



Make DAWN work for you

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Introduction

June 2016 Barts Health NHS trust (Whipps Cross, The Royal London & St Barts Hospitals) finally upgraded from DAWN version 6.0 to DAWN version 7.9

Once familiar and practised with how DAWN worked we began to think about some modifications that would allow us to manage our clinics more efficiently, improve patient safety and develop the service for the future





The main reasons for change

As daily, weekly & monthly tasks were time consuming and inefficient

To standardise practice and develop Standard Operating Procedures (SOPs) for all processes

For medical & clerical staff to be trained and all using the same system which would ensure continuity of care and enhance patient safety

To be able to identify patients into various special groups

So that future audits and trials would be easier to perform and identify where service development or change is required





Processes implemented to identify specific groups of patients

Route cause analysis (RCA)

Community discharges

Inpatient status

BMI – not suitable for NOACs

Recording side effects

Identifying patients for trials





Implementation of guidance for NICE and Chief Medical Officer

CQUIN (Commissioning for Quality and Innovation) 2007

95% of all adult inpatients (including day cases) should have a recorded risk assessment

All patients should be reassessed at within 24 hours of admission

RCA investigations for all possible hospital acquired VTE within 30 days of diagnosis





Reporting RCA

From F5 management screen – lookup tables – diagnosis

In diagnosis group select VTE for any diagnosis that includes a DVT, PE, VTE or thrombotic event

Any patient requiring a Route Cause Analysis (RCA) will appear on the list using filter “RCA needed”

Search from new patient clinic on or after today’s date

This needs to be done before the patient is seen and ultimately moved into another clinic

From the list go into patient details and copy the MRN/hospital number into the hospital CRS record

Look to see if the patient has had an admission prior to the recent VTE event <90 days ago


Go into the intranet for the Clinical effectiveness Unit (CEU) and select RCA tool

Split screen so that all patient information can be seen and entered on the CEU programme

On DAWN mark the event “RCA completed”

Once this is done the patient will disappear from the list





Route cause analysis (RCA)

http://10.117.246.157/?Screen=FrameSet&SID=5D3867B06404151F5B4ACDBFC7670294&PageID=0 - 4S Dawn - Internet Explorer

Close all Tabs System Menu Patient Search Help

List view

With RCA needed

All (All patients)

(All risk classes)

(All diagnoses)

(Any target range)

All Whipps Cross New Patient Clinic (

On or After 20/09/2017

(All roles)

Work List Post Clinic Check Messages Non Attendance Clinic Summary Status Annual Review Reminders Events No Next Test Date

Filter With RCA needed

Clinic All Whipps Cross New Patient Clinic (WHIPPS)

Date On or After 20/09/2017

29 records found.

