ePharmacy: Making the delivery of pharmacy safer and more efficient

Better Together for Digital Healthcare 2023

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Background

- Medicines are a critical pillar of the health system.
  - ✓ They are the most common health intervention
  - ✓ They have been associated with negative outcomes including death when there are errors during the medication process.
- We want to use technology to help:
  - ✓ Improve medication safety and reduce medication errors
  - ✓ Improve the efficiency of the medication process
  - ✓ Provide patients with access to their medicines information

Elliott, R., Camacho, E., Gavan, S., Keers, R., & Chuter, A. (2023). Estimating the impact of enabling NHS information systems to share patients' medicines information digitally

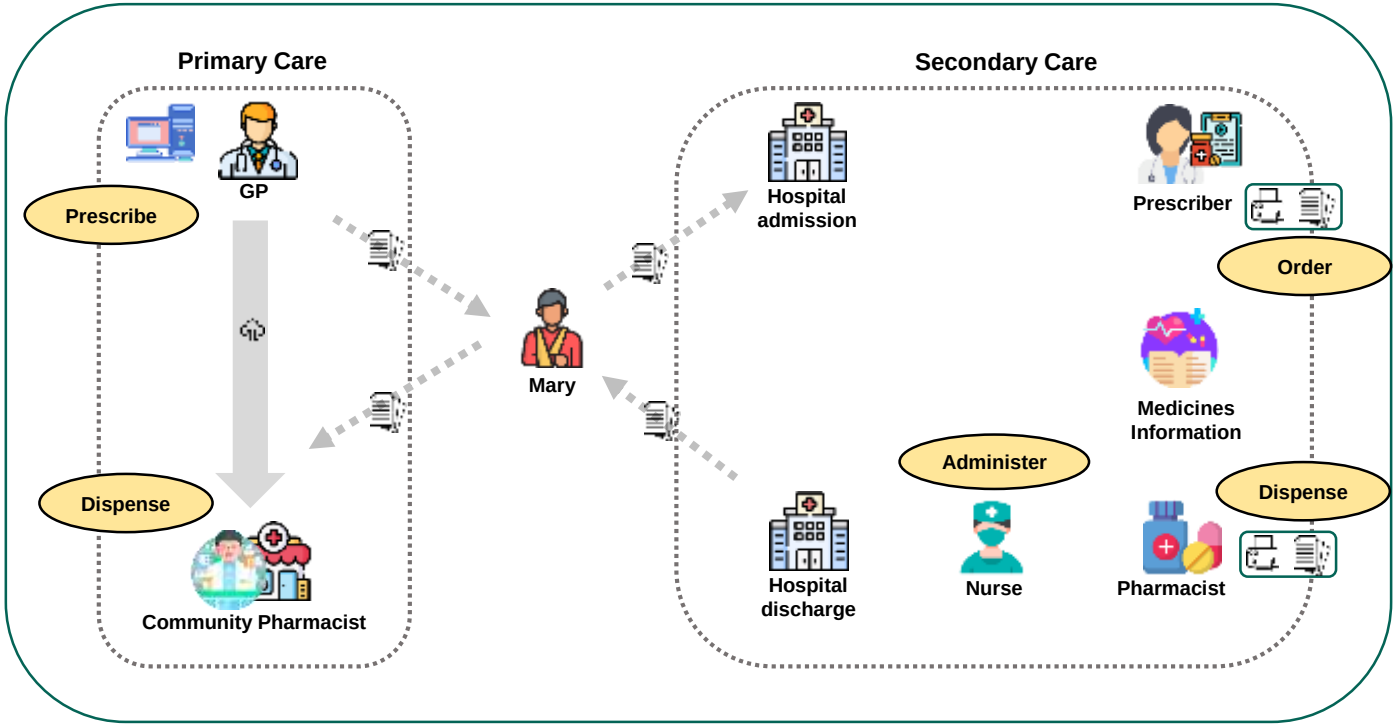
UK 2023

Estimated 1.8 million transition medication errors (without digital information standards)

