

# Evolution of the VFAC

## RELIABLE DATA FOR DECISION MAKING



Ian McGovern

Clinical specialist Physiotherapist

Our Lady Of Lourdes Drogheda



# The patient journey







Christopher Fenelon and Ian McGovern

# Traditional Fracture Clinic

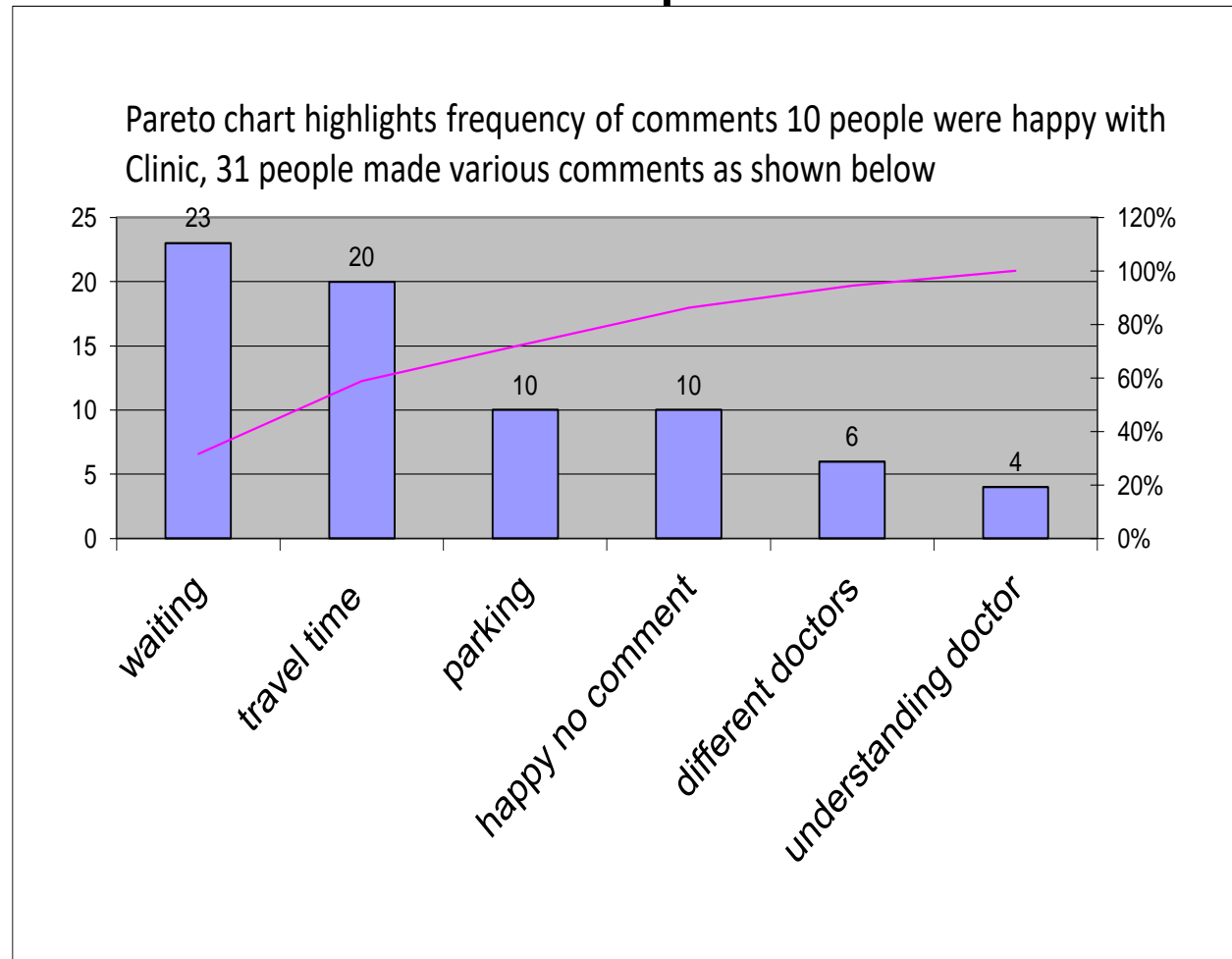


Continually  $\uparrow$  capacity to meet  $\uparrow$  demand  $\neq$  financially sustainable