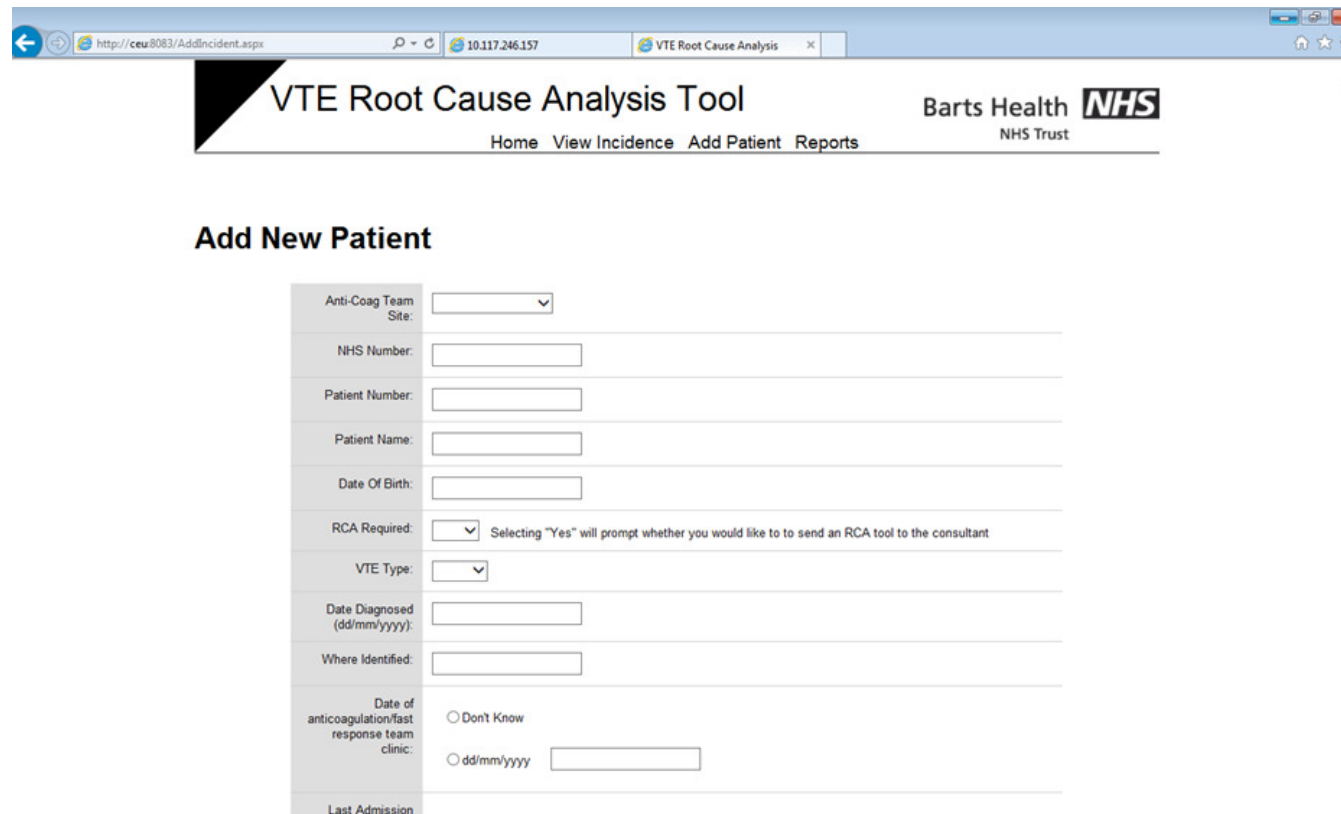
Name	Test Date	Time	INR	Target	TIR	Drugs	Events	Procedures	Reviews	Post code	Risk Class	Sample
	22/09/2017	14:00	0.00							E12 SEJ	High	
	22/09/2017	14:15	0.00							E18 2QL	Unclassified	
	22/09/2017	14:30	0.00							E4 6QR	High	
	22/09/2017	14:30	0.00							IG10 2BB	High	
	22/09/2017	14:45	0.00							E11 4HG	High	
	27/09/2017	14:00	0.00							E4 8HW	High	
	27/09/2017	14:00	0.00							IG9 SRW	High	
	27/09/2017	14:15	0.00							E17 4LJ	High	
	27/09/2017	14:30	0.00							E18 1PZ	High	
	27/09/2017	14:45	0.00							E10 5LY	High	
	27/09/2017	15:00	0.00									
	27/09/2017	15:00	0.00							E11 2AQ	High	
	29/09/2017	14:00	0.00							IG9 6HLJ	High	
	29/09/2017	14:00	0.00							E4 6UG	High	
	29/09/2017	14:15	0.00							IG8 8BL	High	
	29/09/2017	14:30	0.00							E4 6YE	High	
	29/09/2017	14:30	0.00							E10 5LR	High	
	29/09/2017	14:45	0.00							E10 7EQ	High	
	29/09/2017	15:00	0.00							IG95TB	Unclassified	
	02/10/2017	14:30	0.00							E17 7HE	High	
	04/10/2017	14:00	0.00							E11 2NA	High	
Plum, Professor	04/10/2017	14:00	0.00							ABC DEF	High	
	04/10/2017	14:15	0.00							E11 2NA	High	
	04/10/2017	14:30	0.00							E18 2QQ	High	
	04/10/2017	14:45	0.00							E18 1LW	High	
	04/10/2017	15:00	0.00							E17 3PH	High	
	06/10/2017	14:00	0.00							IG8 8GN	High	
	06/10/2017	14:15	0.00							E17 5DF	High	
	25/10/2017	14:00	0.00							IG8 9PH	High	

OK Print

100%



Route cause analysis (RCA)



The screenshot shows a web browser window with the URL `http://ceu.8083/AddIncident.aspx` and the IP address `10.117.246.157`. The page title is "VTE Root Cause Analysis Tool". The header includes the Barts Health NHS Trust logo and navigation links: Home, View Incidence, Add Patient, and Reports. The main section is titled "Add New Patient" and contains a form with the following fields:

