Introduction

Radboud University Medical Center

40.000 assets
20.000+ Medical Devices

10's of building
100's of floors
More than 400.000 m2

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Problem description

🔍 Limited insight in location and movement of mobile objects

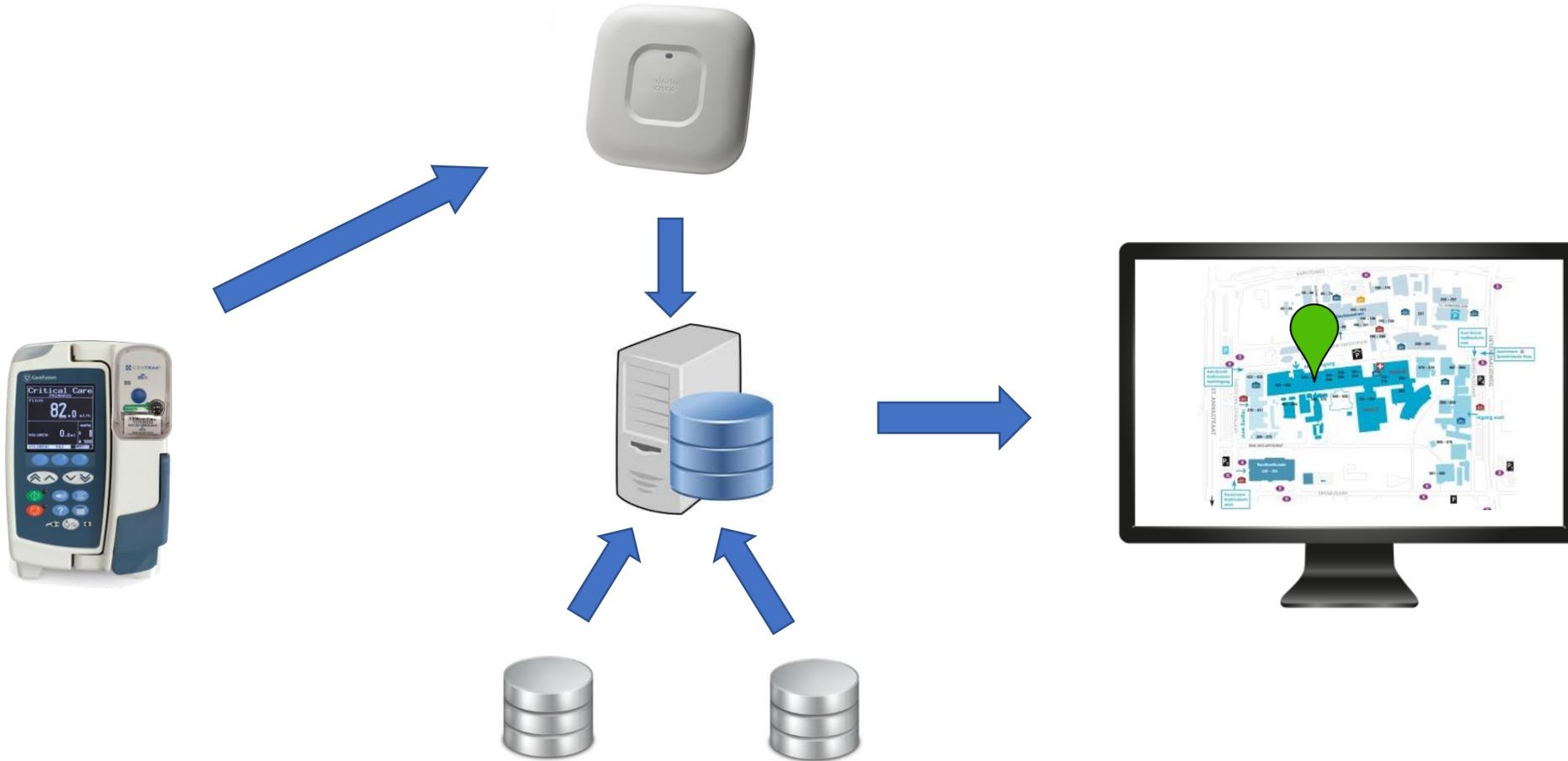⧗ Time lost in searching and administration

☹ Frustration

📊 Inefficient use and management of Medical Technology

Roland Loeffen. On the right Track : onderzoek naar de inzet van Track en Trace technologie binnen het ziekenhuis(PDEng Qualified Medical Engineer, external assessor) (in Dutch)