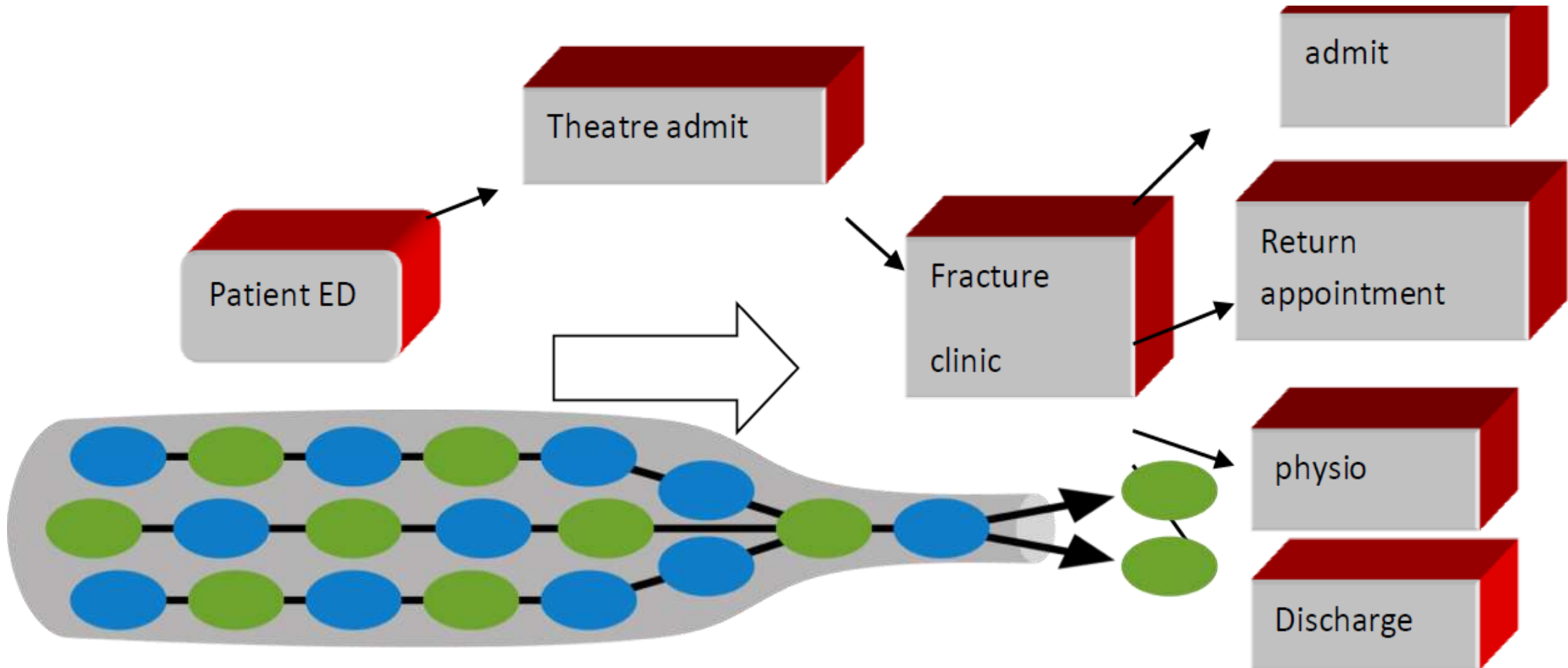


Christopher Fenelon and Ian McGovern

# Voice of patient



# Traditional process bottleneck







80 patients reduced to 30 per clinic



60% managed effectively at home

# vFAC Sites

Letterkenny

Sligo

Castlebar

6 – a/w several LIUs  
12 – single ED

15 sites  
returning  
data

**Galway**  
UHG  
Ballinasloe  
Roscommon  
Ennis

**Limerick**  
UHL  
St Johns  
Ennis  
Nenagh

Kerry

IRELAND



NORTHERN  
IRELAND

**Drogheda**

OLOLD ED  
Dundalk IU  
Cavan ED  
Monaghan ED  
Navan injury unit

**Dublin**

Connolly

Beaumont

Mater

Vincent's  
Loughlinstown

St James

Tallaght

Naas

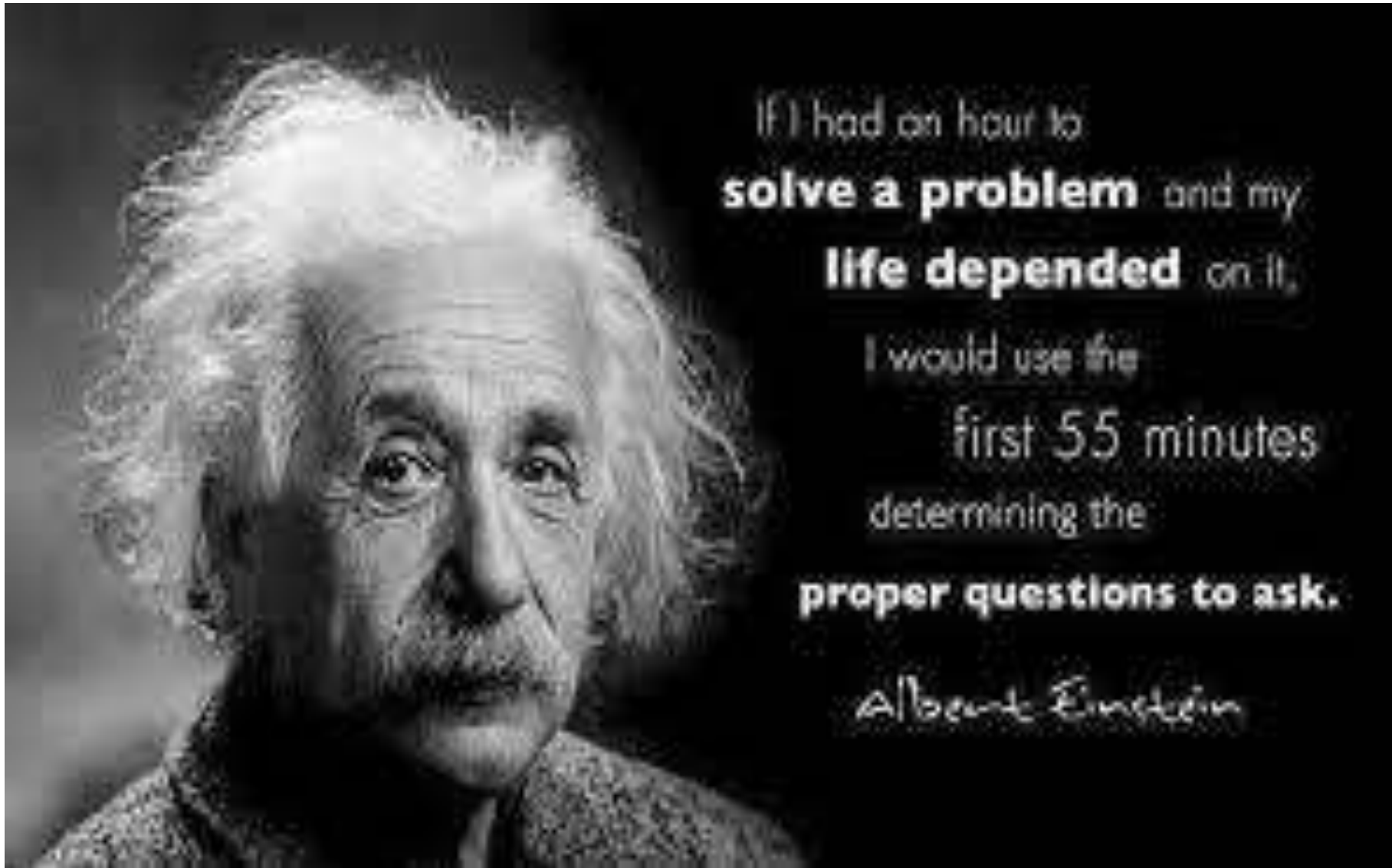
Crumlin

T.Street

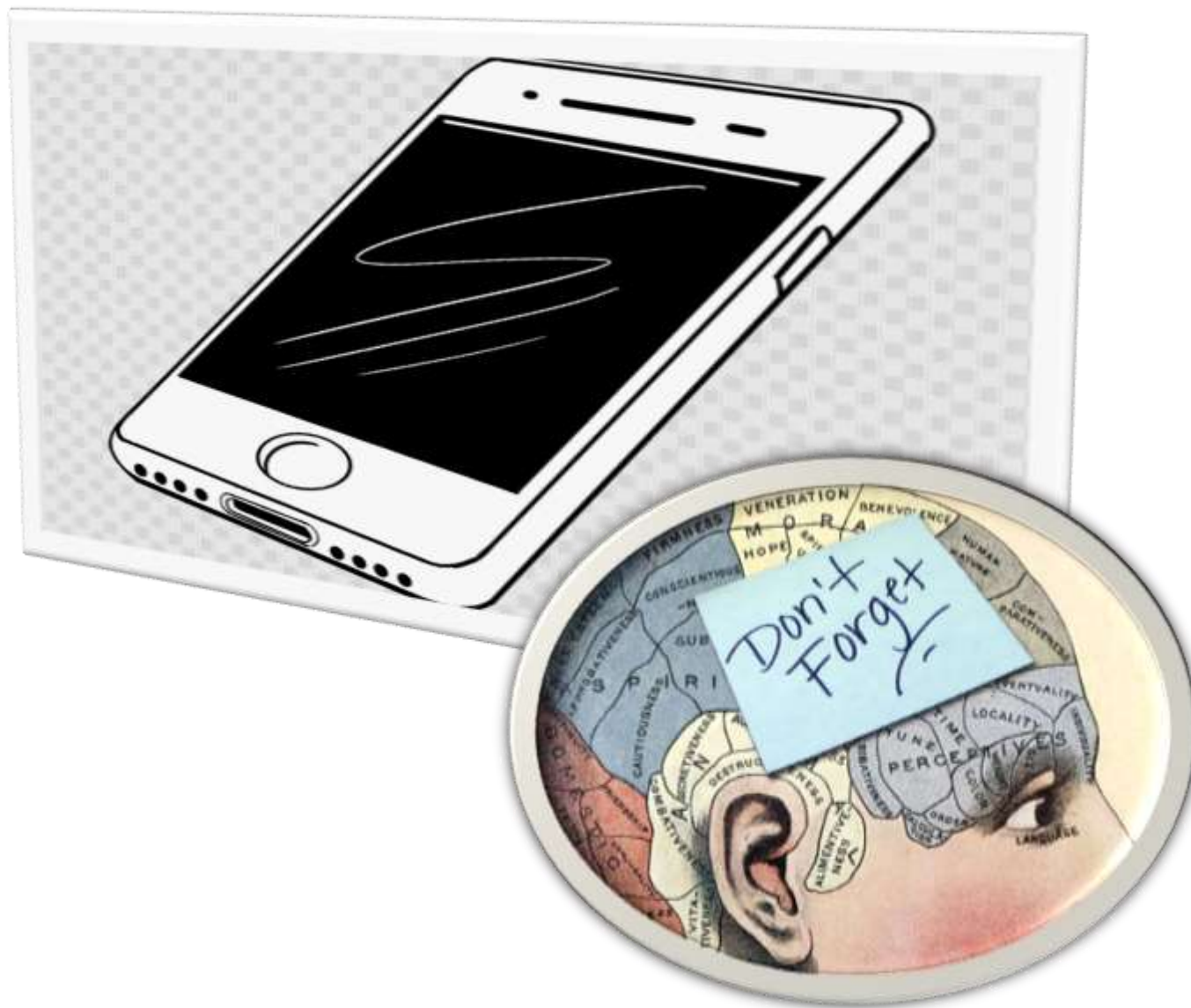
**Cork**  
CUH ED  
Mallow  
Bantry  
Mercy  
MIUG

**Waterford**  
UHW  
Wexford  
Kilkenny  
Clonmel

**Tullamore**  
Tullamore ED  
Portlaoise ED  
Mullingar ED  
Ballinderry MIU Mullingar  
