



医療DX教育研究センター

Center for Digital Transformation of Healthcare



medical informatics

Hospital Journey to Innovation - Sandbox Implementation & Deployment

Tomohiro Kuroda

CIO, Kyoto University Hospital



Kyoto University Hospital (KUHP)



KUHP



Landscape of KUHP

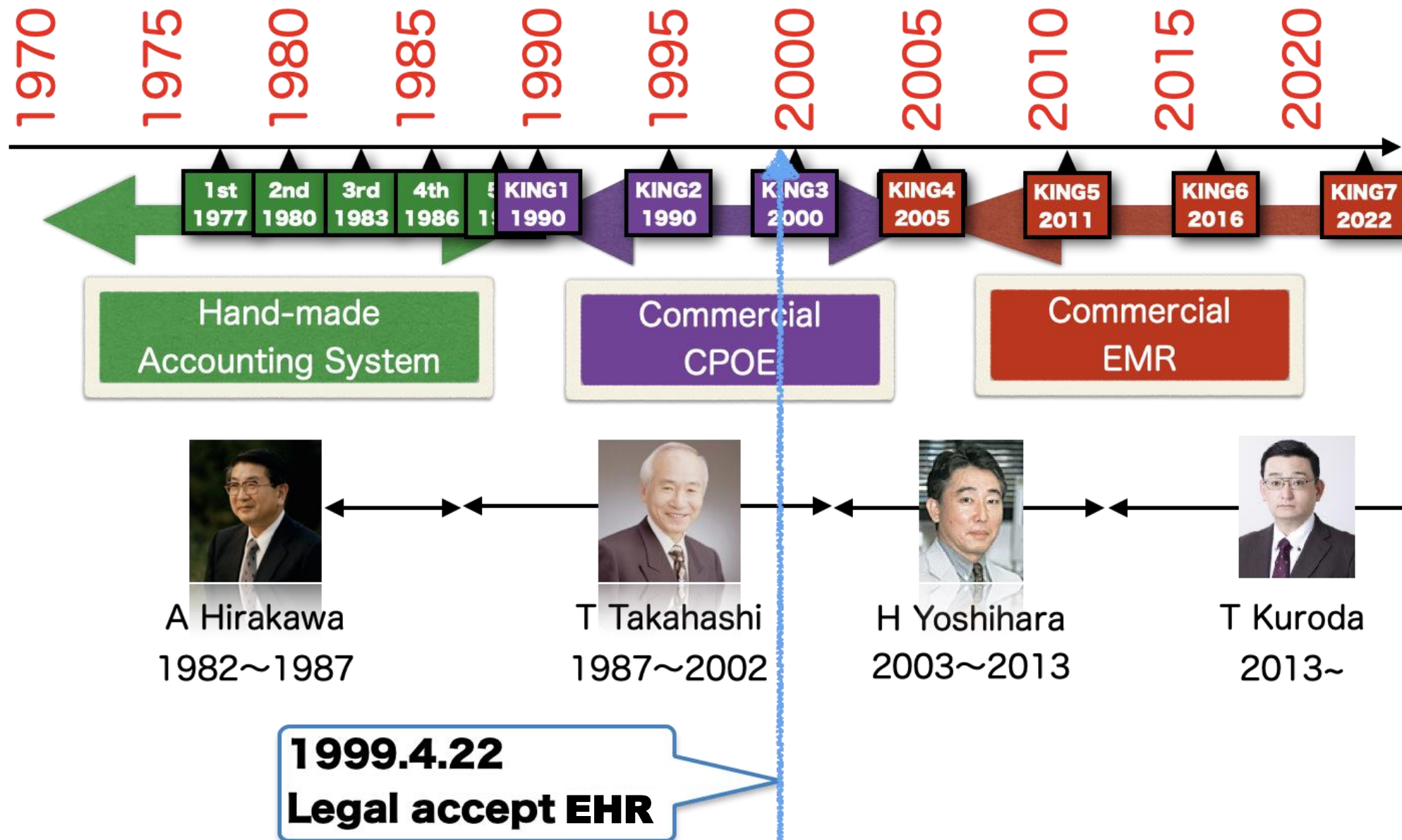


Nightmare of KUHP


4




History of HIS of KUHP





Common Problem of EHR




Burnout EHR






 記事

約 1,740 件 (0.09 秒)

 プロフィール

 マイ ライブラリ

期間指定なし

2025 年以降

2024 年以降

2021 年以降

期間を指定...

関連性で並べ替え

日付順に並べ替え

すべての言語


英語 と 日本語のページを検索

すべての種類

総説論文

☐ 特許を含める

☒ 引用部分を含める

 アラートを作成

✓ Association of clerical burden and EHR frustration with burnout and career intentions among physician faculty in an urban academic health system

[JA Ripp](#), [RH Pietrzak](#), E de Guillebon... - International Journal of ..., 2025 - Elsevier

... and after hours EHR time relative to ... EHR time, EHR frustration and clerical time; and (3) the relationship between after hours EHR time, EHR frustration and clerical burden with burnout ...

☆ 保存 引 被引用数: 1 関連記事 全 2 ページン

✓ Special Topic Burnout: Improving Nurse Documentation Time via an Electronic Health Record Documentation Efficiency Tool

[J Will](#), D Jacques, D Dauterman... - Applied Clinical ..., 2025 - thieme-connect.com

... of nurse documentation burden or burnout. Qualitative research could augment these findings to further understand how saving time in the EHR corresponds with these perceptions. ...

☆ 保存 引 関連記事 全 2 ページン

✓ Special Topic Burnout: An AI-Powered Strategy for Managing Patient Messaging Load and Reducing Burnout

SN Proctor, G Lawton, S Sinha - Applied Clinical Informatics, 2025 - thieme-connect.com

... In this paper, we describe our institution's experience implementing a pilot of our electronic health record (EHR) system's Health Insurance Portability & Accountability Act (HIPAA) -...