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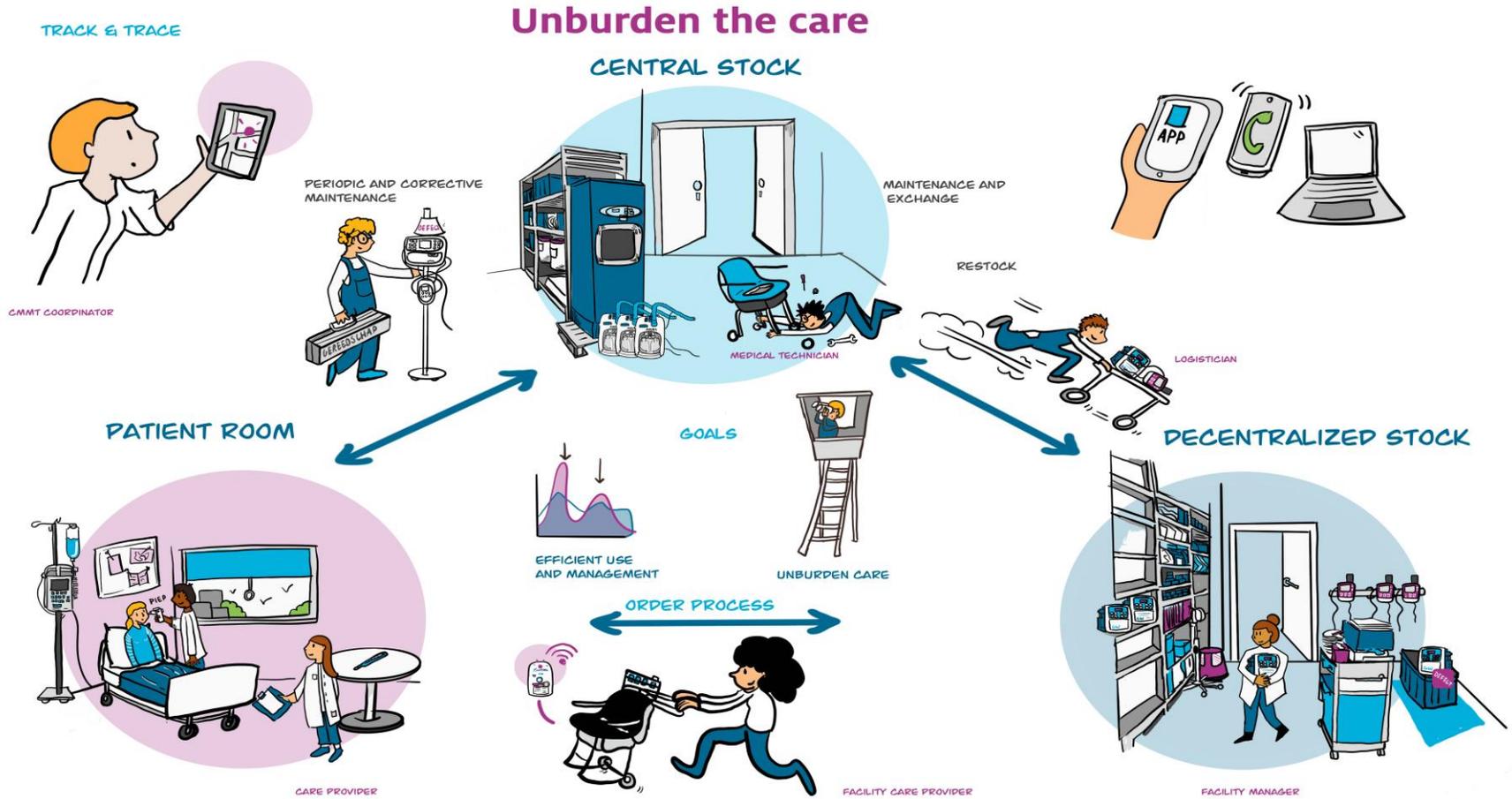
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Real Time Location System(Track and Trace)

Kamel Boulos MN, Berry G. Real-time locating systems (RTLS) in healthcare: a condensed primer. Int J Health Geogr. 2012 Jun 28;11:25. doi: 10.1186/1476-072X-11-25. PMID: 22741760; PMCID: PMC3408320.

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Goal

Centrally Managed Medical Technology (CMMT) Radboud umc

Unburden the care

TRACK & TRACE

CENTRAL STOCK

CMMT COORDINATOR

PERIODIC AND CORRECTIVE MAINTENANCE

MAINTENANCE AND EXCHANGE

RESTOCK

MEDICAL TECHNICIAN

LOGISTICIAN

PATIENT ROOM

GOALS

DECENTRALIZED STOCK

EFFICIENT USE AND MANAGEMENT

UNBURDEN CARE

ORDER PROCESS

CARE PROVIDER

FACILITY CARE PROVIDER

FACILITY MANAGER

Justjulie i.o.v. het Radboud UMC

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Methods

RTLS platform(Philips PerformanceFlow)

- Visualisation, Notifications, Workflow support, Analytics,......

Use of Existing WIFI network

- No infrastructural changes needed
- Campuswide coverage

Integration with asset management system for MT management

- Asset management data combined with location data
- Work order creation for workflow support
- Inventory Management of decentralized and central stock

Results

- Hospitalwide Functional RTLS platform
- Integration with Asset management system
- Important tool for Central Management of Medical Technology

Take home message:

- Track and Trace is a tool, not a goal
    - Combine Track en Trace with process/organisational change to reach goals

- Think big but start small
    - Hospital wide approach with future-proof system
    - Phased implementation on the basis of topical use cases