

# ToolboxSync

A solution to share guidelines with all clinical staff

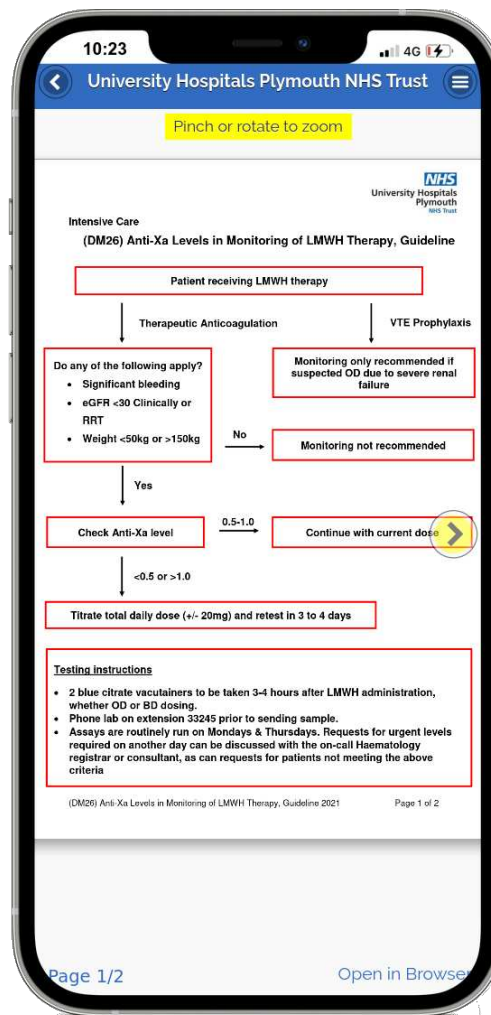
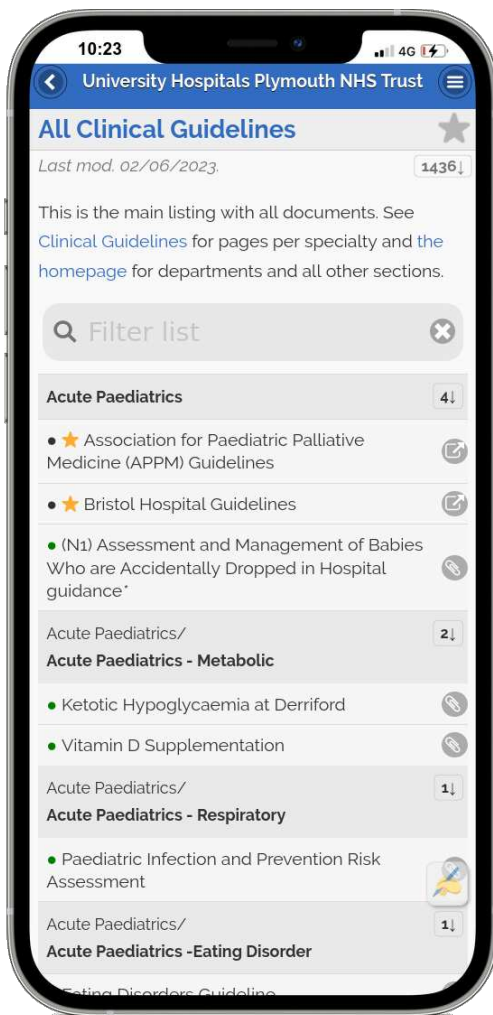
Katie Hooper, UHP Audit, Assurance and Effectiveness Lead