☆ 保存 引 関連記事 全 2 ページン

✓ Key strategies to promote professional wellness and reduce burnout in oncology clinicians

[K Lapen](#), [F Chino](#), A Noble, JO Jin, LA Levit... - JCO Oncology ..., 2025 - ascopubs.org

... for institutions to deimplement related to electronic health record (EHR), such as minimizing ... by EHR entry and other low-value work. For example, EHR systems add to clinician burnout ...

☆ 保存 引 被引用数: 1 関連記事 全 2 ページン

[PDF] [ascopubs.org](#)

✓ [HTML] Usability of an electronic health record 6 months post go-live and its association with burnout, insomnia and turnover intention: a cross-sectional study in a ...

[S Lohmann-Lafrenz](#), [SØ Gismervik](#)... - BMJ Health & Care ..., 2025 - pmc.ncbi.nlm.nih.gov

... professionals evaluated the usability of a new electronic health record (EHR) and to investigate the association between the usability and burnout, insomnia and turnover intention. ...

☆ 保存 引 関連記事 全 4 ページン

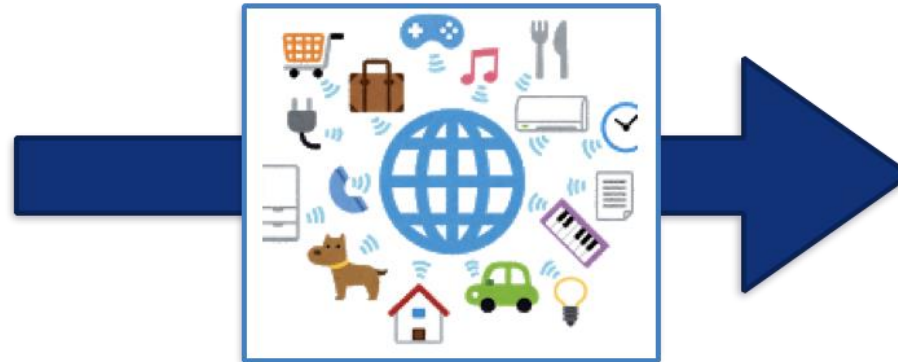
[HTML] [nih.gov](#)

IoT : The Silver Bullet



機械由来

Machine Origin



Internet of Things



機械可読

Machine Readable

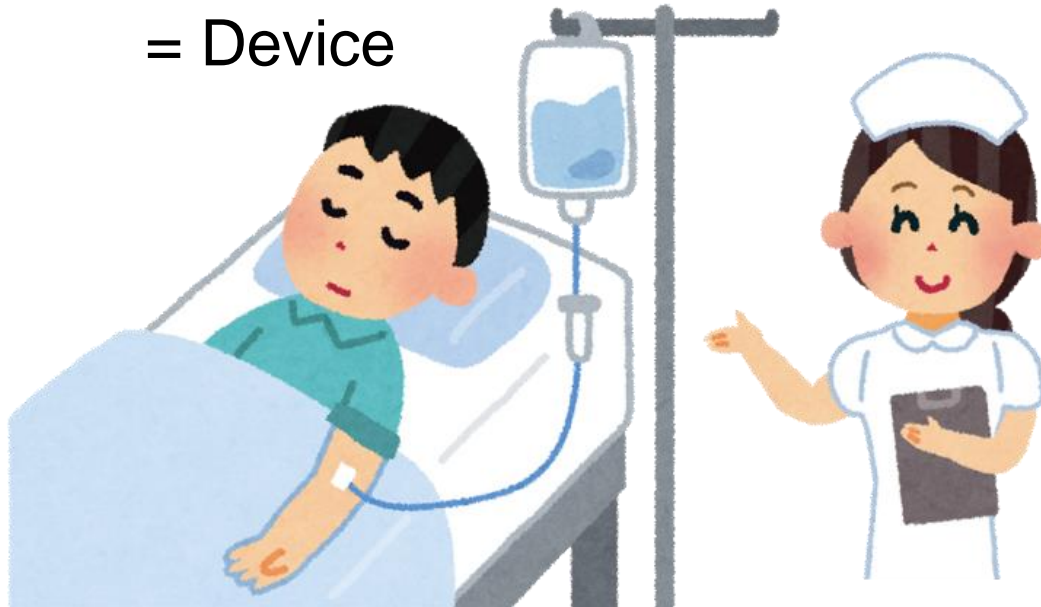
*The problem is, people have limited time, attention and accuracy
— all of which means they are not very good at capturing data about things in the real world.
(Kevin Ashton. That 'Internet of Things' Thing)*

Direct Data Capture from Machine to Machine

- When = NTP
- Who = Nurse + Patient
- Where = Bed
- What = Device
- How = Device



How to Collect Automatically ?



**Measure Person
at the Bedside**

VDT : Bedside IoT (2016)



