ward
 - Outlier notification
- Able to integrate with the telemedicine platform to perform the contactless interaction between patient and the caregiver

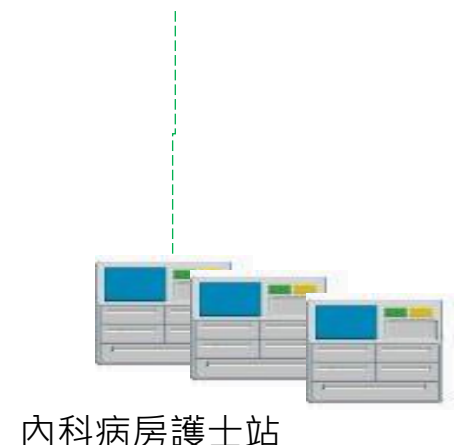
(4)用藥安全



iMADC 系統架構圖



Ethernet



ADC 系列產品



Manage controlled substance or high-value medicine and reduce human error with automated dispensing control.





(5)病人安全

ToF感知科技照護



- ✓ 近紅外光感知元件，不是攝影機、沒有RGB影像、保護病患隱私
- ✓ AI影像分析引擎，隨時為您注意被照護者的行動
- ✓ 非穿戴裝置，沒有交叉感染，消毒，維護管理問題



單人房與健保房皆適用



Care Recipient Monitor

- AI Time-of-flight Image Recognition System



- Applications:
 - ✓ Internal Control Center
 - ✓ Mobile Care App
 - ✓ Interactive Dashboard



(6) 科技清消

The Industry Challenge

1.7M

Number of hospital acquired infections per year

100K

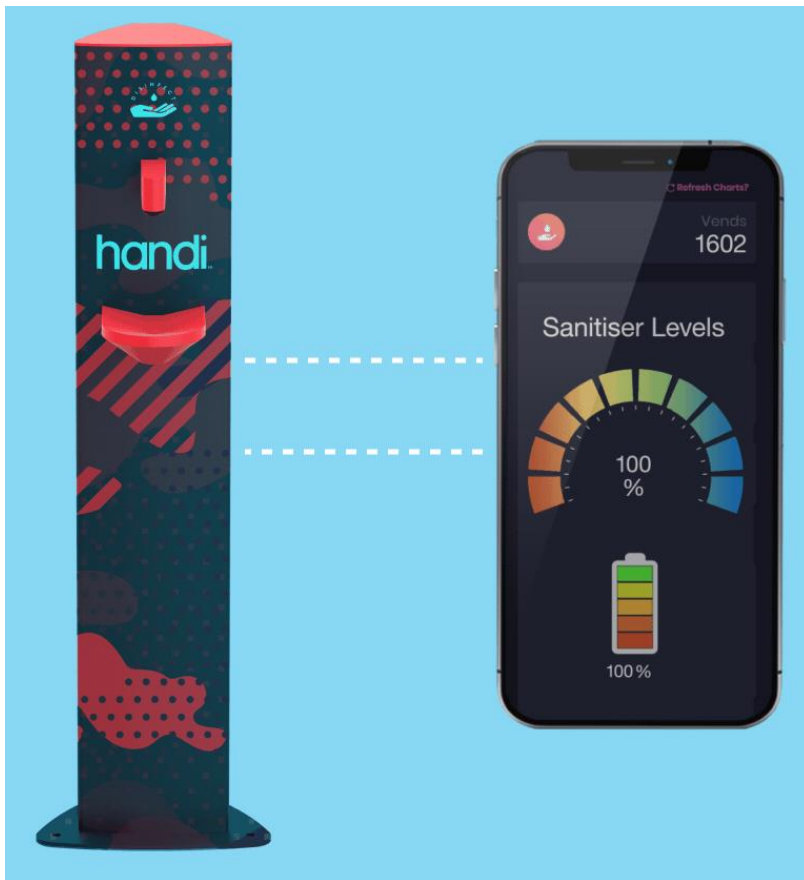
Number of infection related deaths per year

50%

Percentage of preventable pathogen transmission through improved hand hygiene protocols

61%

Percentage of Healthcare Workers that do not adhere to recommended hand hygiene practices





Track Hand Sanitizer Status

Track Sanitization Events and Usage Levels



Fully Anonymous Monitoring

Complete Privacy of Usage



Workflow Behaviour Mapping

Map out Areas of High Risk



Enhance Patient Experience

Measure hand hygiene where it matters most

Hand Hygiene Report

[Hospital Name]

Facility-wide hand hygiene compliance rate
The total number of times that hand hygiene was performed divided by number of opportunities captured.