Anti-Coag Team Site:	<input type="text"/>
NHS Number:	<input type="text"/>
Patient Number:	<input type="text"/>
Patient Name:	<input type="text"/>
Date Of Birth:	<input type="text"/>
RCA Required:	<input type="text"/> Selecting "Yes" will prompt whether you would like to send an RCA tool to the consultant
VTE Type:	<input type="text"/>
Date Diagnosed (dd/mm/yyyy):	<input type="text"/>
Where Identified:	<input type="text"/>
Date of anticoagulation/fast response team clinic:	<input type="radio"/> Don't Know <input type="radio"/> dd/mm/yyyy <input type="text"/>
Last Admission	<input type="text"/>



Route cause analysis (RCA)

http://10.117.246.157/?Screen=FrameSet&SID=5D3867B06404151F5B4ACDBFC7670294&PageID=0 - 4S Dawn - Internet Explorer

Close all tabs System Menu Patient Search Help Anticoagulation

Patient X

Plum, Professor - 01/04/1930 - WH22222 - Cluedo Lodge

Risk class: High
Pref. clinic: Whipps Cross New Patient Cli
Phone: - home
Age: 87

Diagnosis: Pulmonary Embolism From Vq Sca
Target Range: None
Start date: 03/08/2017 - 26 wks. Due to stop: 01/02/2018
Anticoagulant: Rivaroxaban 20mg od
Treatment Plan: 1 of 1 active
Risks:

Other events

Event	Severity	Date	Notes
RCA completed	High Risk/severity	07/09/2017	

TEST PATIENT

Graph History Personal Treatment plans Questionnaires Test Results Interface Warnings

There are no items to display

Add history data

New Save To list Print

1 / 9 (Show all)

javascript:GetParent().DoAction('SelectTab','Tab_Events')

DAWN CLINICAL FRAMEWORK 7.9





Community discharge process

Patients are identified by their postcode – DAWN has excluded any postcodes not required (Redbridge & Waltham)

Patients are on life long treatment

Certain patients by their diagnosis are excluded – marked as an event “not for community discharge”

Particular patients are just not suitable due to history of bleeding, active cancer treatment etc. - marked as an event “not for community discharge”

Some patients are excluded by choice - marked as an event “not for community discharge”

Select particular clinic - home visit, postal patients & warfarin clinic

Select on or after – 4 weeks in the future. This indicates stability

Review each patient for stability & suitability of discharge

Print 12 month history & discharge letter to patient and GP – discharge patient on DAWN



Community discharges

Close all Tabs System Menu Patient Search Help

List view X

DAWN CLINICAL FRAMEWORK 7.9

List view

With Redbridge and Waltham

All (All patients)

(All risk classes)

(All diagnoses)

(Any target range)

All Whipps Cross Home Visits (WHIPPS)

On or After 02/10/2017

(All roles)

Work List Post Clinic Check Messages Non Attendance Clinic Summary Status Annual Review Reminders Events No Next Test Date

Filter With Redbridge and Waltham

Clinic All Whipps Cross Home Visits (WHIPPS)

Date On or After 02/10/2017

2 records found.

Name	Test Date	Time	INR	Target Tilt	Drugs	Events	Procedures	Reviews	Post code	Risk Class	Sample
	02/10/2017	08:30	0.00	2.50	58%				E4 6UH	Unclassified	
	04/10/2017	08:30	0.00	2.50	96%				IG8 7RD	High	

OK Print





Review of inpatient process

Patients are marked as an event “inpatient”

- when we have been informed that they are inpatients by the ward, the patient or a relative
- we have checked on the hospital system (CRS) and found that they are inpatients if they have not attended a recent appointment
- They are home visit patients and absent when we visit

All scheduled appointments are deleted

At the end of the week an audit is run to check inpatient status and each patient is followed up

If no longer an inpatient the event is deleted and a future appointment / home visit is booked

Most recent INR and dose are recorded on DAWN

If patient anticoagulation treatment has changed DAWN is updated and the patient is either reviewed in clinic or telephoned in 3-4 weeks.