Harm to 31,000
Deaths 45
Cost £17.4 M
Additional days 36,000

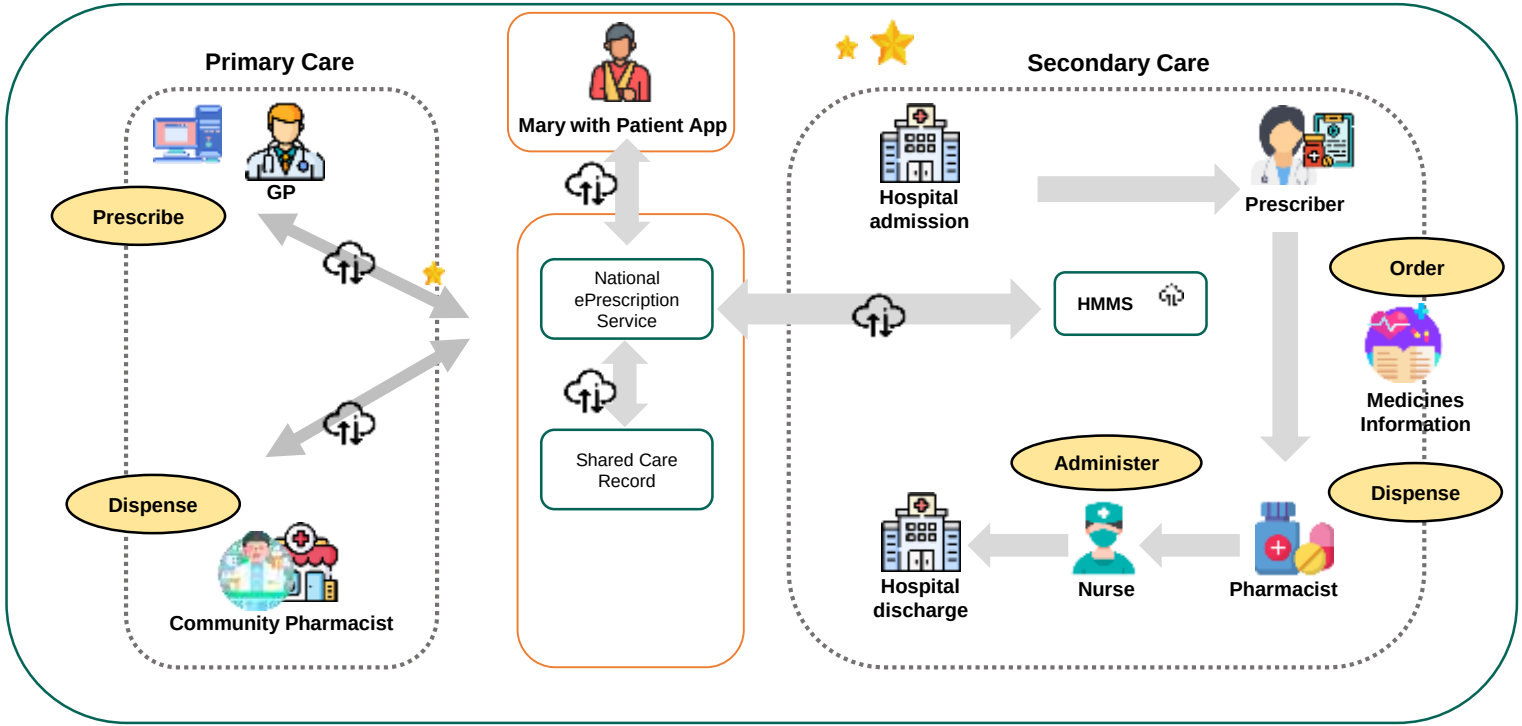
Expect 40%reduction with new standards

Current Prescribing and Dispensing Data Flow

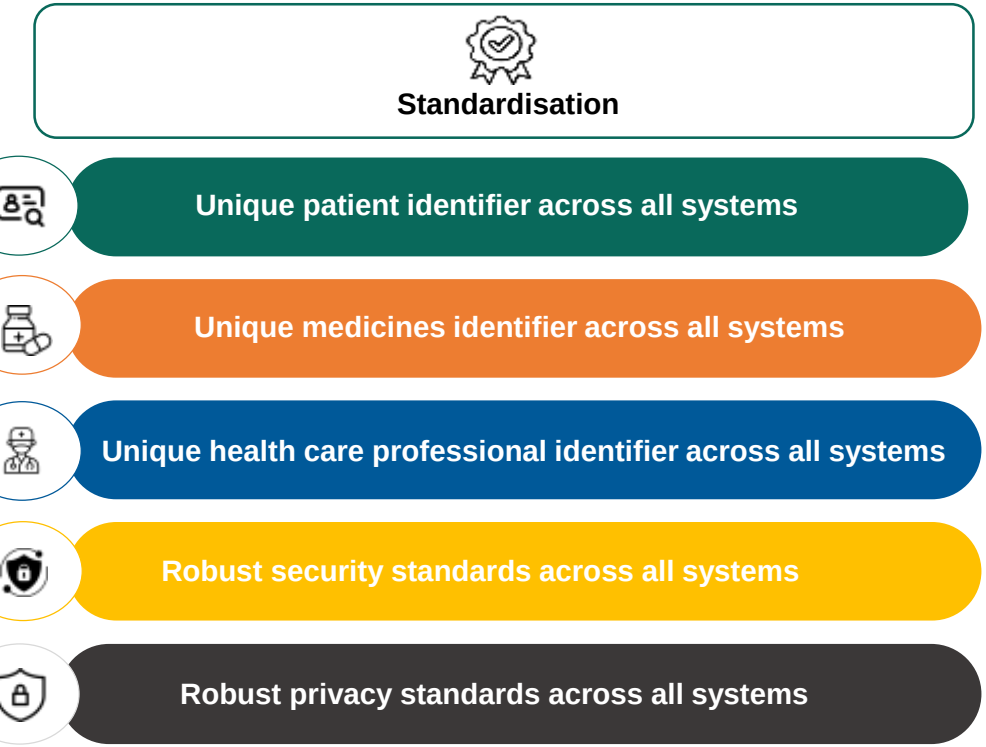


ePharmacy Delivering Digital Healthcare

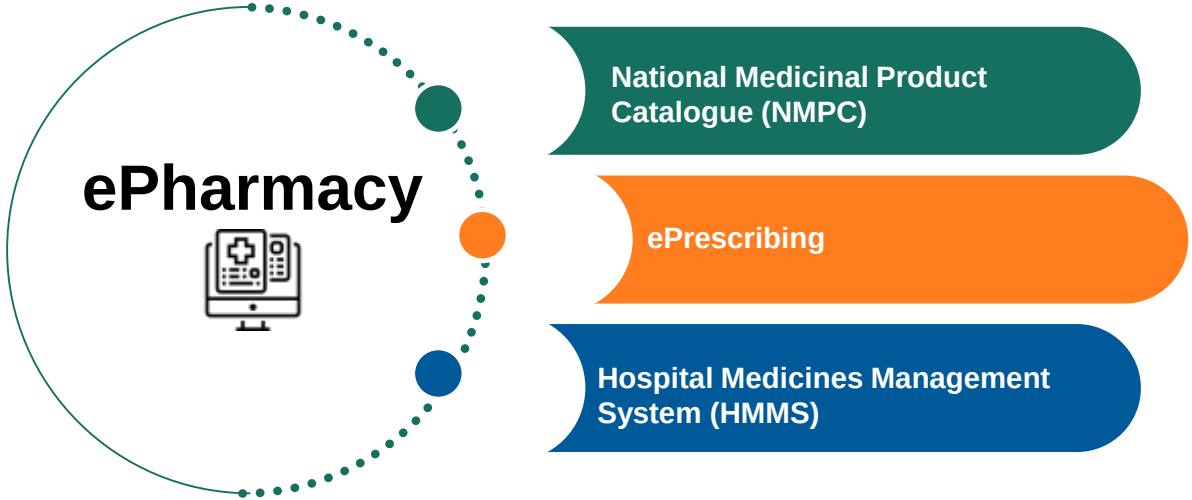