Dr Nanette Bothma, UHP Chief Medical Information Officer

Dr Will Barker, Health Toolbox founder

Petko Yotov, Health Toolbox software architect





▲ 4 duplicate or orphan entries | 📅 194 unknown expiry dates | 📄 CSV export

Show: ☒ valid ☒ due for review ☒ expired ☒ N/A ☒ unknown

Filter list	
Acute Paediatrics +	Edit dates
★ Association for Paediatric Palliative Medicine (APPM) Guidelines	N/A
★ Bristol Hospital Guidelines	N/A
(N1) Assessment and Management of Babies Who are Accidentally Dropped in Hospital guidance*	Nov 2024
Acute Paediatrics/	
Acute Paediatrics - Metabolic +	Edit dates
Ketotic Hypoglycaemia at Derriford	Dec 2023
Vitamin D Supplementation	Dec 2023
Acute Paediatrics/	
Acute Paediatrics - Respiratory +	Edit dates
Paediatric Infection and Prevention Risk Assessment	Sep 2023
Acute Paediatrics/	
Acute Paediatrics -Eating Disorder +	Edit dates
Eating Disorders Guideline	Dec 2023
Adult Pain Management +	Edit dates
Acute Neuropathic Pain Guidelines	Jul 2023
Acute Pain Assessment Tool for Adult Patients	Jul 2023
Administration of Entonox for Acute Pain in Adult & Paediatric Patients	May 2023
Administration of IV Morphine in Acute Care Areas - Supporting Information Pack	Jul 2023



# What is ToolboxSync?

Document Management System (DMS) by **Health Toolbox**

- Automated synchronisation of a shared folder with Clinical guidelines
- Seamlessly integrated with your Toolbox website and mobile apps

Simplifies:

- Distribution of clinical documents to staff
- Communication to staff
- Identification and anticipation of needs
- Review, update, recall of documents
- Availability and accessibility for staff
- Security



# Context

How does your Trust manage clinical guidelines?

- What software authoring tools are used?
- Which guidelines expire in the next 3 months?
- Does *all* staff access *only* the latest versions?
- How are guidelines promoted to new staff?
- Where is the guidelines repository?
- What is the review and update process?
- Can your staff access guidelines onsite and offsite, and from mobile devices?

**ToolboxSync** adapts to the existing workflows of your teams, and improves the distribution, review, update, communication, and accessibility of important clinical documents.



## Context: Types of documents

Typically, clinical documents accessed by staff can be of several categories:

Authored by the Trust:

- Specialty guidelines, department protocols
- SOP, DTC, PGD, PIL, Community guidelines
- Newsletters, incident reports
- Local software documentation, video tutorials
- Forms

Authored externally:

- National guidelines (PDF)
- Hyperlinks to online resources
- Medical equipment documentation

**ToolboxSync** supports all these formats and additional metadata.



## Context: Authoring guidelines

In a typical Trust, clinical guidelines are:

- Produced and updated by specialty committees
- Authored / updated in desktop word processor
- Review / expiry dates per document
- Exported to PDF for distribution to staff
- National guidelines in PDF format may be included
- Some departments may use specific publishing tools (Power apps, Microguide)

With **ToolboxSync** adoption:

No change or training required

No change or training required

Yes + filters, reports, exports, notifications

No change or training required

No change or training required

No change required. **Interconnection**  
or migration may be possible.



## Context: Reviewing / updating guidelines

Who coordinates document updates?

- Dedicated staff, or "someone" from departments?
- Able to quickly identify all guidelines due for review?
- Are people notified and review meetings scheduled?

What happens if...

- A document beyond its expiry date?
- Multiple copies of the same file?
- Different departments need the the same guideline?
- Documents without expiry dates?

**ToolboxSync:**

No change required

Yes, filter list, CSV export, report

Automated notifications

Flagged or hidden, auto-notification

Automatically detected and flagged

Cross-reference files in other folders

Categories "Never expires", "Unknown"

# ToolboxSync: Distributing guidelines to staff

What we would expect from you:

- Shared local network folder, with all *current* guidelines in PDF format
- Subfolders and files per department or per specialty
- Coordinator from the Trust to organise and monitor the shared folder
- IT department to help with the initial configuration





# ToolboxSync: Distributing guidelines to staff

What you can expect from us:

- Automated synchronisation of the shared folder with your Toolbox website and user apps
- Documents removed from the shared folder auto-delete from the Toolbox website and user apps
- Automated notifications for documents due for review
- Direct access from Trust intranet/EHR, individual user accounts for personal devices
- Improved availability, accessibility, search, including on mobile devices
- Reports on usage statistics, page popularity, and search trends
- Bespoke communication tools, reports, posters, QR codes



# Acute Limb Ischaemia

## Background:

- 1.1 Acute limb ischaemia is the sudden onset of severe ischaemia of either upper or lower limb in a previously well perfused limb.
- 1.2 It is most commonly due to an arterial embolus secondary to atrial fibrillation but may also be due to occlusion of an aneurysmal or otherwise diseased native artery, trauma or occlusion of a pre-existing arterial graft.