Inpatient Status

Close all Tabs System Menu Patient Search Help Anticoagulation

List view Patient X

Mustard, Colonel - 01/04/1920 - WH33333 - Cluedo Manor

Risk class: High
Pref. clinic: (None selected)
Phone: - home
Age: 97

Diagnosis: Dvt
Target Range: 2.0 - 3.0 (2.5 Target)
Start date: 03/08/2017 - 26 wks. Due to stop: 01/02/2018
Anticoagulant: Warfarin Mixed Whole Tablets (in mg/DailyAvg)
Treatment Plan: 1 of 1 active
Risks

TEST PATIENT

Dosing Contacts Letters Drugs Events Procedures Reviews Reminders Groups Documents

Other events

Event	Severity	Date/Notes
Inpatient	High Risk/severity	03/08/2017

Graph History Personal Treatment plans Questionnaires Test Results Interface Warnings

There are no items to display

Add history data

New Save To list Print

1 / 1 (Show all)

DAWN CLINICAL FRAMEWORK 7.9



Inpatient status

Close all Tabs System Menu Patient Search Help

List view x

DAWN CLINICAL FRAMEWORK 7.9

List view

With Inpatient check

All (All patients)

(All risk classes)

(All diagnoses)

(Any target range)

All (All clinics)

(All types)

(All roles)

Work List Post Clinic Check Messages Non Attendance Clinic Summary Status Annual Review Reminders Events No Next Test Date

Filter With Inpatient check
8 records found.

Name	Status	DoD
[REDACTED]	active	
[REDACTED]	active	
[REDACTED]	Active	
Mustard, Colonel	active	
[REDACTED]	Active	
[REDACTED]	Active	
[REDACTED]	Active	
[REDACTED]	Active	

OK Print



Process for BMI – not suitable for NOACs

Patients with a weight $>120\text{kg}$ and $<40\text{kg}$ are usually not suitable for NOACs

Data can be collected on these patients and if in the future licences for the use of NOACs is changed then these patients can be easily identified

Process can also be used where renal impairment is another factor for unsuitability for NOACs



BMI – not suitable for NOACs

http://10.117.246.157/7ScreenFrameSet&SID=456EF4294608F8106DC2234661E97A9E&PageID=0 - 4S Dawn - Internet Explorer

Close all tabs System Menu Patient Search Help Anticoagulation

Patient x

Orchid, Dr - 01/04/1970 - WH11111 - Cleudo House

Risk class: High

Pref. clinic: Whippa Cross Postal Patient (v)

Phone: - home

Age: 47

Diagnosis: Atrial Fibrillation

Target Range: 2.0 - 3.0 (2.5 Target)

Start date: 03/08/2017 - Indefinite

Anticoagulant: Warfarin Mixed Whole Tablets (in mg/DailyAvg)

Treatment Plan: 1 of 1 active

Risks

TEST PATIENT

13/09/2017 10:47

Barts Health NHS Trust - Burchell
Frances
BMI - not suitable for NOACs
patient is underweight

Graph History Personal Treatment plans Questionnaires Test Results Interface Warnings

Date INR Dose Dosing Instructions Time INR In range Comments

Mon 11/09/2017 0.0 0.00 d

Add history data

New Save To list Print

1 / 1 (Show all)

DAWN CLINICAL FRAMEWORK 7.9



BMI – not suitable for NOACs

Close all tabs System Menu Patient Search Help

List view

With BMI - not suitable for NOAC's

All (All patients)

(All risk classes)

(All diagnoses)

(Any target range)

All (All clinics)

(All types)

(All roles)

Work List Post Clinic Check Messages Non Attendance Clinic Summary Status Annual Review Reminders Events No Next Test Date

Filter With BMI - not suitable for NOAC's
9 records found.

Name	Status	DoD
[Redacted]	active	
[Redacted]	New	
[Redacted]	active	
Orchid, Dr	active	
[Redacted]	active	
[Redacted]	Active	
[Redacted]	active	
[Redacted]	active	

OK Print





Process for NOAC side effects

Patients are identified and marked as an event “NOAC side effects”

Details of the side effect are entered as a quick note on patient record

Process could also be used for warfarin etc.