Place & Confirm
かざして押すだけ

SHIMADZU **TERUMO** **OMRON** **arkray**

Vital Data Terminal / バイタルデータターミナル

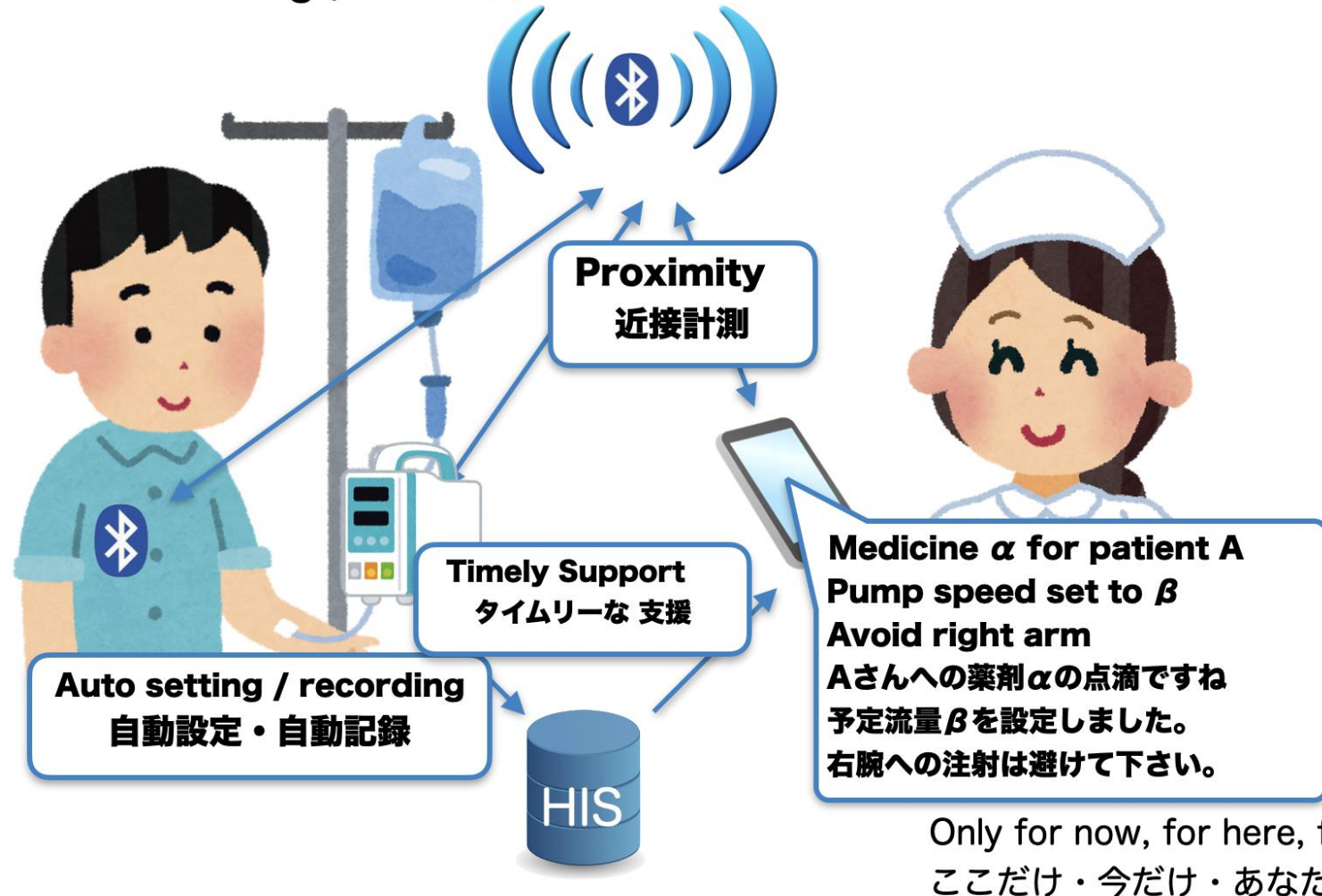
Position = Context
場所 = 文脈



お名前		職員名	
島津 太郎		京大 花子	
SpO2	98 %	9:54:29	
脈拍 (SpO2)	85 bpm	9:54:29	
PI	44	9:54:29	
機器選択	▼	クリア	確認

