



The Unified Smart Hospital Ecosystem:

Harnessing the Power of Smart Hospital, Pharmacy, and IoMT Solutions

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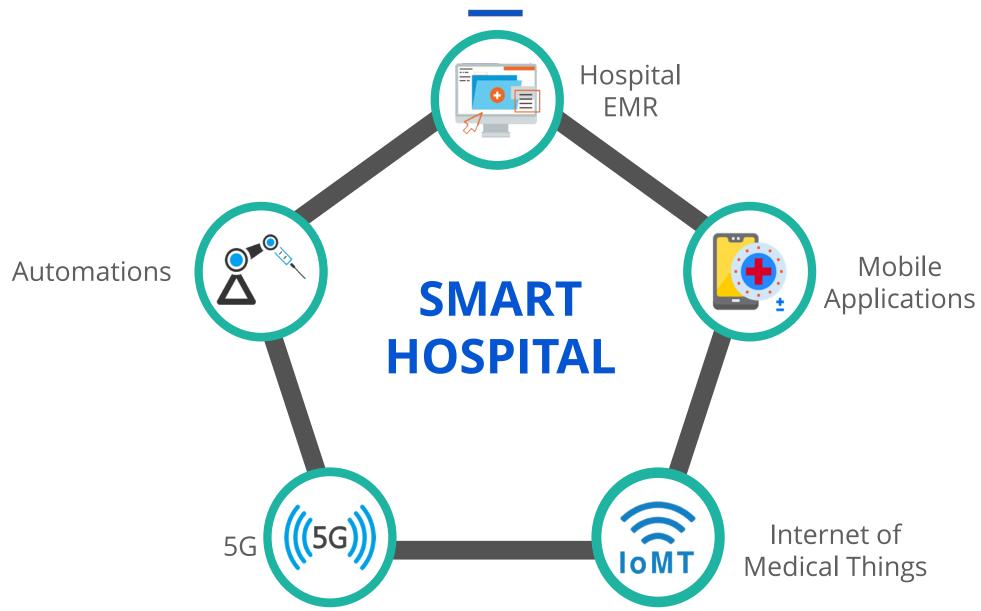


Challenges: Public Hospital Expenditure 2018 – 2022

| | 2022 HK\$Mn 港幣百萬元 | 2021 HK\$Mn 港幣百萬元 | 2020 HK\$Mn 港幣百萬元 | 2019 HK\$Mn 港幣百萬元 | 2018 HK\$Mn 港幣百萬元 |
|---|--------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| ncome 收入 | | | | | |
| Government subvention (recurrent and capital) 政府補助(經常性及資本性) | 81,585 | 78,597 | 73,985 | 64,877 | 57,802 |
| Medical fee income (net of waivers) 醫療費用收入(扣除減免) | 5,251 | 4,837 | 4,827 | 4,713 | 4,287 |
| Non-medical fee income 非醫療費用收入 | 1,162 | 1,263 | 1,513 | 1,219 | 1,018 |
| Designated donations 指定捐贈 | 159 | 361 | 202 | 194 | 93 |
| Capital donations 資本捐贈 | 154 | 166 | 159 | 144 | 138 |
| | 88,311 | 85,224 | 80,686 | 71,147 | 63,338 |
| xpenditure 支出 | | | | | |
| Staff costs 員工成本 | (58,118) | (57,665) | (53,700) | (48,703) | (45,113 |
| Drugs 藥物 | (9,642) | (8,685) | (8,102) | (7,305) | (6,663 |
| Medical supplies and equipment 醫療物品及設備 | (5,969) | (4,956) | (3,842) | (3,312) | (2,970 |
| Other operating expenses (include depreciation and | (14,091) | (13,383) | (11,277) | (10,381) | (9,433 |
| amortisation) 其他營運開支(包括折舊及攤銷) | Inflation: | 3.7% | 10% | 10.4% | 8.6% |
| | (87,820) | (84,689) | (76,921) | (69,701) | (64,179 |
| Results for the year 年度結果 | 491 | 535 | 3,765 | 1,446 | (841 |

Source: P.243, https://www3.ha.org.hk/CC Publication/HA Annual Report 2021-22.pdf

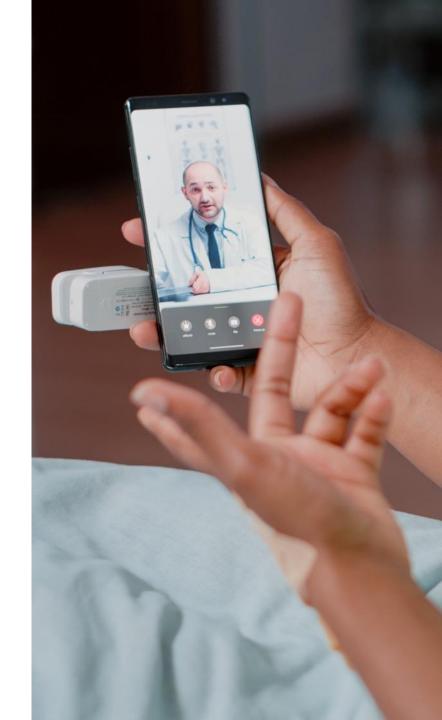
What is Smart Hospital?