Future Prescribing and Dispensing Digital Flow



Requirements for Robust Digital Data Flow



ePharmacy Introduction



National ePrescribing Project

National ePrescribing Project Vision

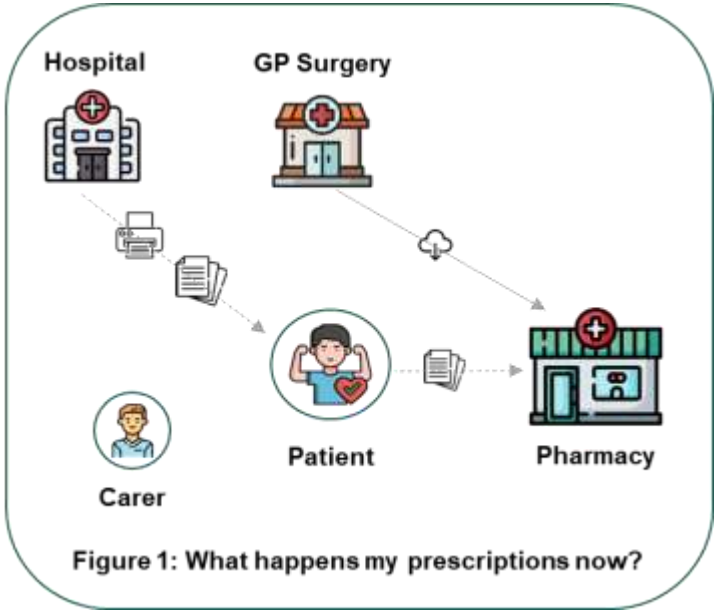


Figure 1: What happens my prescriptions now?