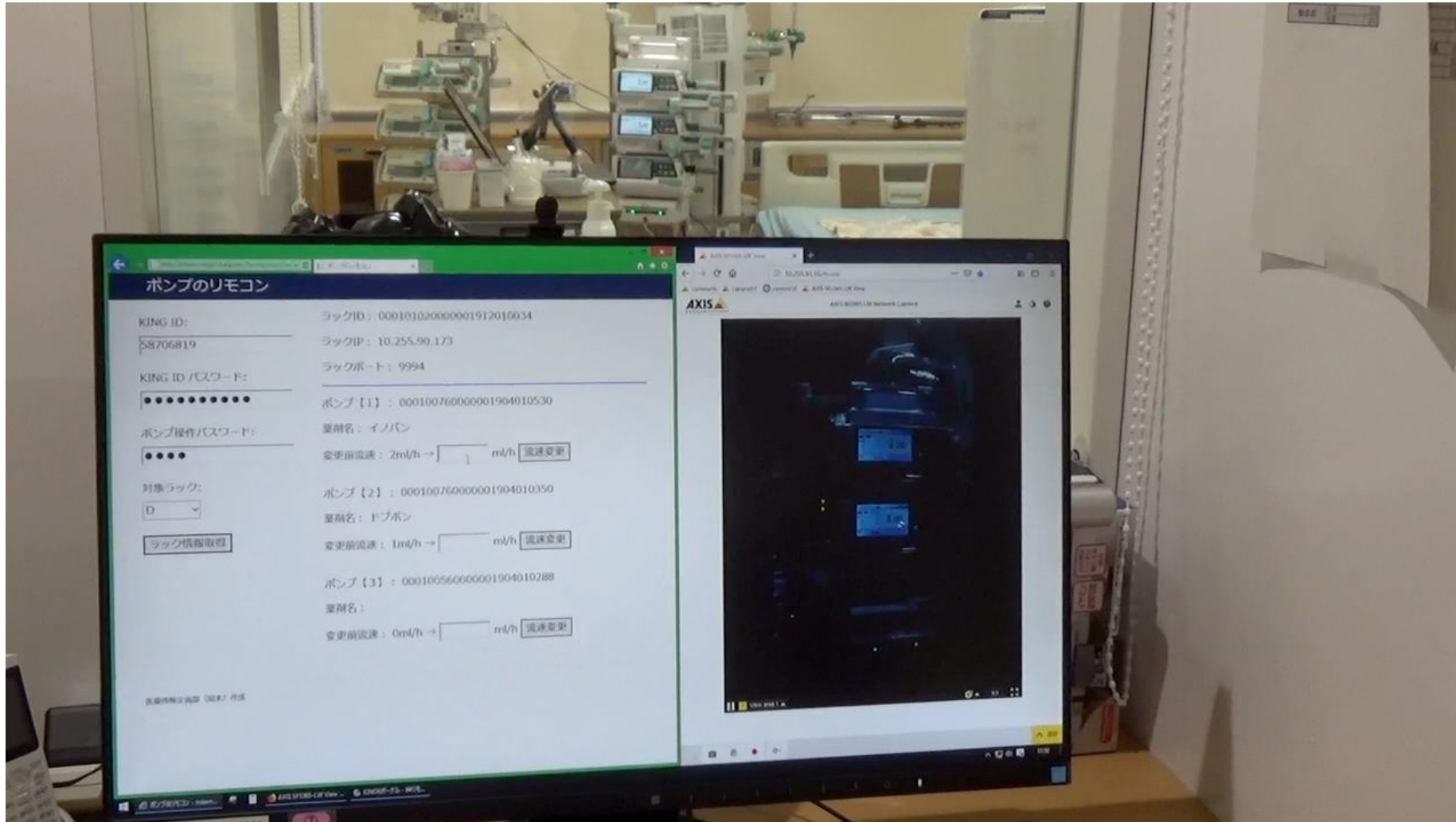
Beyond IoT : Context-Aware IT Service

- Zero-point Check up / ゼロ点認証
- Automatic Recording / 自動詳細記録



IoT at ICU : Six-Foot Telemedicine (2020)

Under Covid to Reduce PPE Consumption



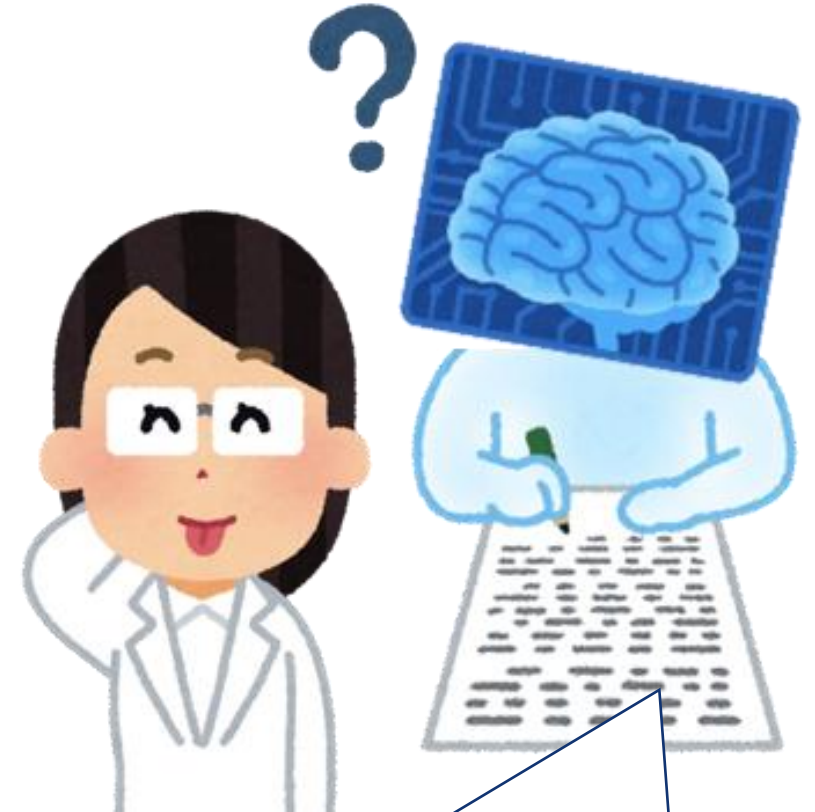
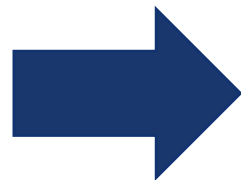
Beyond IoT : Salient HIS

- Clinic = Routine + Response
 - Routine : Defined by Clinical Path
 - Response : React Patient Condition

HIS can estimate coming event

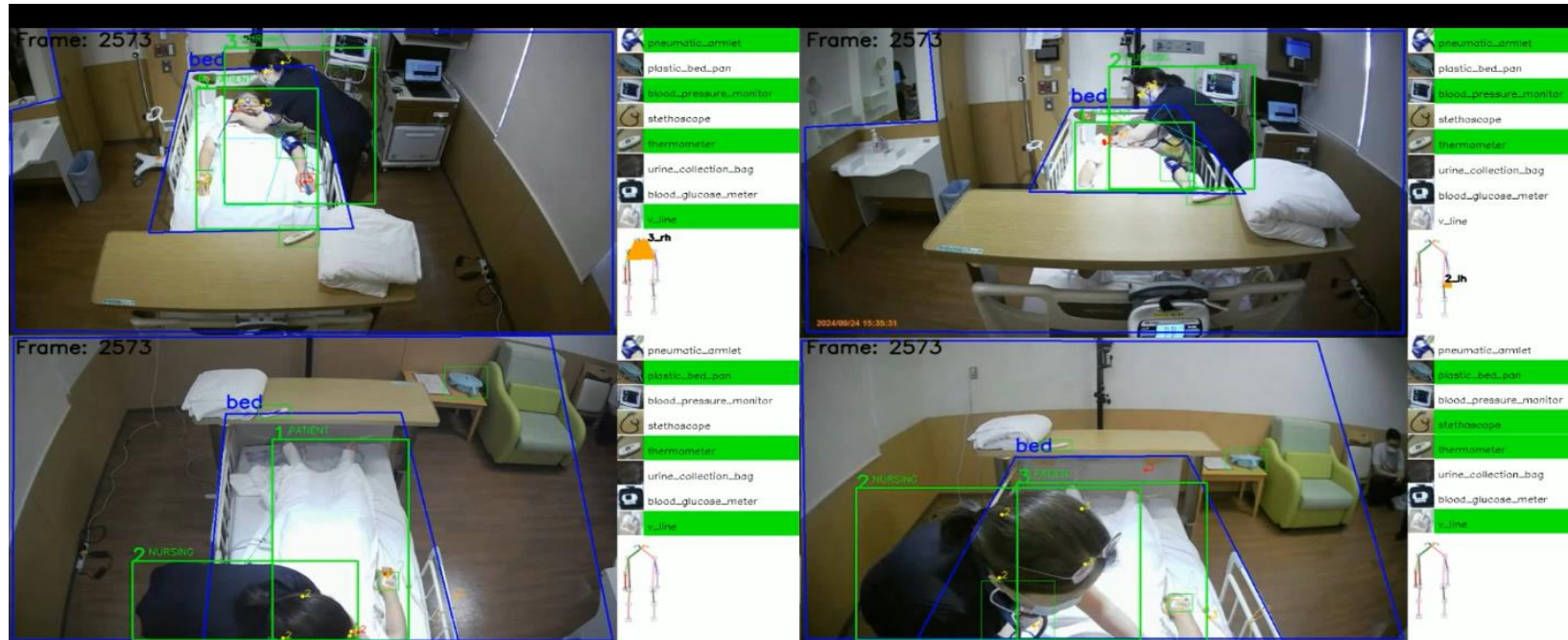
- Unexpected Happening for HIS
 - Incident
 - Reacting Un-measured Event