Data is collected / audited for future studies



Side effects

http://10.117.246.157/7Screen=FrameSet&SID=456EF4294608F8106DC2234661E97A9E&PageID=0 - 4S Dawn - Internet Explorer

Close all Tabs System Menu Patient Search Help Anticoagulation

List view Patient Treatment plans

Green, Reverend - 01/04/1960 - WH66666 - Cluedo Priory

Dosing Contacts Letters Drugs Events Procedures Reviews Reminders Groups Documents

Risk class: High
Pref. clinic: Whips Cross Follow Up NOAC
Phone: - home
Age: 57
Diagnosis: Pte Recurrent
Target Range: None
Start date: 13/09/2017 - Indefinite
Anticoagulant: Apixaban 5mg bd
Treatment plan: 2 of 2 active
Risks

TEST PATIENT

Barts Health NHS Trust - Burchell Frances
13/09/2017 10:52
Developed chest and abdomen pain recently so stopped edoxaban and felt the pain subside. He has seen his GP and has had no further pain. Otherwise he seems stable. We discussed the need for anticoagulation and decided to try an alternative NOAC, apixaban 5mg bd to see if any of the symptoms returned as it seems after taking edoxaban since March that the medication was causing the symptoms

Other events

Event	Severity	Date/Notes
NOAC side effect	High Risk/severity	03/09/2017

Graph History Personal Treatment plans Questionnaires Test Results Interface Warnings

There are no items to display

Add history data

New Save To list Print

16 / 30 (Show all)



NOAC side effects

Close all Tabs System Menu Patient Search Help

List view X

DAWN CLINICAL FRAMEWORK 7.9

List view

With NOAC side effects

All (All patients)

(All risk classes)

(All diagnoses)

(Any target range)

All (All clinics)

(Any date)

(All roles)

Filter With NOAC side effects
28 records found.

Name	Unit No	Event	Date/Warn Level
	WH326674	NOAC side effect	24/08/2017 Always Warn
	9448871	NOAC side effect	09/08/2017 Always Warn
High Risk/severity			
Green, Reverend	WH66666	NOAC side effect	03/08/2017 Always Warn
Moderate Risk/severity			
	9436191	NOAC side effect	14/07/2017 Always Warn
	WH1333422	NOAC side effect	14/07/2017 Always Warn
High Risk/severity			
	9150227	NOAC side effect	05/07/2017 Always Warn
Minor			
	02203483	NOAC side effect	28/06/2017 Always Warn
Moderate Risk/severity			
	6426545	NOAC side effect	26/06/2017 Always Warn
	6565257	NOAC side effect	01/06/2017 Always Warn
	639713	NOAC side effect	31/05/2017 Always Warn
	00041935	NOAC side effect	19/05/2017 Always Warn
High Risk/severity			
	6551632	NOAC side effect	08/05/2017 Always Warn
Minor Gp Visit			
	9594688	NOAC side effect	08/05/2017 Low
High Risk/severity			
	810429	NOAC side effect	03/05/2017 Always Warn
Minor Hospitalised			
	810429	NOAC side effect	03/05/2017 Always Warn
Moderate Risk/severity			
	9304335	NOAC side effect	24/04/2017 Always Warn

OK Print





Process for drug trials

Find suitable patients by filtering their diagnosis and target

Mark each patient as an event “UCH NOAC trial”

Audit by using appropriate selected filters

Can be used for future studies and any drug trials



Selection of patients for drug trials

http://10.117.246.157/?Screen=FrameSet&SID=231FF152341064D585A8E3B5D35BA81F&PageID=0 - 45 Dawn - Internet Explorer

Close all Tabs System Menu Patient Search Help

List view Patient

DAWN CLINICAL FRAMEWORK 7.9

List view

With Scheduled Tests (alphabetically)

All (All patients)

(All risk classes)

ANTPH - Antiphospholipid Syndrome

3.0 - 4.0 (3.5 Target)

All (All clinics)

(Any date)

(All roles)

Work List Post Clinic Check Messages Non Attendance Clinic Summary Status Annual Review Reminders Events No Next Test Date

Filter With Scheduled Tests (alphabetically)
Prime diagnosis ANTPH - Antiphospholipid Syndrome
Target range 3.0 - 4.0 (3.5 Target)
5 records found.

