better meds

EFFECTS

SIDE

Learnings from digital medication management

28 FEBRUARY 2023, LONDON

---

better meds

Side Effects: Learnings from digital medication management

SIDE EFFECTS: Learnings from digital medication management

Better Meds users came together to share their best practice tips and aspirations in medication management during a special event on 28 February 2023, designed to foster increased shared learning across the NHS.

Here we capture the use cases and best practices that are transforming patient experience while also shining a light on the common barriers that are still thwarting progress towards achieving the goal of seamless, digital flow of medicines information across health and care.

Participants of the **Better Meds Side Effects event** in London

Electronic Prescribing: now and in the future

NHS England has a vision for safer, more joined up care and medicines interoperability is crucial to achieving this. While electronic prescribing and medication administration (ePMA) systems have become a norm in UK hospitals, they often have different workflows and clinical guidelines, causing differences in how ePMA systems are used. This prevents sharing of medicines data across care settings.

Rahul Singal, Chief Pharmacy and Medicines Information Officer, NHS England shared the strategies that NHS England is adopting to tackle this through the Digital and Interoperable Medicines Programme.

TO ACHIEVE SUCCESS THERE NEEDS TO BE:

- **The definition and adoption of interoperable medicines standards to support safer, more joined up patient care**
  These standards must be available across any care settings for true interoperability to be achieved.

- **Increased adoption of the Electronic Prescription Service across all care settings.**
  EPS is enhanced and aligned to national interoperability standards and is available for use by all care settings, with increasing adoption across secondary care; improving patient experience and reducing burden for staff.

It was agreed that there are multiple use cases for EPS across health and care, with clear benefits within outpatients, during discharge from secondary care, in virtual wards and home care settings. However, complexities remain that sit outside of technology. Questions quickly emerged around patient safety and the need for governance and shared prescribing protocols. The communication from community pharmacy back to secondary care prescriber needs to be resolved before this becomes a new model of care.

> ❝ ❞
>
> *I think the use case for EPS is strongest in community service - I think community and mental health services will be the trailblazers on this.*

Rahul Singal
Chief Pharmacy and Medicines Information Officer, NHS England

THE FUTURE

Looking to the future, NHS England aspires to make patient level medicines data from secondary care ePMA systems available to the NHS and research community for secondary uses and research. It is hoped this will reap gains from insights at a population level.

Rahul Singal
at the Better Meds event in London

Use Case: Digital transformation in SLaM and plans for the future

Barbara Arroyo, Interim CCIO, South London and Maudsley NHS Foundation Trust, shared how the trust has been working with Better Meds to shape ePMA use in mental health trusts. The trust went live with Better Meds in 2022 but they have been working in partnership with Better for years to shape ePMA best practice in mental health settings.

Mental health trusts care for patients with the most severe mental health needs and so their care is complex. It covers mental health but also physical health, social care and mental health law.

THE SUCCESSFUL DEVELOPMENT OF THE MENTAL HEALTH EPMA SYSTEM DEPENDED ON:

- **A clinically led but digitally enabled approach**
  SLaM's ePMA is designed to act as a key enabler for providing outstanding patient care. It is clearly linked to the trust's medicines policy and supports prescribing guidelines.

- **Development of an integrated solution to capture patient consent and capacity**
  Consent is particularly important for patients receiving treatment to support mental health conditions, particularly for those detained under the Mental Health Act.

- **'Floor walkers' to assist during go-live**
  A core tactic that the SLaM team attribute to the successful roll-out is the decision to have "floor walkers" - ePMA experts on hand to help problem shoot any issues staff were having and provide additional training support.

- **Integration into existing quality systems**
  SLaM's ePMA has integration with its EPR and the London Care Record so all records are updated, and all teams can access the most up-to-date data.

" "

We had a robust team behind the scenes supporting back-end development and floor walkers at the front end supporting our frontline staff. We hadn't had that model in any of our development deployments before and it was really transformational.

Barbara Arroyo
Interim CCIO,
South London and Maudsley NHS Foundation Trust

Reflecting on the impact that the ePMA has had, Barbara said: *"We've seen time saved, there is less duplication, less interruptions and, with discharges, we are more efficient. It's been like night day for us."*

Use case: Consolidating health data

The driving force behind ePMA integration at Somerset NHS Foundation Trust is to realise the vision for connected care providers and to support and empower patients with the management of their medicines.