HIS needs to ask WHY



**Future HIS may record EHR automatically
and
ask WHY when unexpected action taken**

Future HIS may record EHR automatically

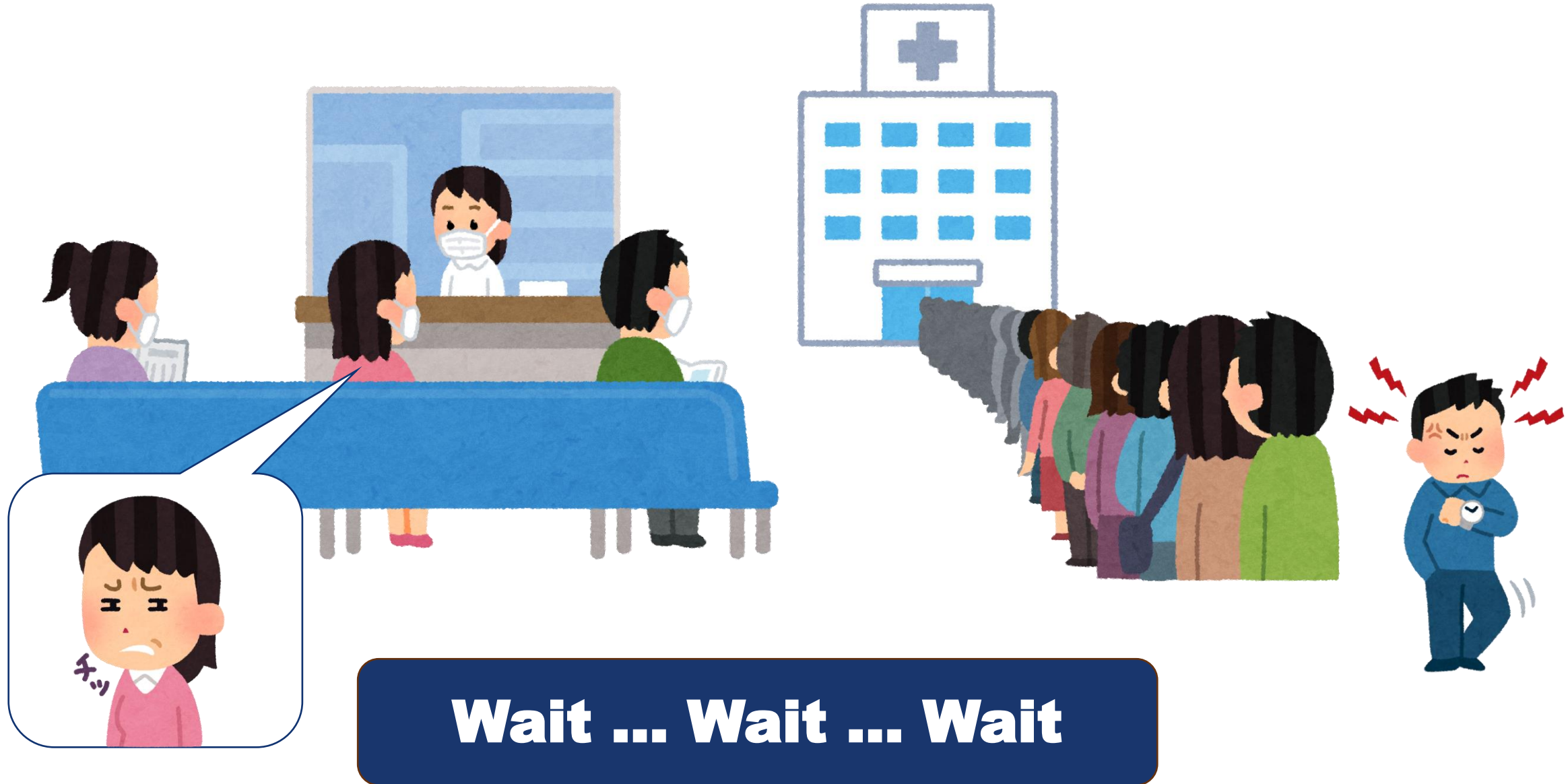


body_temperature_measurement	64
blood_pressure_and_pulse_rate	87
lung_sound_and_breath_sound	0
bowel_sound	0
indwelling_bladder_catheter	0
excretion	0
blood_glucose_measurement	0
turning_over	0
sensory_dullness	0
abnormality_v_line	0
peripheral_artery_palpation	0
dorsiflexion	0
mobility	0