Name	Test Date	Time	INR	Target	TIR	Drugs	Events	Procedures	Reviews	Post code	Risk Class	Sample
	29/09/2017	13:30	0.00	3.50	37%		Yes			E17 6AX	Unclassified	
	26/09/2017	08:00	0.00	3.50	31%		Yes			E10 7HR	Unclassified	
	28/09/2017	08:00	0.00	3.50	36%		Yes			E17 9HZ	Unclassified	
	29/09/2017	09:00	0.00	3.50	26%		Yes			E10 7BE	Unclassified	
Scarlet, Miss	16/10/2017	08:00	0.00	3.50			Yes			ABC DEF	High	

OK Print



Identify patients for trials

Close all Tabs System Menu Patient Search Help Anticoagulation

Patient X

Scarlet, Miss - 01/04/1970 - WH44444 - Cluedo Court

Risk class: High
Pref. clinic: Whipps Cross Postal Patient
Phone: - home
Age: 47

Diagnosis: Antiphospholipid Syndrome
Target Range: 3.0 - 4.0 (3.5 Target)
Start date: 03/08/2017 - Indefinite
Anticoagulant: Warfarin Mixed Whole Tablets (in mg/DailyAvg)
Treatment Plan: 1 of 1 active
Risks:

TEST PATIENT

Other events

Event	Severity	Date	Notes
UCH NOAC TRIAL	High Risk/severity	03/08/2017	

Graph History Personal Treatment plans Questionnaires Test Results Interface Warnings

There are no items to display

Add history data

New Save To list Print

1 / 1 (Show all)

DAWN CLINICAL FRAMEWORK 7.9



NOAC drug trials

http://10.117.246.157/?Screen=FrameSet&SID=83E92032C470622A91621AFE7CE8923&PageID=0 - 4S Dawn - Internet Explorer

Close all Tabs System Menu Patient Search Help

List view X

DAWN CLINICAL FRAMEWORK 7.9

List view

With UCH NOAC Trial

All (All patients)

(All risk classes)

(All diagnoses)

(Any target range)

All (All clinics)

(Any date)

(All roles)

Work List Post Clinic Check Messages Non Attendance Clinic Summary Status Annual Review Reminders Events No Next Test Date

Filter With UCH NOAC Trial
15 records found.

High Risk/severity

Name	Unit No	Event	Date	Warn Level
Scarlet, Miss	WH44444	UCH NOAC TRIAL	03/08/2017	Always Warn
000550633	UCH NOAC TRIAL		19/04/2017	Always Warn
574374	UCH NOAC TRIAL		13/04/2017	Always Warn
H00544338	UCH NOAC TRIAL		13/04/2017	Always Warn
537867	UCH NOAC TRIAL		13/04/2017	Always Warn
9644956	UCH NOAC TRIAL		13/04/2017	Always Warn
000328403	UCH NOAC TRIAL		13/04/2017	Always Warn
0641662	UCH NOAC TRIAL		13/04/2017	Always Warn
661736	UCH NOAC TRIAL		13/04/2017	Always Warn
002329620	UCH NOAC TRIAL		13/04/2017	Always Warn
000044422	UCH NOAC TRIAL		13/04/2017	Always Warn
000853168	UCH NOAC TRIAL		13/04/2017	Always Warn
640601	UCH NOAC TRIAL		13/04/2017	Always Warn
000913787	UCH NOAC TRIAL		13/04/2017	Always Warn
000606130	UCH1 NOAC TRIAL		12/04/2017	Always Warn

OK Print





Example of a SOP

HOW TO RECORD A NOAC SIDE EFFECT

<http://10.117.246.157/dawnac>

Log into DAWN with your user name and password

PATIENT VIEW – search for patient by entering name or MRN number

EVENTS – click on quick note (window)

THEN SELECT “NOAC side effect”

SELECT HIGH RISK

DURATION OF WARNING “A”

THEN IN ORANGE FIELD PUT “A”

OK

IN QUICK NOTE – give a description of the type of side effect

Log out of DAWN by clicking the chequered flag





Additional help DAWN support have given us

- Freedom of information requests– DAWN team able to help write and generate reports so that we can supply data as and when requested
- Changes to clinic profiles and times to accommodate staffing levels and genre of health care professionals
- DAWN developed reports and lists for clinics to ensure notes no longer necessary
- Supported us during the May 2017 cyber attack which allowed us to continue with all our clinics





In conclusion

- Improved efficiency
- Improved patient safety
- Standardised practice
- Paperless clinics
- All information on patients regarding anticoagulation is legible in one place and without the need for separate lists and spreadsheets
- Able to audit activity and specific groups for future development
- Opportunity to easily share with other sites





Final thought

If you want DAWN to work for you
and you haven't got a clue

Ask the DAWN support team