David Chalkley, Deputy CCIO and Digital Clinical Safety Lead at the trust, outlined how they are working with Better to develop an interoperable system that pulls in medication data from multiple care providers and presents the data in consolidated views.

IN CONNECTING PROVIDERS IN THIS WAY, PROVIDERS WILL IMPROVE:

✓ **Efficiency**
Significant staff hours saved as data integration removes the need for transcription between systems.

✓ **Communication**
All care providers are aware of current patient data and medications.

✓ **Medications delivery**
Greater continuity of care with oversight of current and historic prescriptions.

The trust is already successfully bringing data from GP records into Better Meds.

Central to this work is the development of consolidated and reconciled timeline views of medicines. This means that frontline staff, regardless of the provider setting, can see what medication a patient is currently taking and understand prescribing decisions. They won't need to look at lists of medications and interpret the information themselves from different providers, the information will be provided for them through the different interfaces.

"

This will never remove the need to have conversations with patients about the medications they take and why they take it, but it will very much augment patient care and medications management.

David Chalkley
Deputy CCIO and Digital Clinical Safety Lead, Somerset NHS Foundation Trust

THE FUTURE

Looking to the future, Somerset NHS Foundation Trust is looking to utilise the Better Data Platform to hold the medicines data. This will enable the team to develop different visualisation tools, unlocking a host of opportunities to interrogate the data and further develop use cases.

ePMA as first aid: rapid wide-scale implementation during the pandemic

The University Medical Centre Ljubljana is the largest healthcare institution in Slovenia, with 8,500 employees and 2,100 hospital beds. Anja Drobne and Ana Kos, both registered nurses from the Intensive Therapy Unit, revealed how the rapid, wide-scale implementation of Better Meds ePMA supported the hospital's COVID-19 response.

Better Meds was implemented within the Intensive Therapy Unit in 2017. However, as the COVID-19 pandemic hit, the University Medical Centre Ljubljana had yet to achieve hospital-wide roll-out. As a result, only a limited number of staff were familiar with the system. When the numbers of patients and staff within the Intensive Therapy Unit dramatically increased, the hospital found itself needing to rapidly train its staff on the ePMA system whilst simultaneously coping with the demands of caring for seriously ill patients.

RAPID CHANGES WITHIN THE HOSPITAL RESULTED IN:

- ✓ The Intensive Therapy Unit expanded with a further 50 patient beds created to care for COVID-19 patients.

- ✓ New staff were brought in to help care for the growing numbers of patients, who had to adapt to the new equipment, workspaces and care programmes.

- ✓ Patient ratios were increased to allow medical students to care for four patients - something that was unimaginable before the pandemic but that became a necessity.

- ✓ Pharmacists were employed within the Respiratory Unit who prepared all the medication enabling nurses to attend to patients.

- ✓ 450 nurses, students and volunteers were quickly trained to use the ePMA.

Due to the ease of use, the hospital found that staff could become confident using Better Meds within just 3-5 days. The team benefitted from efficiency savings and safety benefits at a time when they needed them most.

BENEFITS INCLUDED:

- Issues with legibility of handwriting were eradicated

- In built warning systems alerted staff to medication issues

- Opportunities for mistakes to occur were reduced, improving patient safety

- Reduction in the time taken to prescribe, check, supply and administer medications

- Automatic data collection, from ECGs for example, further saved time

University Medical Centre Ljubljana doesn't have a big digitisation team and so it was frontline nurses training other nurses on the Better Meds system. It took them just 3-5 days to get nurses fully operational on the system - it was so impressive how quickly they rolled this out.

Anja Drobne
University Medical Centre Ljubljana

Experience sharing with order sets

What are the common pitfalls with order sets? While it is recognised that there are many benefits to using order sets, there are still some limitations that need to be considered. In this workshop, we discussed what the key considerations are and what to do to mitigate any risks.

THERE ARE MANY BENEFITS TO USING ORDER SETS. FOR EXAMPLE, IT:

- allows standardisation of prescriptions
- gives non-prescribing roles access to set prescription types
- allows safer prescribing of complex prescriptions, eg IV infusions or syringe drivers
- facilitates faster prescribing of common/uncommon therapies
- enables you to restrict prescribing of certain medicines (that you can't restrict using RBAC).

HOWEVER, IN ORDER TO GET THE MOST BENEFITS FROM ORDER SETS, THEY NEED TO BE SET UP CORRECTLY.