## Presentation:

# Case study: University Hospitals Plymouth

## Context:

- Acute teaching Trust, 10,000 staff, multiple locations
- Major Trauma centre, specialist surgery services
- Population of 475,000, wider peninsula ~ 2 million
- Community healthcare coordination (STP, ICB)

## Environment:

- Paper-based Trust, starting our digital journey
- Recently implemented Electronic Patient Record
- Multiple intricate IT systems that pose usability challenges



# Case study: University Hospitals Plymouth

## Challenges and concerns:

- Locating and accessing clinical documents is not apparent and straightforward
- Central drive with a fraction of the Trust documents, workload for maintenance and governance, little clinical engagement / ownership, some outdated documents
- ~400 ED guidelines: in-house website, not easily discoverable, onerous to maintain
- Other service lines: guidelines on isolated network drives only accessible from specific locations
- Community healthcare: some sensitive documents ended up on the patient-facing Trust website
- Risk for adverse effects on patient care if guidance cannot be accessed or if different teams use differing clinical approaches



# Case study: University Hospitals Plymouth

Four options:

1. Do nothing and the risks and concerns persist
2. Update UHP Beacon app developed in-house
  - Used for Gynaecology Guidelines
  - Major changes in authoring workflows
  - Not restricted to verified UHP staff
  - Costs for Microsoft Azure platform licence and even one "junior" software developer would be very high
3. Evaluate **Health Toolbox**
4. Increase Microguide app subscription
  - Used for Antimicrobial Guidelines
  - Major changes in authoring workflows
  - Not restricted to verified UHP staff
  - Costs increase with each new department added



## Case study: University Hospitals Plymouth

**Health Toolbox** was evaluated by the Trust IM&T Solutions Architect, and by the Chief Medical Information Officer.

- 60-day successful pilot with ED documents, and SeeEHR (intranet) integration.
- Cost-effective as capacity and capabilities aligned with Trust needs. Only financial impact: annual fee. Once installed, no additional equipment, IT support costs, or staff are required.
- Easy to use, widely deployed in other organisations, Junior Doctor handbooks, QIPs.
- Allows for multiple office and media formats, including video for training purposes.
- Allows for consistent, accessible, and current information.
- No change in authoring workflows for Clinical guidelines.
- Access can be restricted to authenticated Trust staff.



# Case study: University Hospitals Plymouth

Sync folder feature:

- Huge benefit as no change in team process
- Continue to drop revised documents into the shared drive
- Automatically synchronised into the Toolbox website and app
- Started with 300-400 documents, currently 1500+
- Rarely needed guidance, pathways are now easily available to all staff
- Ability to link to external resources which we couldn't do before
- Cross-link files from other departments



# Case study: University Hospitals Plymouth

Cross-link feature:

- One guideline can be cross-referenced into other folders
- Helps accessibility for people using their own department sections
- Reduces maintenance workload as only one file to update/replace
- Reduces clinical risks of different files managed by different people with slightly different versions





# Case study: University Hospitals Plymouth

Posters, reports, and QR codes feature:

- These are automatically generated from your content and screenshots
- Can be customised before exporting to PDF or printing
- Put posters up in Doctors' Mess, Post-graduate centre
- Laminated deep-link QR codes in services
- Embed deep-link QR codes into printed health record documentation: protocols can be scanned on a phone and brought up when needed
- People suggest other uses, ask for their own QR codes



# ToolboxSync: Bespoke tools for communicating to staff



The collaborative local knowledge resource for University Hospitals Plymouth NHS Trust



### Your Toolbox

- + 75 pages and subpages
- + 48 attached documents
- + 16 embedded videos
- + 1320 edit revisions on pages in 6 months (June 2023)

### Popular sections

- + ED and UTC/MIU Guidelines
- + Clinical Guidelines
- + Neonatal Guidelines
- + Contacts
- + Maternity & Obstetrics Guide...
- + Antimicrobial Guidelines (Mi...
- + NICE Guidelines
- + Departmental information

### Your Team

**Toolbox Champion:**  
Katie Hooper, A&E Lead

- + 2 administrators
- + 18 editors (apply to join!)

