

‘Working on a Virtual Ward’

Experience from a national pilot

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What is a Virtual Ward (VW)?

- Exact electronic duplication of an inpatient ward (on Trakcare)
- Patients are at home but continue to receive treatment traditionally delivered in hospital
- Patients “remain” in VW from commencement of care/discharge from inpatient care to discharge from VW care
- VW stay is a direct alternative to hospital inpatient stay
- Established for Hospital at home where activity recognised through SMR01 coding

Building the Virtual Ward

- **When patients are accepted for therapy/treatment by the OPAT Service they are:**
- Admitted to the VW
- Single virtual Inpatient episode of care for the duration of therapy;
- Exception is if a patient is discharged to allow for an Acute episode of care
- Requests placed against IP episode (x-rays/scans etc meaning they can often be done quickly)
- Clinical letters associated to IP episode (Treatment commence, Change of Treatment, Discharge)
- Clinical episode linked to HEPMA



The Patient's 'Virtual' Journey

- All OPAT referrals are listed on the OPAT Workbench and are vetted by the ID Consultant or Registrar. Their status is changed to 'In Progress' once a plan has been made or 'Discontinued' if not for OPAT.

Home | Tools | Messages | Logout User: HUNTEPA413 | Location: OPAT GGC | Lock

Workbench Others ⓘ

[Pt Search](#)
[Results Unsigned](#)
[New Request](#)
[Adhoc Request](#)
[Bed Request](#)
[CS Review](#)
[ED Menus](#)
[Episode Outcomes](#)

Options Help

Receiving Location:
 Date From:

Status:
 Date To:
 CHI:

Priority:
 Date Execute From:

Radiology Status:

- Authorised
- Booked
- Corrected Result
- Did Not Attend
- Discontinued
- Executed

Order Item:
 Ward:

Previous Day Next Day
 Total No of Records: 3
Lock

| Select | Icon Profile | CHI | Surname | Forename | DOB | Current Ward | Requested Location | Order Item | Priority | Item Status | Start Date | Requesting Clinician | Adm Doctor | Proc Notes |
|--------------------------|--------------|------------|-------------|--------------|------------|--------------------------------|----------------------------|--------------------------------------|----------|----------------|------------|------------------------|---------------------------|------------|
| <input type="checkbox"/> | | TJ81016365 | Opat | Qeuh-Opattwo | 09/08/1976 | | QEUH Vetting | OPAT non cellulitis referral - adult | Routine | Verified Order | 21/09/2022 | eHealth Pauline Bowes1 | Dr Ronald Seaton | |
| <input type="checkbox"/> | | TJ81016402 | Opat | Walter | 09/08/1976 | QEUH Ward 10A Orthopaedics (D) | QEUH Ward 10A Orthopaedics | OPAT non cellulitis referral - adult | Routine | In Progress | 21/09/2022 | eHealth Pauline Bowes1 | Mr Mark Richard Broadbent | |
| <input type="checkbox"/> | | 4444444444 | Dummpatient | Trak Four | 19/02/1941 | | QEUH Vetting | OPAT non cellulitis referral - adult | Routine | Verified Order | 22/09/2022 | eHealth Pauline Bowes1 | Dr Ronald Seaton | |

The Virtual Ward

OPAT CNS – manages practicalities of treatment plans

- Liaise with patients and ward teams to support discharge and arrange follow-up
- Arrange for community referrals to attend and start treatment

Once they have been discharged from their IP ward or attended for first visit to start treatment in OPAT, they are admitted to the OPAT Virtual Ward.

The screenshot displays a software interface for a 'VIRTUAL Ward' at 'OPAT - QEUH'. The interface includes a navigation bar with options like 'Pt Search', 'Results Unsigned', 'New Request', 'Active Clinical Notes', 'Adhoc Request', 'Bed Request', and 'CS Review'. Below the navigation bar, there are statistics: 'Patients In Beds: 0', 'Patients Not In Bed: 39', and 'Patients In Department: 39'. The main area is divided into four columns representing different treatment areas: 'QEUH OPAT Waiting Area (0)', 'QEUH OPAT Oral Therapy (12)', 'QEUH OPAT IV (26)', and 'QEUH OPAT Cellulitis (1)'. Each column contains a list of patient records with various colored icons (green, yellow, red, black) indicating their status or treatment progress.