Mobile Application

For Patients

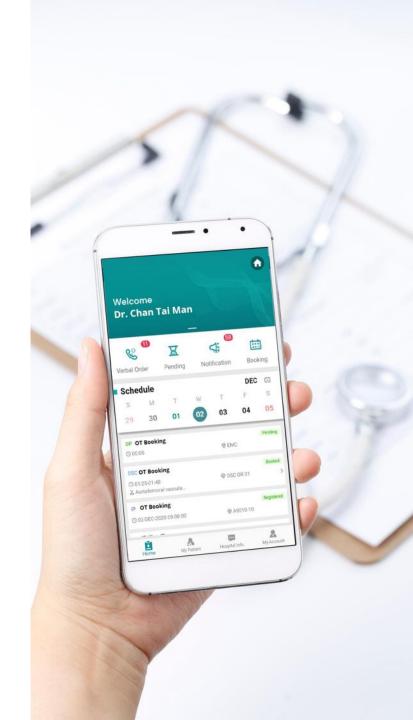
- Access medical records, test results, treatment plans, and medication information with ease.
- Stay informed and engaged in their own healthcare from anywhere at any time.
- Streamline communication
- Improve overall patient care
- Feel more in control of their healthcare and better understand their condition



Mobile Application

For Doctors

- Real-time access on patient-record
- Make informed decisions about treatment options
- Streamline communication with colleagues
- Reduce time and resources required to manage patient care



Connect IoMT with Hospitals

The Internet of Medical Things







Pharmacy: Smart OP Dispensing Solutions

Workflow Specific

7 Pharmacy Queue **Display System ('PQDS') Zircon Tag** D01 Drug Drug Drug Patient Drug Checking Replenishment Assembly Registration Picking Issuing Management -① Warehouse **3 Smart Drug ⑤ Drug Refill System** Management **Picking Management Solution ('DRS') Solution 6** Smart **② Smart Drug 4** Express Dispensing System Issuing Replenishment **Management Solution ('EDS')**

Warehouse

1 Warehouse Management System

Visual Guidance to the Right Shelf for Restocking

Mobile device and dashboard direct user to the shelf and compartment location





2 Smart Drug Replenishment

Drug replenishment with a hint of flashlight





3 Smart Drug Picking

Scan & Pick the Right Drugs

- Instant color flashlight guidance within secs
- Verification of drugs









thingsocket® Zircon Tag

- Versatile solution with RFID Technology
- 4 colored light indicators
- Various colored combination flashlight & patterns
- Configurable display content template
- Flexible installation



4 Express Dispensing System Management Solution ('EDS')

Scan to Assemble into the Right Basket

- Assemble the right drugs to the right basket with color flashlight guidance
- Support multiple users



5 Drug Refill System Management Solution ('DRS')

Enhance efficiency and accuracy

- Effective time & resources management
- Time saving for Drug Refill Preparation







Extended Function:

Outbound service to community centers/convenience stores/ drug stores

6 Smart Issuing

Right Basket to Right Patient

- Get the right basket(s) in the pile in seconds
- Last guard to patient safety
- Enhance integrity and accuracy
- Instant number display and calling at designated counter



7Pharmacy Queue Display System ('PQDS')

All-in-One Pharmacy Management Dashboard

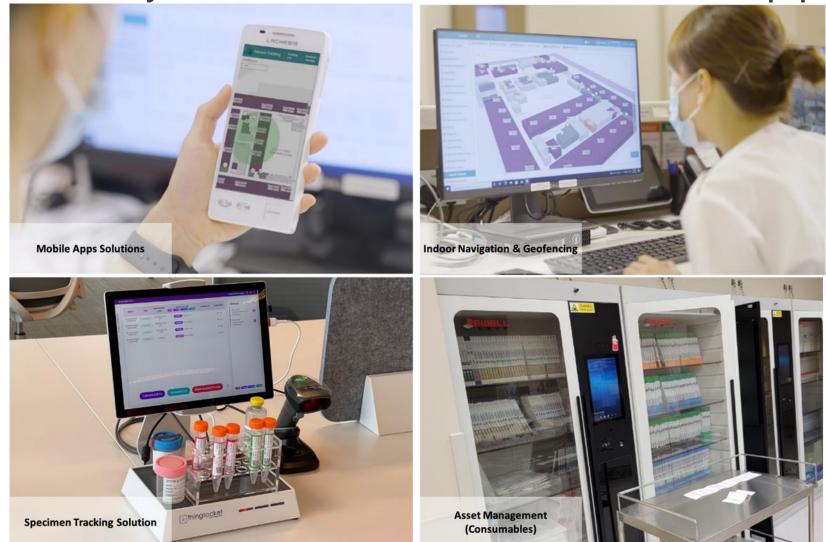
- Dynamics view of dispensing KPIs
- Flexible layout design
- One system, multiple layout for various screens



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| 3002 | 4 | | | | | | | | | | | | | |

Smart Hospitals: IoMT

Real-time Location System: Patients, Staff, Movable Assets, Medical Equipment on Map



Challenges and Considerations

Transforming from Traditional to Smart Hospital



Data Security And Privacy



Integration With Legacy Systems



Staff Training And Support





Patient Education And Engagement



Thank You for Your Time!

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