### Contacts directory

**135 contacts, including:**

- + 112 tel/ext. numbers
- + 36 bleep numbers

**in 7 categories, including:**

- + Ward contact information
- + OnCall Specialties
- + Emergency Department
- + Imaging

### Your App

- + Find bleeps, dial extensions
- + Shared resources & podcasts
- + User bookmarks
- + Available offline, searchable
- + Daily automatic updates

### Clinical guidelines

**1614 documents in 28 categories, including:**

- + Emergency Department
- + Neonatal
- + Medical Guidance
- + Maternity & Obstetrics
- + Critical Care
- + Surgical Guidance


**Download your Local knowledge Toolbox now!**

Toolbox [...] is an excellent innovation which I feel will significantly transform the perennial issues faced by junior doctors and hospitals in general.

Professor Sir Bruce Keogh, NHS medical director 2007-2013

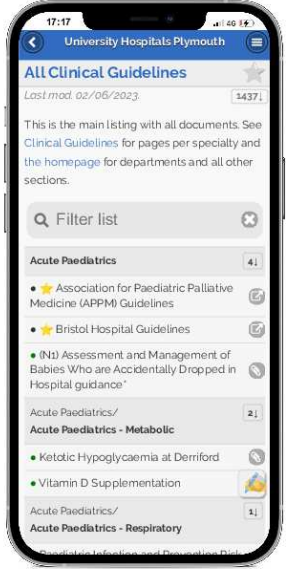


Katie.Hooper@nhs.net | support@dr-toolbox.com | www.health-toolbox.com/UHP | @HealthTbx



Need help starting your new job?

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### The collaborative local knowledge resource for University Hospitals Plymouth NHS Trust

*Toolbox [...] is an excellent innovation which I feel will significantly transform the perennial issues faced by junior doctors and hospitals in general.*


Prof. Sir Bruce Keogh, NHS medical director 2007-2013

Katie.Hooper@nhs.net  
support@dr-toolbox.com | @HealthTbx  
www.health-toolbox.com/UHP




health-toolbox.com/UHP


Download the tools for your clinical environment now!




Your **Toolbox** has information about:  
UHP /  
Clinical Guidelines




HTBx.app/UHP/ClinicalGuidelines  
Direct link to website page. Registration required.  
Mobile app available for portable access.




Your **Toolbox** has information about:  
UHP / Clinical Guidelines /  
ED and UTC/MIU




HTBx.app/UHP/EmergencyDepartment  
Direct link to website page. Registration required.  
Mobile app available for portable access.



Your **Toolbox** has information about:  
UHP /  
Departmental Informati...



HTBx.app/UHP/Departments  
Direct link to website page. Registration required.  
Mobile app available for portable access.



Your **Toolbox** has information about:  
UHP /  
Staff Wellbeing



HTBx.app/UHP/StaffWellbeing  
Direct link to website page. Registration required.  
Mobile app available for portable access.

# Case study: University Hospitals Plymouth

## Autologin feature:

- Most useful feature for clinicians in the patient care area
- One-click access from a Trust desktop computer and from the intranet
- No need to create an account or to sign in, no extra step
- Most of the daily users currently access the UHP Toolbox in this manner

## Bulk-registration feature:

- Notified clinical directors of 4 care groups, distribution lists, about this next step
- Bulk-uploaded 1500-2000 user accounts, consultants, midwives, nurses, trainees...
- Accounts are only needed for access on personal devices, or for editing



# Case study: University Hospitals Plymouth

Health Toolbox one-click password-less access from the SeeEHR (intranet) front page:

The screenshot shows the SeeEHR front page with a blue header bar. The header contains the SeeEHR logo, a search bar, and a navigation menu. Below the header, there are five teal buttons: 'Open Ward/List', 'CPL', 'SeeEHR Forms', 'Salus Forms', and 'Health Toolbox'. The 'Health Toolbox' button is highlighted with an orange box. Below the buttons, there are three main sections: 'Last Viewed Lists', 'Bookmarked Patients', and 'Last viewed Patients'. The 'Last Viewed Lists' section contains a list of wards with their established beds. The 'Bookmarked Patients' section shows 'No bookmarked patients'. The 'Last viewed Patients' section shows a list of patients with their names, dates, and icons for login, home, and more options.

https://see-ehr.plymouth.nhs.uk/home

University Hospitals... Epic Cerner System C SeeEHR General EPR info PKB ServiceNow Change Manageme... Planning Portal Data Dictionary Project 3-Hospital... Synbiotix : Helpdes... Homepage Digital healthcare ~...

SeeEHR Connecting patients, clinicians and you.