- **Consideration must be given to the creation of order sets.**
  It is important to get the structure right - there are only two levels, one of which can't contain prescriptions. Thought must also be given to the order set group nomenclature, including how this affects the order.

- **Order set maintenance**
  It is important to think about when an order set should/shouldn't be used and to plan how updates will be made on an ongoing basis.

- **Managing usage**
  There are limited ways of restricting access to order sets and so thought should be given to its usage from the outset. Equally, you can't force staff to use them, and it is difficult to audit usage.

Governance was a core topic during the workshop. It was stressed that there is a need for someone to take ownership of the order sets and to ensure they are adequately maintained.

THE GOVERNANCE SHOULD INCLUDE:

✅ Records of what has been built, including details of structure; who built it and why; and, if an order set has been deleted details of why.

✅ Control over who can access, create and delete order sets.

✅ A defined process for creation, checking and duplicating.

Anja Drobne revealing the process of rapid implementation

Hospital at home: how to treat patients outside the hospital

The NHS is heavily investing in virtual wards – at home "hospitalizations" to reduce the burden on hospitals. By the end of 2023, integrated care systems (ICS) are supposed to provide 40-50 virtual beds per 100.000 patients. The investment in the next two years for this endeavour is 450 million GBP.

The issues around how this can work became a hot topic. Concerns were raised around the speed in which virtual wards are to be established, with patient safety and issues around mitigation of risks core discussion points. Here are the highlights from the discussion.

INTEGRATION OF SYSTEMS

Unsurprisingly, issues around integrations between ePMAs, EPS, PAS, and EPR systems were flagged. Virtual ward teams need to be able to access the most up to date medications and patient information.

CONNECTIVITY

Linked to this was issues around connectivity. Areas of the country still without 4G may be unable to support virtual wards if home monitoring equipment does not have sufficient signal strength. Similarly, the inability of community teams to access patient records increases the risks of errors, with the request for ePMAs to have an offline mode where patient information is available, and notes can be inputted.

ROLES AND RESPONSIBILITIES

Complexities remain as to where responsibility lies with management of medicines. It was felt that there isn't the time to solve all the issues quickly and that there needs to be time to establish the right processes and governance to ensure that patient safety is maintained, and any model is fit for purpose.

STAFFING REQUIREMENTS

A significant barrier for the effective use of virtual wards at scale was staff resources. Concern was raised that in order to adequately staff the Hospital at Home model, then there would need to be increases in staff at a time when there is a retention and recruitment crisis. If there are gaps in care cover, what does a patient do? Do they ring out of hours GP or call 999?

ELIGIBILITY OF PATIENTS

"It's not like we're holding onto patients as it. We're trying to discharge them as fast as possible," said one of the attending clinicians, referring to the need for clear criteria for admitting patients onto a virtual ward. Patients are most likely to be admitted following a face-to-face assessment and they are deemed to be stable. For example, it has been proven that in cases of early discharge the model can be effective. Similarly, home care is not a new model for end-of-life patients. However, It is unlikely the model could be applied to all patient cohorts and so care needs as well as the home environment conditions, community support to be taken to establish adequate screening criteria.

Trusted by the leading UK health organisations

NHS
The Christie
NHS Foundation Trust

NHS
Wye Valley
NHS Trust

NHS
Oxford Health
NHS Foundation Trust

NHS
South London
and Maudsley
NHS Trust

NHS
Somerset
NHS Foundation Trust

NHS
South Tees Hospitals
NHS Foundation Trust

NHS
University Hospitals
Plymouth
NHS Trust

NHS
Dartford and
Gravesham
NHS Trust

NHS
Herefordshire and
Worcestershire
Health and Care
NHS Trust

NHS
North Cumbria
Integrated Care
NHS Foundation Trust

Healthier
**Lancashire &
South Cumbria**

ONKOLOŠKI INŠTITUT
INSTITUTE OF ONCOLOGY
LJUBLJANA

univerzitetni
klinični center ljubljana
University Medical Centre Ljubljana

Better data, better care.

better

Better d.o.o.
Štukljeva cesta 48
1000 Ljubljana
Slovenia

www.better.care

Better Ltd
Capital Quarter No.4
Tyndall Street, Cardiff,
Wales, CF10 4BZ

info@better.care

Better Deutschland GmbH
Ballindamm 39
20095 Hamburg
Germany

@BetterCareIT