Patient Alert

- Once a patient is admitted into the Virtual Ward, the CNS will add an Alert to say the patient is admitted on the Virtual Ward
- This will now display every time the Demography screen is accessed; will inform e.g. NHSGGC ED staff that the patient is a virtual Inpatient and needs discharge before admission into another department.

Permanent Alerts
Please remember any User can view permanent alerts

Alert Category

Alert

Date Created

Extra Information

Text must be highlighted for the canned text icon to become visible

Display Alert

Status

Expected Review Date

Closed Flag

Expiry Date

Clinic attendance

- As well as the patient's admission onto the ward, their clinic attendance is captured on Ward Attenders and weekly/daily appointments made to capture their time spent in person at OPAT.
- Clinical Outcomes and Procedures are added to each visit so we can capture what happens at each visit.

The screenshot displays a clinical software interface with a yellow header bar containing patient information: 13:00, 1402650000, Dummypatient, Labs One, 14/02/1965, Female, S N OPAT, Slots=3; S N OPAT; S R OPAT; Arrived [checked].

The main content area shows appointment details for 21/09/2022, Appointment Care Provider: QEUH Generic Consultant OPAT. A reminder states: "Reminder: recording clinic outcomes does NOT automatically book follow-up appointments".

Three columns are visible, each with a red border:

- RTT:** 1A-Treatment started Today, 1B-Treatment previously started, 2-No treatment required, 3-Patient declines treatment, 4-Observe & review, 5-Supply medical device, 6-for investigation as IP, 6A- Investigate as DC(Including Scopes), 7- for treatment as IP, 7A-for treatment as DC, 7B-for treatment as DC.
- Outcome:** Face to Face Clinic, Telephone Clinic, Video Clinic, Written Clinic, Re-appt 1 day, Re-appt 2 days, Re-appt 3 days, Re-appt 4 days, Re-appt 5 days, Re-appt 6 days.
- Procedures:** COMD Administration of IV Antimicrobials Cellulitis, COMD Administration of IV Antimicrobials Non - Cellu, COMD Administration of IM Antimicrobials, COMD Administration of Oral Antimicrobials Cellulitis, COMD Administration of Oral Antimicrobials Non - Cel, COMD BLOOD SAMPLING, COMD Care and Maintenance of Intravascular Device, COMD PATIENT/CARER TRAINING, COMD Nurse Review Cellulitis, COMD Nurse Review Other, COMD Medical Review Cellulitis.

Below these columns is a "Seen By" field with the name "eHealth Pauline Bowes" and an "Add to List" button.

Discharge from the Virtual Ward

All patients also require to have an Episode Outcome associated to the Inpatient episode on discharge from the OPAT Service