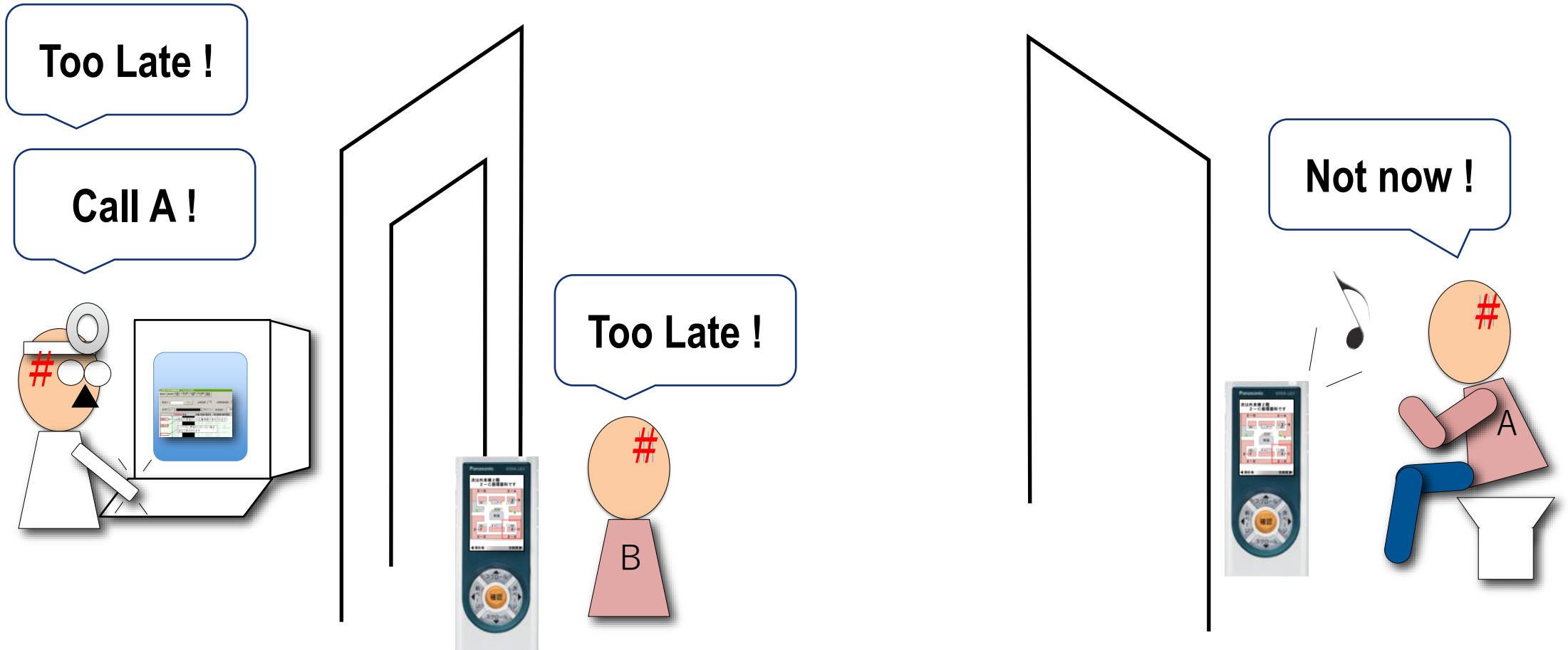


blood_glucose_meter
blood_pressure_monitor
plastic_bed_pan
pneumatic_armlet
stethoscope
urine_collection_bag
thermometer
v_line

Common Problem for Patients



Beeper : to Keep Patient Wait (2000)



Nobody becomes happy

Beeper + IoT = Reduce Wait (2011)

京都大学医学部附属病院 [外来患者選択画面]

最新表示 患者検索 診療科 予約医師 検査/細菌 検査/細菌 検査日 未指定

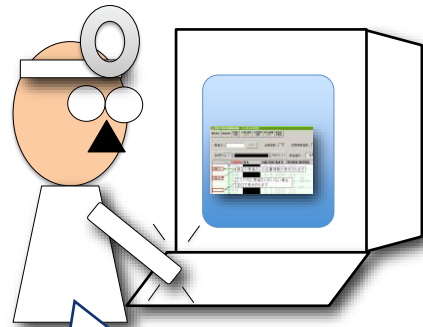
患者ID: 検索 全患者数: 32 診察残患者数:

血液内 血液 予約リスト 患者選択: 全患者

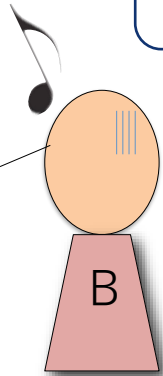
予約	患者ID	氏名	性別	年齢	予約日時	予約医師	予約診療科	予約検査	予約検査日
2階CD	1000000001	田中 太郎	男	45	2011/08/10 10:00	田中 太郎	内科	血液	2011/08/10 10:00
1階AB	1000000002	山田 花子	女	35	2011/08/10 11:00	山田 花子	内科	血液	2011/08/10 11:00
	1000000003	佐藤 一郎	男	55	2011/08/10 12:00	佐藤 一郎	内科	血液	2011/08/10 12:00
	1000000004	鈴木 次郎	男	65	2011/08/10 13:00	鈴木 次郎	内科	血液	2011/08/10 13:00
	1000000005	高橋 三郎	男	75	2011/08/10 14:00	高橋 三郎	内科	血液	2011/08/10 14:00

B is in the waiting room

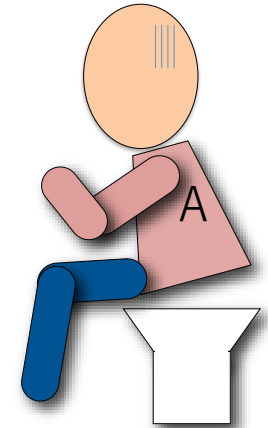
A is not in waiting (Blank)



Call B !



That's Quick !



Reduce 100 hours/day waiting & reporting time

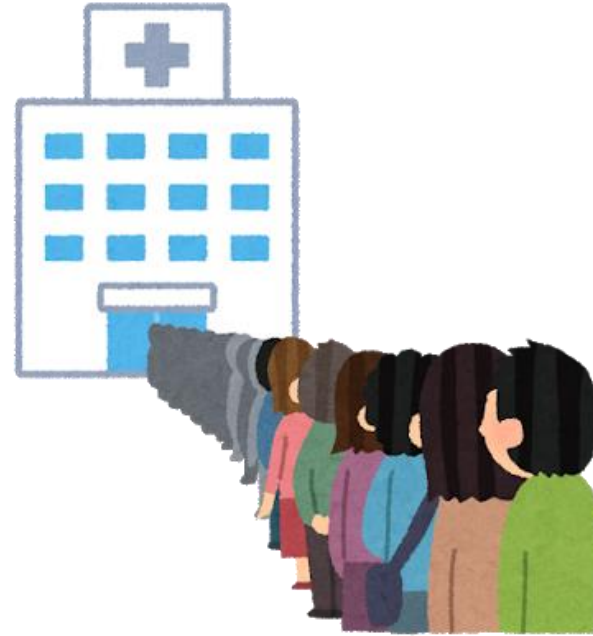
Patients are still Waiting for ...