Current State

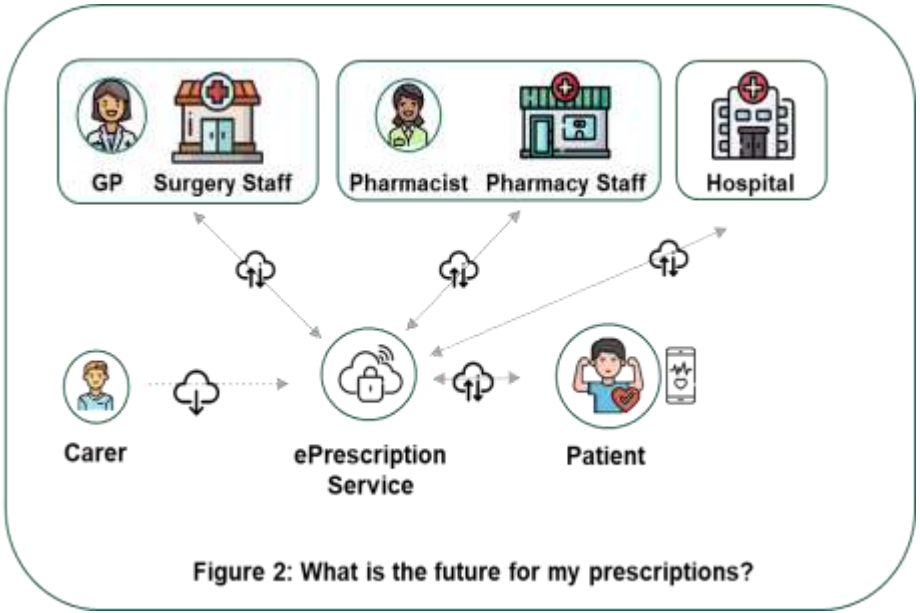


Figure 2: What is the future for my prescriptions?

Future State

What is in it for me?

Patients

I can:

- Digitally access my health information
- Check / view my ePrescriptions and eDispensations
- Order my medicines from my pharmacy
- Order a repeat prescription
- See who has viewed my medicines information

Healthcare Providers

I can:

- Send ePrescriptions to the ePrescription Service
- Cancel an ePrescription
- Amend an ePrescription
- View a patient's full medication list
- Dispense a medication without needing to transcribe from an email or paper
- Save time processing paperwork

Evolutionary pathway

Phase 1

- Build Core
- GP's
- Community Pharmacies
- Patients
- PCRS
- Open NCP Readiness