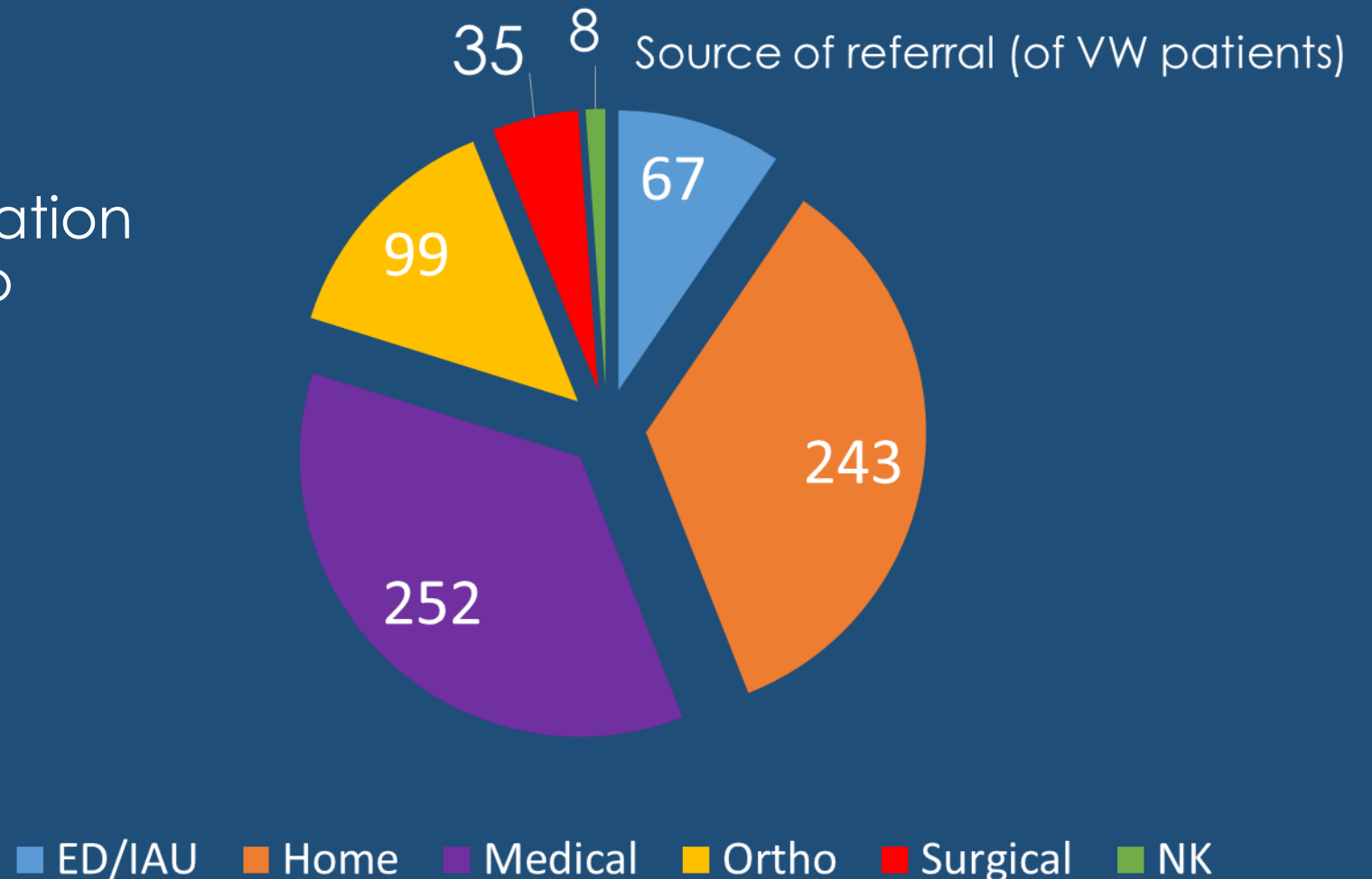
- **AIC Outcomes refer to BSAC OPAT Good practice recommendation outcome definitions**
 - AIC Treatment Aim Attained Uncomplicated
 - AIC Treatment Aim Attained Complicated
 - AIC Treatment Aim Not Attained
 - AIC Discharge for ED/IP Admission
 - AIC Indeterminate
 - AIC Death

The screenshot shows the InterSystems TrakCare Wards interface. The top navigation bar includes 'Home | Tools | Messages | Logout' on the left, 'User: HUNTEPA413 | Location: OPAT GGC | Lock' in the center, and the 'InterSystems TrakCare' logo on the right. Below this is a 'Wards' section with a search icon. A secondary navigation bar contains 'Pt Search', 'Results Unsigned', 'New Request', 'Adhoc Request', 'Bed Request', 'CS Review', 'ED Menu', and 'Episode Outcomes' (highlighted with a red box). The main content area is titled 'VIRTUAL Ward OPAT - QEUH' and displays statistics: 'Patients In Beds: 0', 'Patients Not In Bed: 1', and 'Patients In Department: 1'. Below these are four columns representing different OPAT services: 'QEUH OPAT Waiting Area (0)', 'QEUH OPAT Oral Therapy (1)', 'QEUH OPAT IV (0)', and 'QEUH OPAT Cellulitis (0)'. The 'QEUH OPAT Oral Therapy (1)' column shows a patient card for 'Opat Tom, 35 Yrs, M, CMD, 334h 14m' with 'SEAT' listed below.