Check in



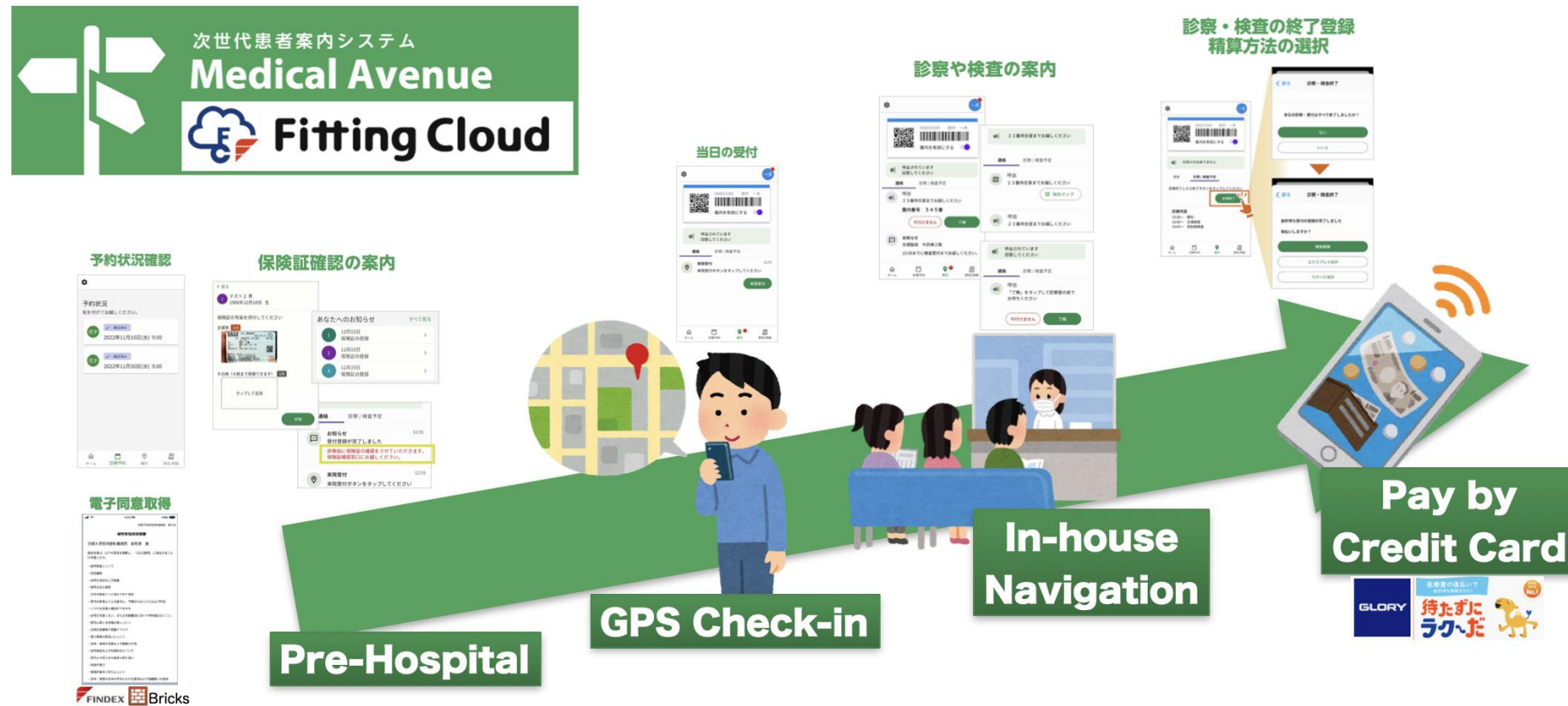
Pay copayment



**Can be done
Outside ...**



Medical Avenue : Do it Outside (2023)



- Data Collection : ePRO / eConsent
- Data Provision : Lab Results / CT Recruitment / SaMD
- Data Carrier : e-Prescription / Referral / Insurance Application

Medical Avenue : Do it Outside (2023)