Subsequent Projects

- Clinical decision support
- Portal

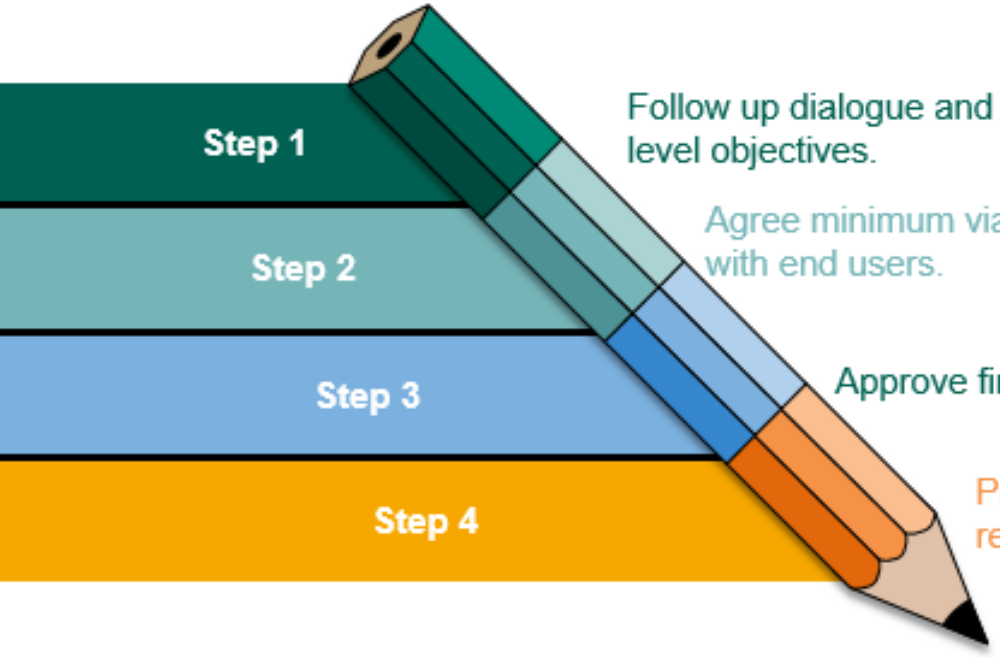
Phase 2 or 3

- Secondary Care

Phase 2 or 3

- Others e.g.
  - Dental
  - Optometry
  - Prison
  - Ambulance Service

Next steps for 2023 / 2024



Follow up dialogue and ongoing engagement with all stakeholders on high level objectives.

Agree minimum viable product, draft future process map and data flows with end users.

Approve final requirement specifications for ePrescription Service

Procurement - publish tender documents, review responses, select vendor for ePrescription Service

Hospital Medicines Management System (HMMS)

What is HMMS?

- HMMS is the national project to **replace the Hospital Pharmacy Departments current legacy software** and **will provide electronic prescribing and electronic medicines administration (EPMA) capability**
- HMMS will **deliver Pharmacy, ePrescribing and eDischarge software to acute and non-acute hospitals**
- HMMS-Pharmacy will be the Pharmacy software **used in facilities where Electronic Health Records (EHRs) are in place or planned** e.g. the Rotunda, CHI and St James
- The HMMS National Office will **support ongoing service contracts, business support, patches, updates, system enhancements and user licenses**

NSP 2023: Key Objective

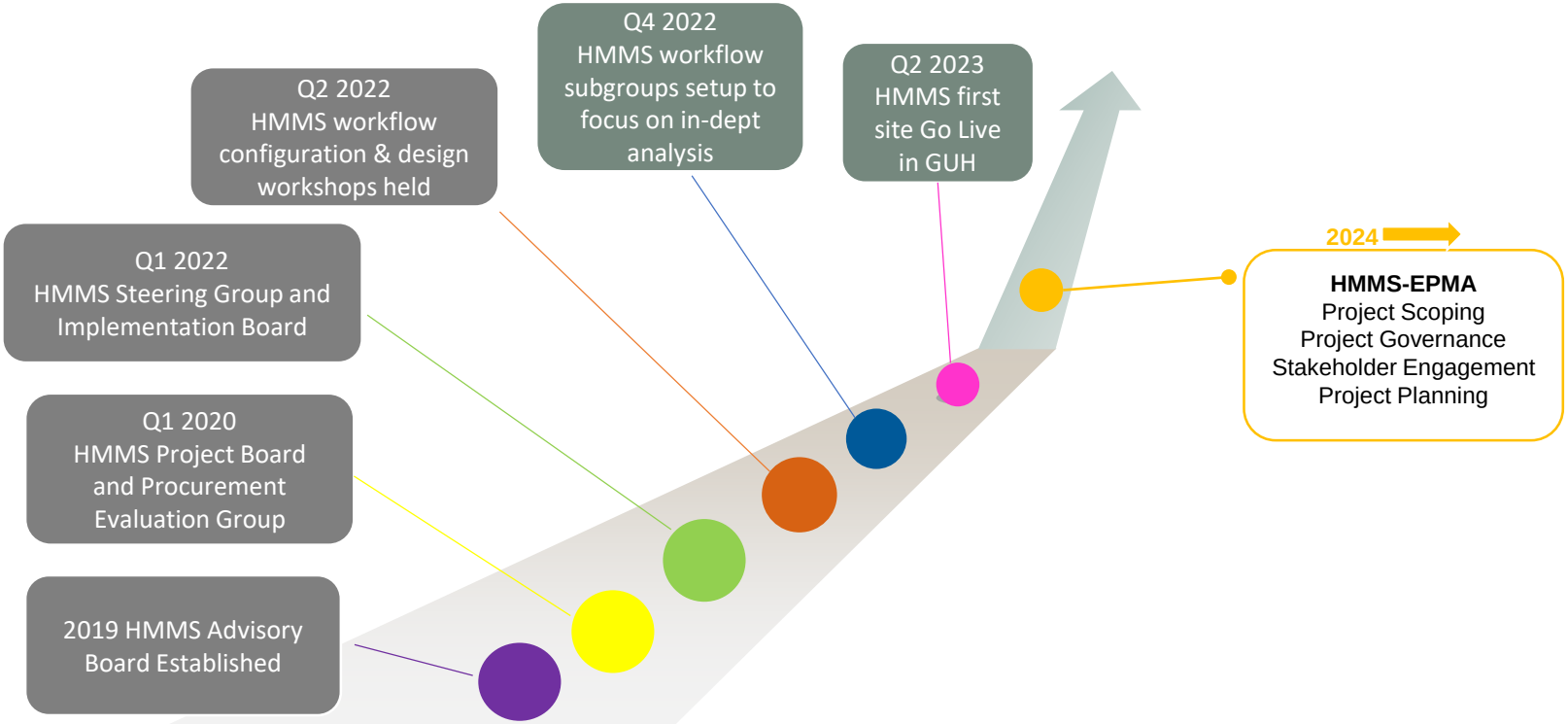
"Support the safe and cost-effective use of medicines through health technolgy and management processes for new medicines and the ongoing clinical management and monitoring, ensuring equity in the provision of existing and emerging medicines / therapies"