***Updated good practice recommendations for outpatient parenteral antimicrobial therapy (OPAT) in adults and children in the UK;**
A Chapman et al; JAC-Antimicrobial Resistance, Volume 1, Issue 2, September 2019

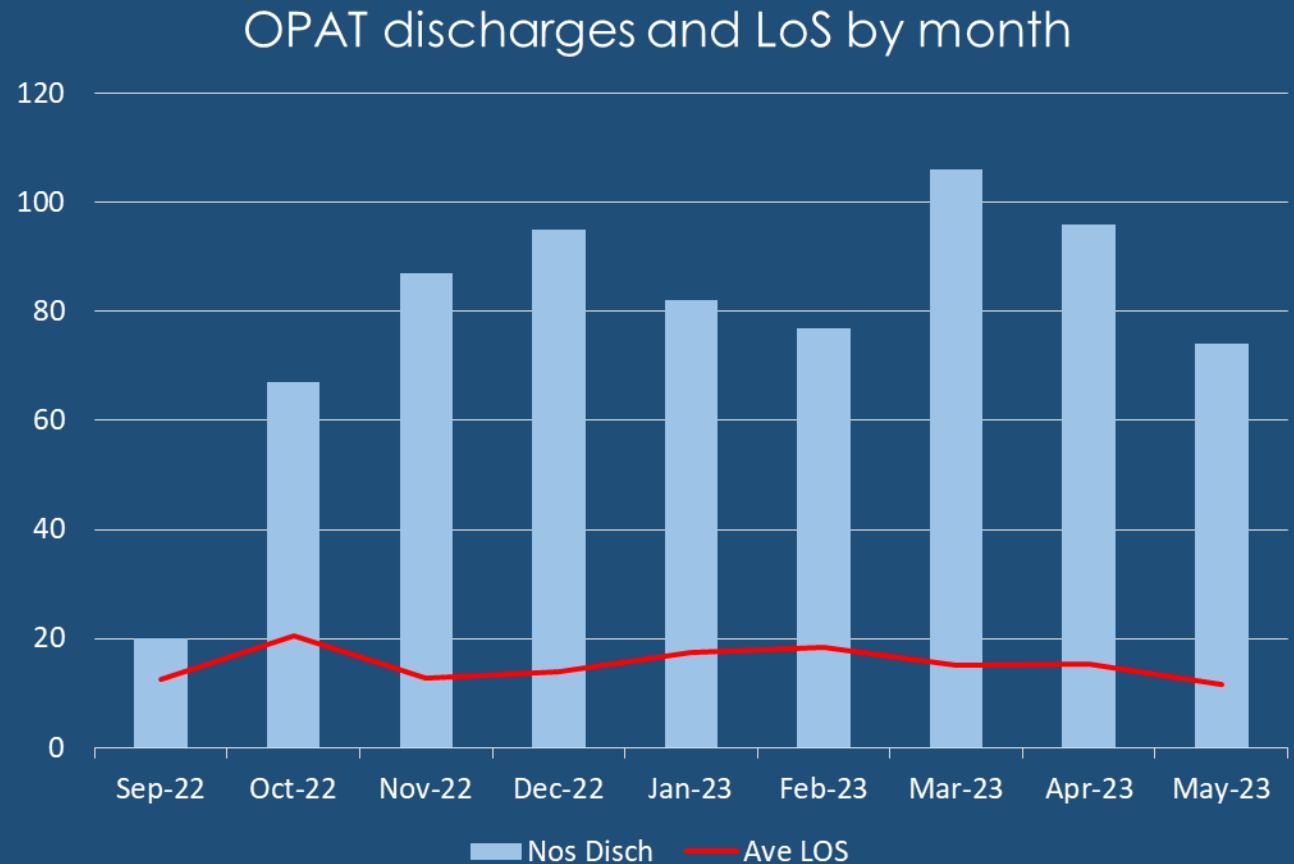
Virtual ward activity (21/9/22-24/5/23)