Search

Open Ward/List CPL SeeEHR Forms Salus Forms Health Toolbox

Last Viewed Lists

- VW – ED to Home Established Beds: 1
- VW - Virtual Ward Hub Established Beds: 1
- Acute Assessment Unit - Zone B Established Beds: 0
- VW - Hospital to Home Established Beds: 0
- VH COVID Established Beds: 0
- Argyll Ward (Adults) Established Beds: 27

Bookmarked Patients

No bookmarked patients

Last viewed Patients

- Mr. [Name] - 01/01/2024
- Mr. [Name] - 01/01/2024
- Mr. [Name] - 01/01/2024
- Mr. [Name] - 01/01/2024

# Case study: University Hospitals Plymouth

Search feature:

- Instantly locates documents by simply typing in a search box
- Finds matching documents in different departments
- Allows to not only focus on your own area, but see if something else is available

Search cloud feature:

- Shows what people are looking for, what they need
- The font size represents the number of searches, search trends
- The terms link to the results of the searches
- Allows to identify and address immediate needs



## ToolboxSync: Recent Search Cloud

hyponatraemia formulary last days covid humidity sepsis pem ciwaa restraint  
induction heparin ucam miscarriage uptodate hipp res psp end of life oncology  
patient group directions policy renal hypercal haemorrhage resuscitation pic confusion rhesus  
self administration pe embolism restraint policy central line removal central vascular catheter  
probiotic maternity alcohol hypokalaemia potassium  
extravasation watch nstemi naloxone angina upper intranet  
display screen assessment hyponatremia pil pil- hyperkalaemia  
acs protocol intravenous orthopaedics head injury pulmonary acs rectal  
vascular plasma exchange catheter infection control tonsillitis chest trauma  
antibiotics antibiotic ferinject acute pain ng tube hypokal

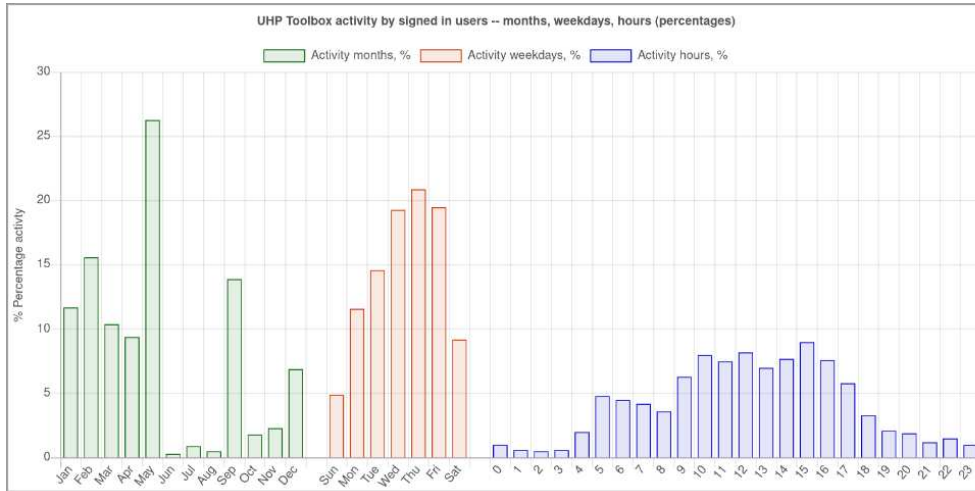
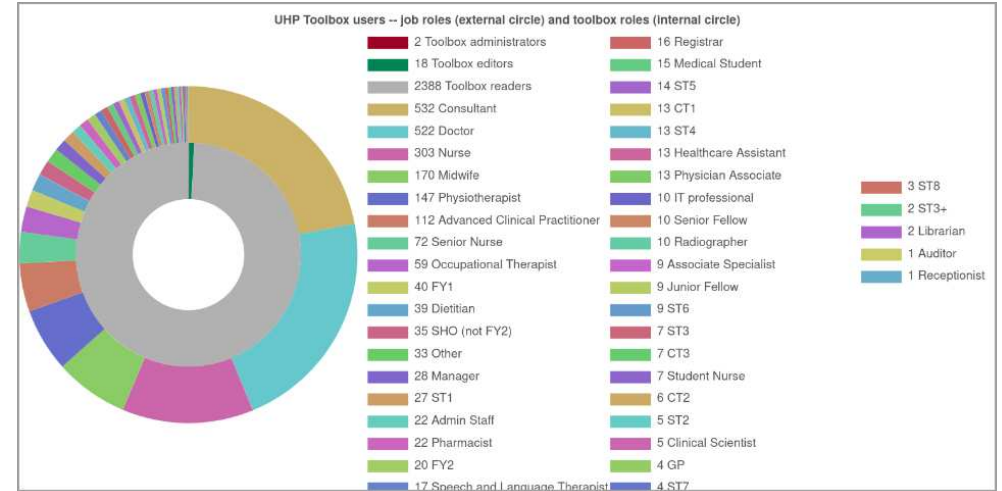
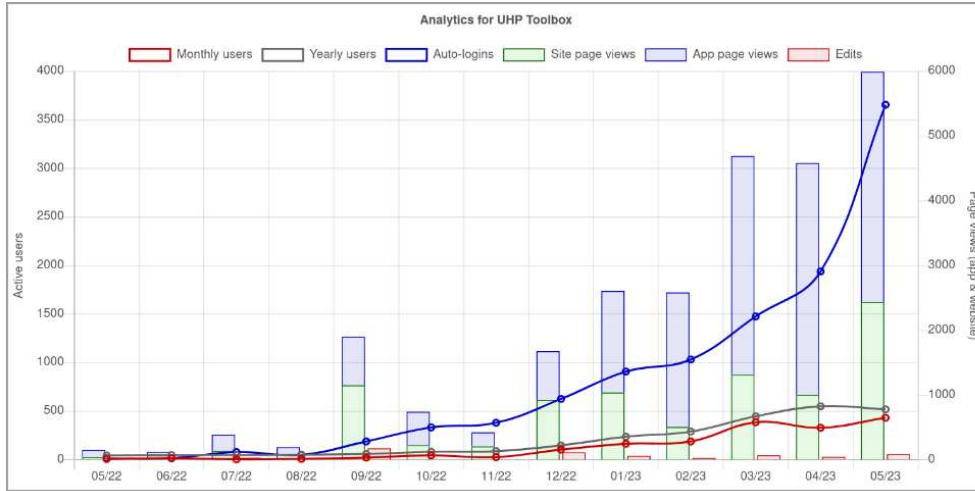
# Case study: University Hospitals Plymouth