Healthcare of IT Age

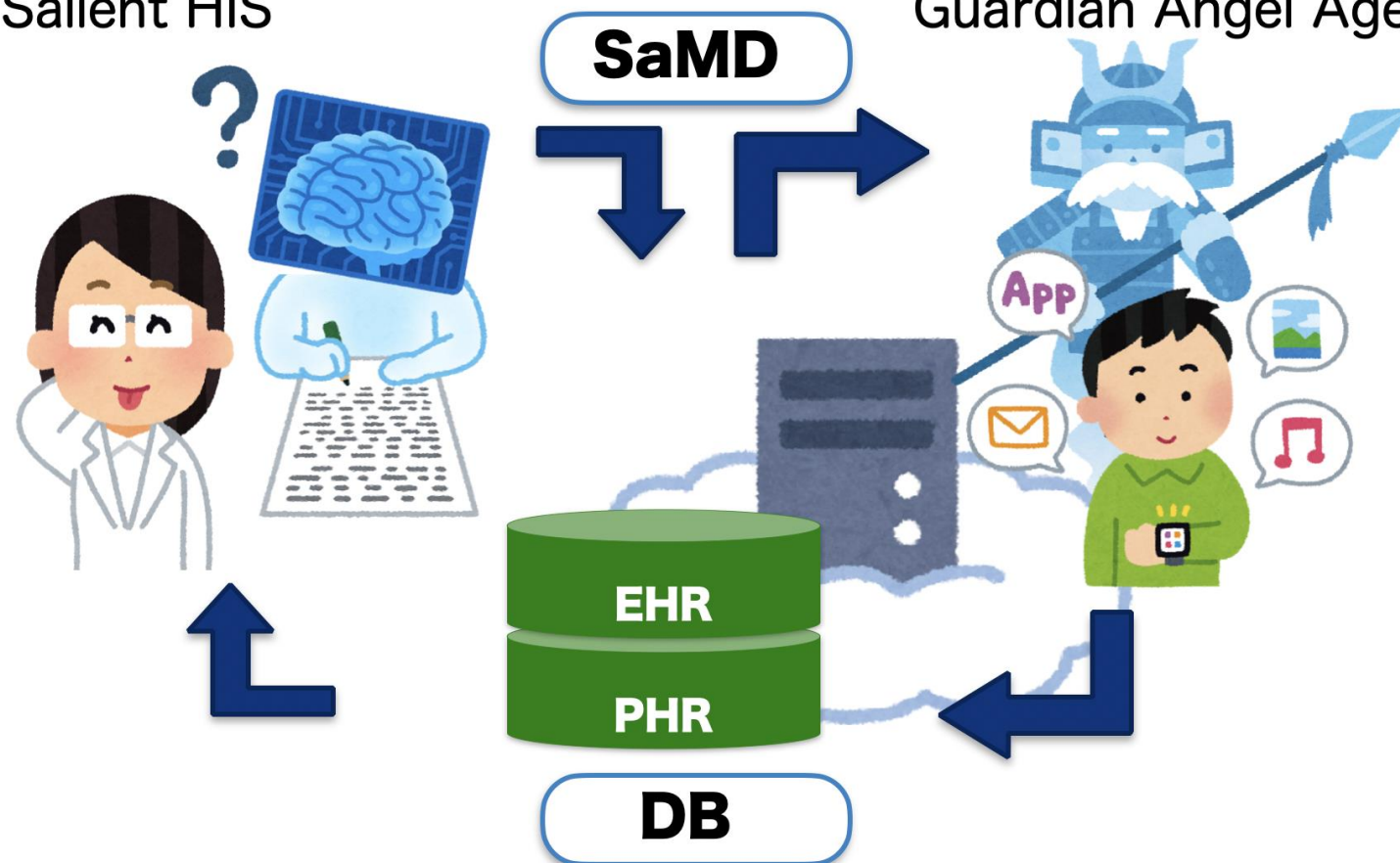
Man-Machine System / 人間機械系

さりげない電子カルテ

Salient HIS

守護霊エージェント

Guardian Angel Agent



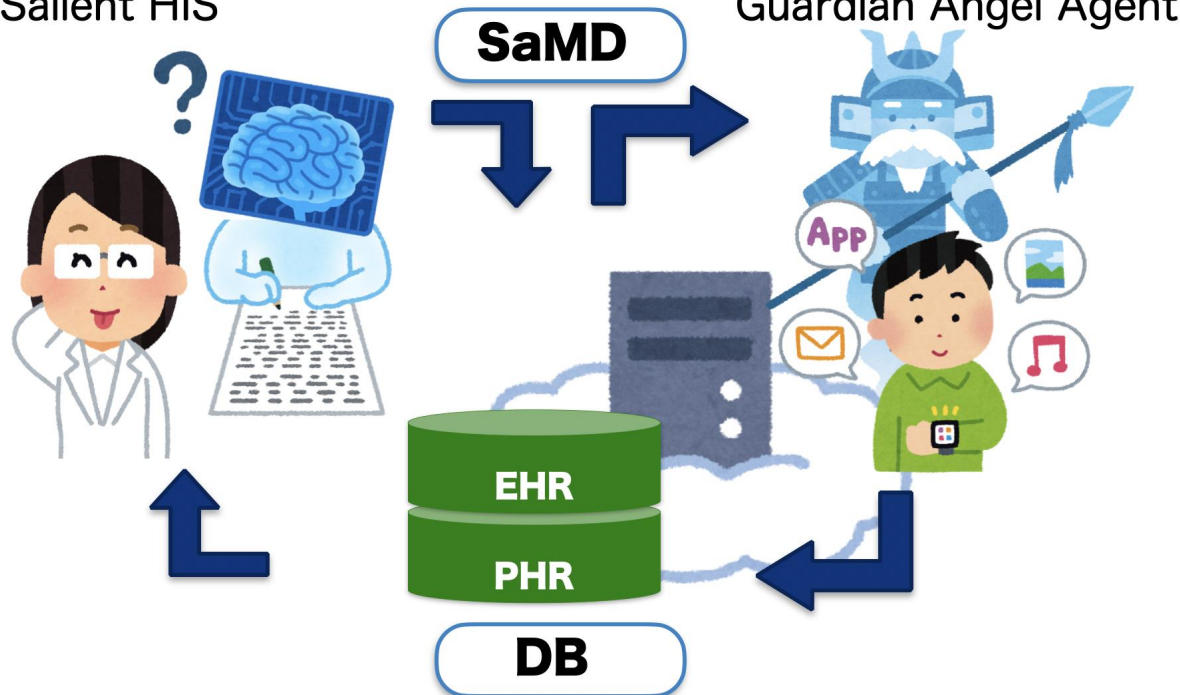
Data Driven World / データ駆動型社会

Healthcare of IT Age

Man-Machine System / 人間機械系

さりげない電子カルテ
Salient HIS

守護霊エージェント
Guardian Angel Agent

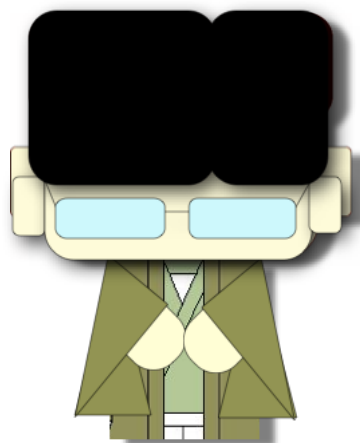


Data Driven World / データ駆動型社会

Social Hospital / ソーシャルホスピタル

Embed Hospital into Society / 社会に病院を組み込む





Thank you for your kind attention !

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medical informatics

Tomohiro Kuroda

CIO, Kyoto University Hospital