- Reasons for discontinuation (rejection) of referral to follow
- 704 discharges



Virtual ward activity (21/9/22-24/5/23)

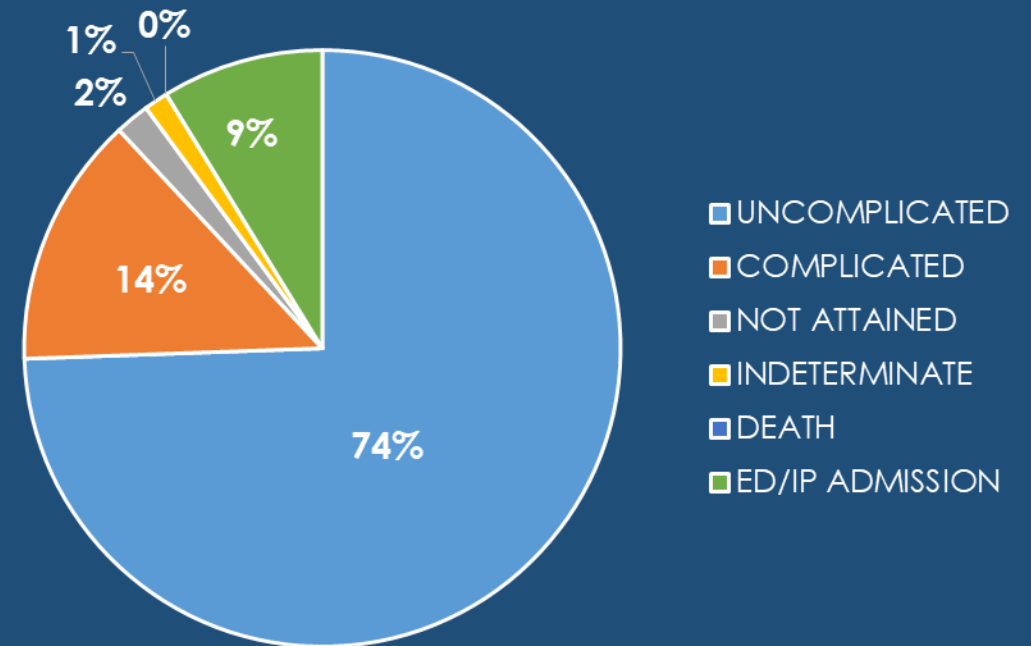
- Mean LoS = 15.4 days
- 48 readmissions (39 returned to complete OPAT)
 - Readmission = 5.5%
- 30 day readmission TBC
- AIC outcomes TBC



Data captured from the Virtual Ward

- Bed days saved
- Treatment type – Non-cellulitis: IV's or Orals, and Cellulitis
- Movement from IV to oral or Oral to IV.
- AIC Outcomes from September 2022 – May 2023

AIC OUTCOMES



Benefits of Virtual Ward

Advantages

- Clear overview of patients currently under care of OPAT
- On average, 10mins saved per patient on admin time
- OPAT data now being captured via trakcare
- Scans/x-rays etc can be booked through VW meaning they are treated as IP rather than OP

Disadvantages

- Still multiple processes to go through to admit to ward despite being less time consuming

What Next?

- This was a national pilot and nationally agreed process
- Plan for all services to develop this in ambulatory care including heart failure team and respiratory
- Within GGC, role out to IRH and RAH has begun and eventually GRI too.
- Development of OPAT questionnaire to replace outdated database
- Ongoing discussion with Scottish Government and Public Health Scotland to assign SMR code to recognise OPAT activity

Any Questions ?