HMMS will be offered to all publically funded acute and non-acute hospital sites in Ireland that are currently paying Pharmacy software license fees

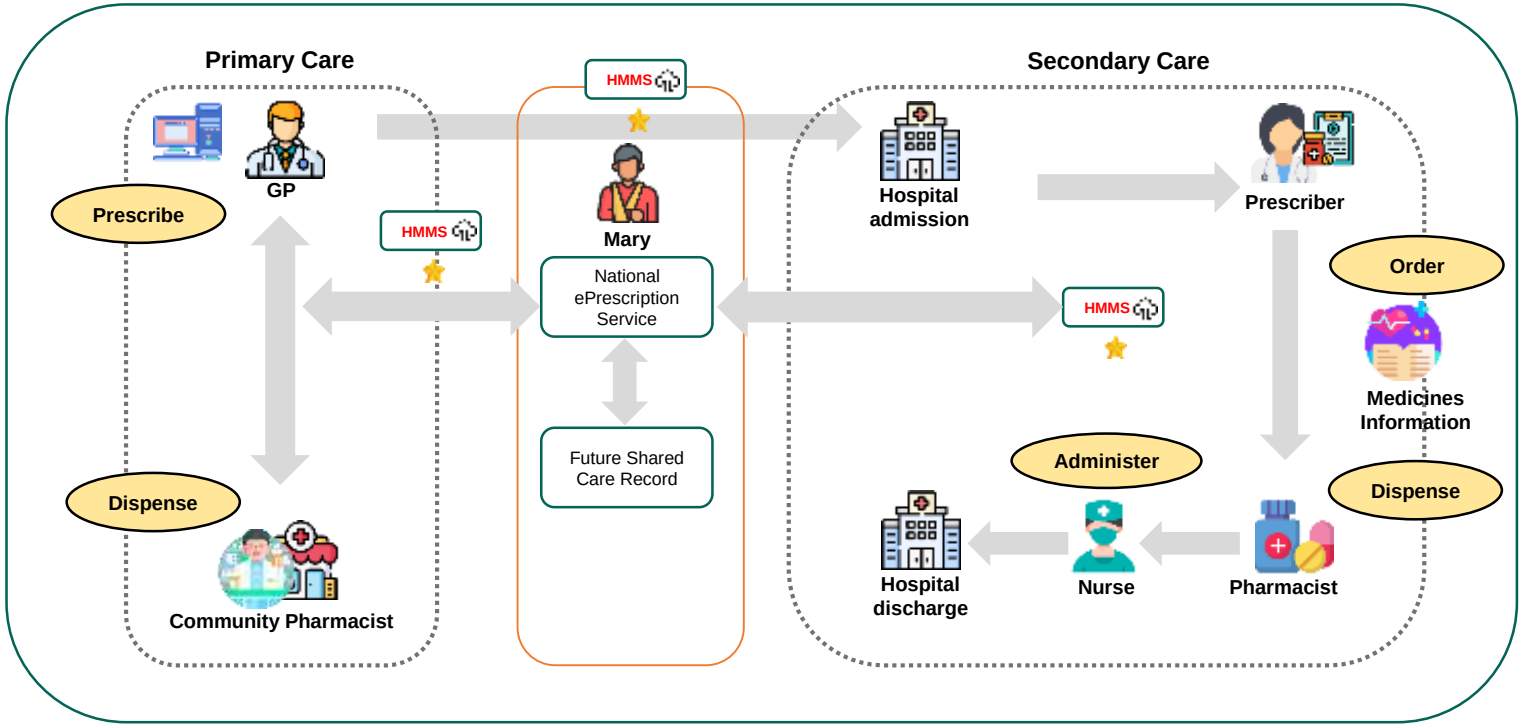
HMMS Functionality

- Comprehensive Software Offering

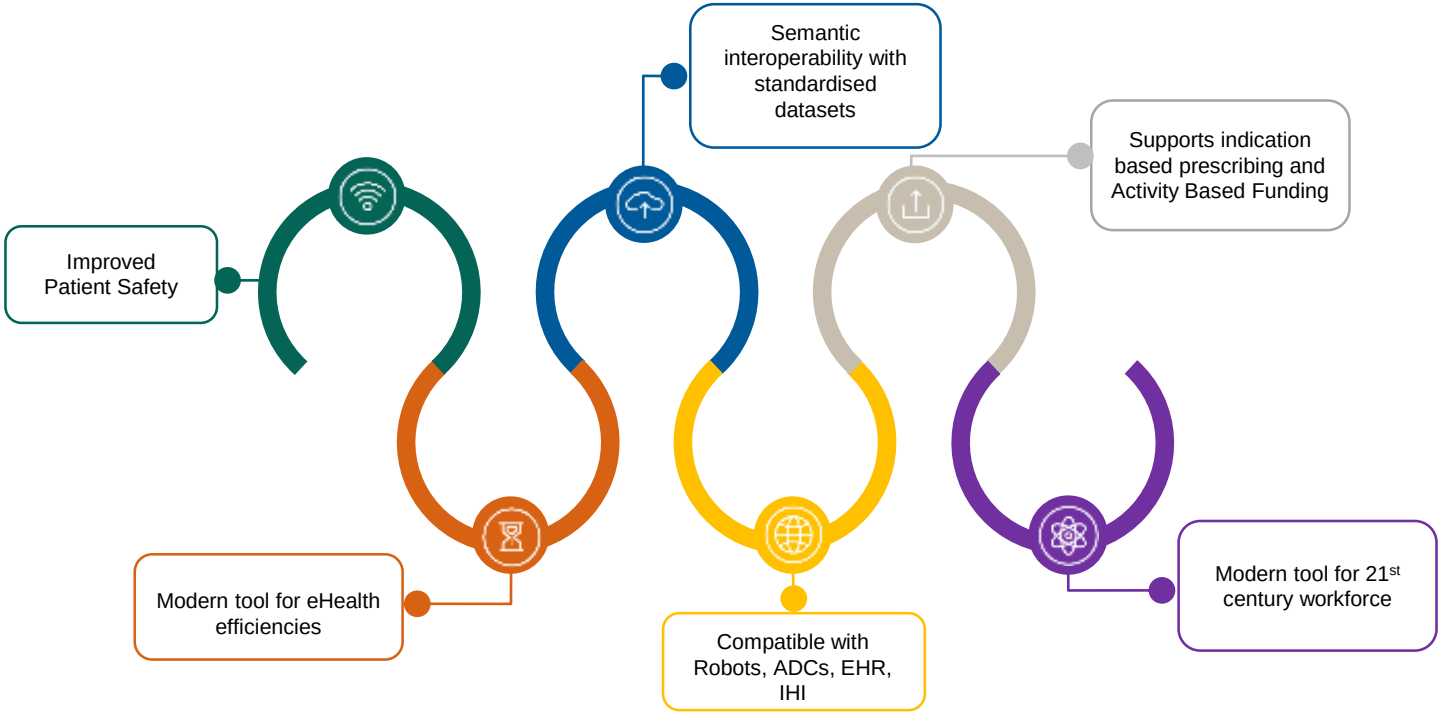
HMMS Key Stakeholder Participation



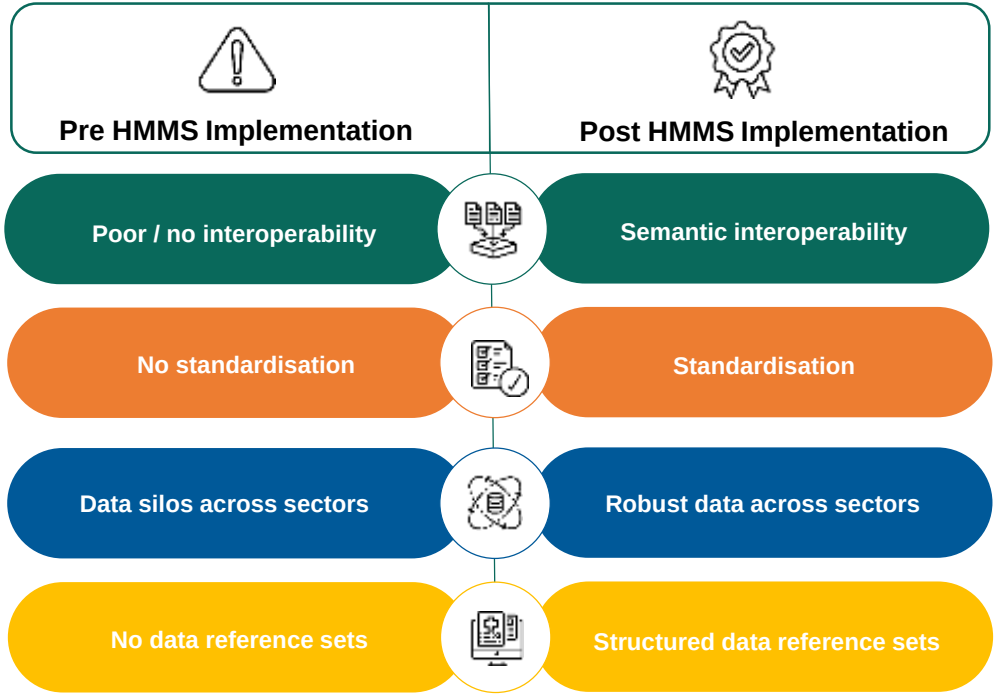
Future Digital Flow with HMMS