70%

Before 65%
Before initial patient/patient environment contact.

After 70%
After patient/patient environment contact.

Top performing Units HHC

Unit	Location	Compliance (%)	Goal (%)	4-week Trend	Day Shift	Night Shift
ER	C-Wing	70	75	-20.7%	68	70
ICU	Building A	68	75	-6.7%	68	70
Med-Surge 1A	D-Wing	68	75	+50%	70	67

Needs Improvement Units HHC

Unit	Location	Compliance (%)	Goal (%)	4-week Trend	Day Shift	Night Shift
Oncology	B-Wing	63	75	+30%	63	63
Rehabilitation	Building 3A	64	75	-2.7%	64	63
Med-Surge 2A	D-Wing	64	75	+40%	63	65

Monthly Trends



物聯網消毒柱 to reduce HAIs



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Monthly Trends



國際學習

FIND A DOCTOR

FIND A TREATMENT

REQUEST A CONSULTATION



Heart Center



Hemato Oncology



Cancer Center



Search

Home

International Patients

Departments

The Cancer Center

Children

Rehabilitation

Heart Center

Contact Us



Newsweek

TOP 10 HOSPITALS IN THE WORLD

#THREE YEARS IN A ROW

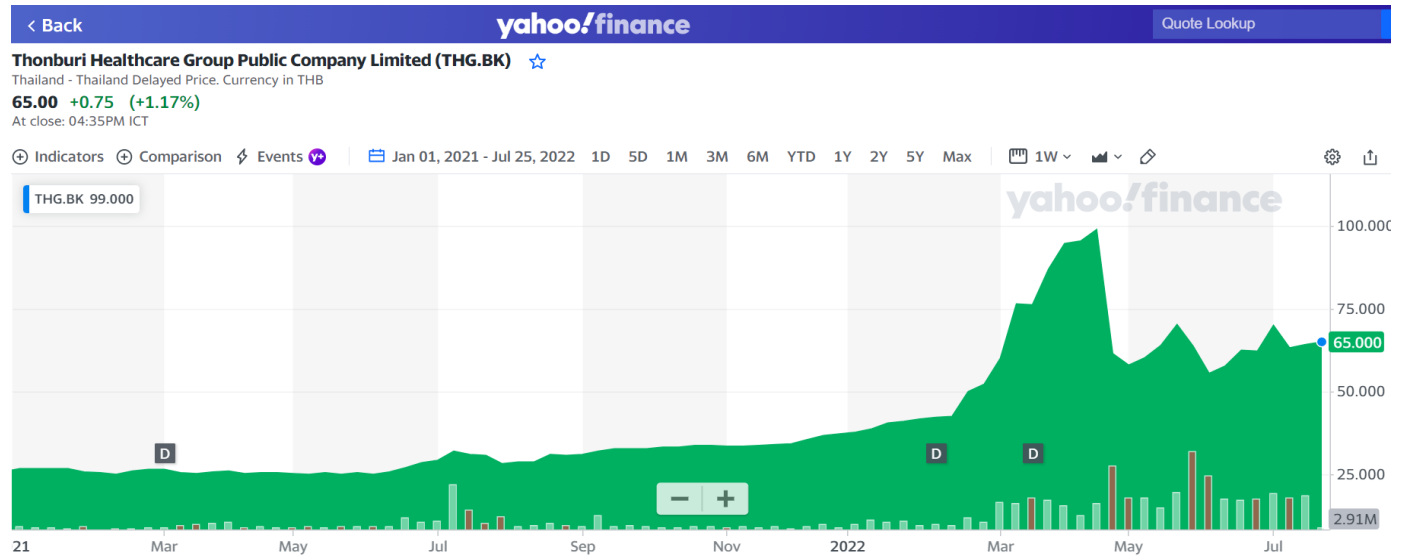
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Sheba Medical Center's ARC Innovation Center Raises Over \$110M in 2021



我們的曼谷醫院客戶 股價65元





Thank
You

imedtac 慧誠智醫
Transforming Healthcare Through AIoT