Built-in tools for monitoring and oversight:

- Analytics - page usage hits in real time, monthly activity stats
- Colour coded expiry dates with filtering
- CSV spreadsheet export with all expiry dates
- List with recently added documents with their expiry dates
- Automated notifications for documents due for review
- Search cloud to identify and address immediate needs
- Access control delegation and self-management

Result: reduced administration workload





UHP stats (CSV)	05/22	06/22	07/22	08/22	09/22	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23
Monthly users	9	16	5	10	22	46	27	105	165	189	387	330	433
Auto logins	15	17	80	51	189	334	382	627	909	1033	1477	1940	3657
Yearly users	44	49	50	53	60	83	89	149	238	291	448	551	520
Total page views	155	124	390	197	1903	743	426	1681	2610	2587	4696	4587	5996
App page views	110	57	252	116	750	516	218	754	1568	2080	3380	3581	3557
Site page views	45	67	138	81	1153	227	208	927	1042	507	1316	1006	2439
Page edits	3	1	33	11	179	1	1	117	63	29	71	48	90





# Case study: University Hospitals Plymouth

## Self management:

- ED already self manage since the pilot
- Clinical education, embedded videos
- Pharmacy, PDG, reports
- Critical care, competencies
- Other departments will be getting edit access to self-manage their sections

## Other uses:

- Strike action folder: quick access information about clinical systems
- Staff working at offsite locations, community midwives



# Case study: University Hospitals Plymouth

## Lessons learned:

Comms, comms, comms

- ↳ Visibility
- ↳ User engagement
- ↳ People see benefits
- ↳ Ideas for improvement
- ↳ Delegation, Self-management
- ↳ Reduced administration workload

QIPs started, gathering feedback before and after changes on Toolbox

## Instrumental ToolboxSync features:

- Availability, including offsite and on mobile
- Autologin from clinical care area
- Search function, Cross-linking
- Automation, Notifications
- No change in team process
- Communication, Posters, QR codes
- Monitoring, Analytics, Search cloud



Documentation in our Help centre:

[health-toolbox.com/ToolboxSync](https://health-toolbox.com/ToolboxSync)

Contact us:

[support@dr-toolbox.com](mailto:support@dr-toolbox.com)