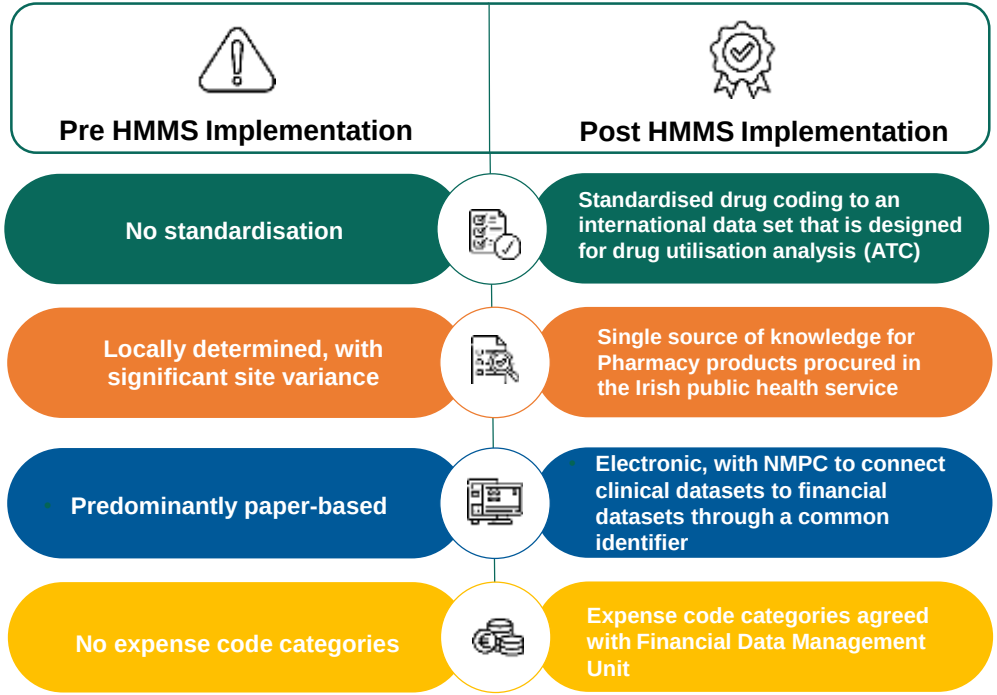
HMMS Benefits



Medicines Data



Financial Data



What is in it for us?

Healthcare Providers

I can:

- View a single patient record of hospital prescribed, dispensed or administered medicines from anywhere in the country.
- Medicines reconciliation on admission through a FHIR standard message from the National ePrescription Service
- Discharge prescriptions through a FHIR standard message to the National ePrescription Service for community pharmacy &/or GP to access.
- Save time processing paperwork
- Prescribe using familiar technology as I used it in my last hospital
- Have Integrated decision support to help my when prescribing complex medicines
- Have a standard workflow for the prescribing, supply and administration of medicines

Questions