Longford GP Treatment center



# Information formats





# Problem

- Paper based
- Manual entry
- Poor communication
- No real time information
- No one system links all parts of orthopaedic care

**Mr. Murphy's Trauma List**  
**21.07.21**

Name	Medical No.	DOB	Injury	Procedure	Side
Tom Walsh	123456	01/01/1980	Femur #	IM Nail	Right
Amy Kelly	999666	06/06/1940	Hip #	DHS	Left
John West	987654	25/12/1920	Ankle #	ORIF	Right
Mary Flynn	112233	01/12/1990	Radius #	ORIF	Left
Paddy Ryan	998877	12/12/1978	Talus #	ORIF	Left
Sam Kehoe	249685	11/11/1945	Tibia #	MUA	Right
Liam Clune	984122	23/03/1986	Wound	Washout	Left
Jim Beem	830959	22/01/2000	Ulna #	MUA	Right

Name: \_\_\_\_\_  
 Patient ID Number: \_\_\_\_\_  
 D.O.B.: \_\_\_\_\_  
 Address: \_\_\_\_\_  
(Affix Patient Identification Label)

  
**Tullamore Trauma Assessment Clinic**  

## Lower Limb Referral

Date of Assessment: \_\_\_\_\_

**\*Please fill out all areas on form\***

**Contact Details:**

Patient's Mobile Number \_\_\_\_\_

Next-of-Kin Name and Phone Number \_\_\_\_\_

Patient's Email Address \_\_\_\_\_

**History/Mechanism of Injury** \_\_\_\_\_

\_\_\_\_\_

Date of Injury \_\_\_\_\_

Range of Movement (Degrees) \_\_\_\_\_


Relevant Medical History \_\_\_\_\_

Is the skin intact? Yes  No  Skin Integrity: \_\_\_\_\_

Side? Left  Right  Is there any neurovascular deficit? Yes  No

Patient weightbearing? Yes  No

Area of Tenderness – mark on diagram


**Treatment Plan:** \_\_\_\_\_

\_\_\_\_\_

Back-slab applied? Yes  No  Splint applied? Yes  No  Sling provided? Yes  No

Orthopaedic Diagnosis \_\_\_\_\_

**Signature of Doctor:**

Name \_\_\_\_\_

HMC Number \_\_\_\_\_

Date of Referral \_\_\_\_\_

**Advice Sheet Given to Patient: Direct Discharge:**

**Signature of ANP:**

Name \_\_\_\_\_

Registration Number \_\_\_\_\_

# Digital Documentation & Patient Care



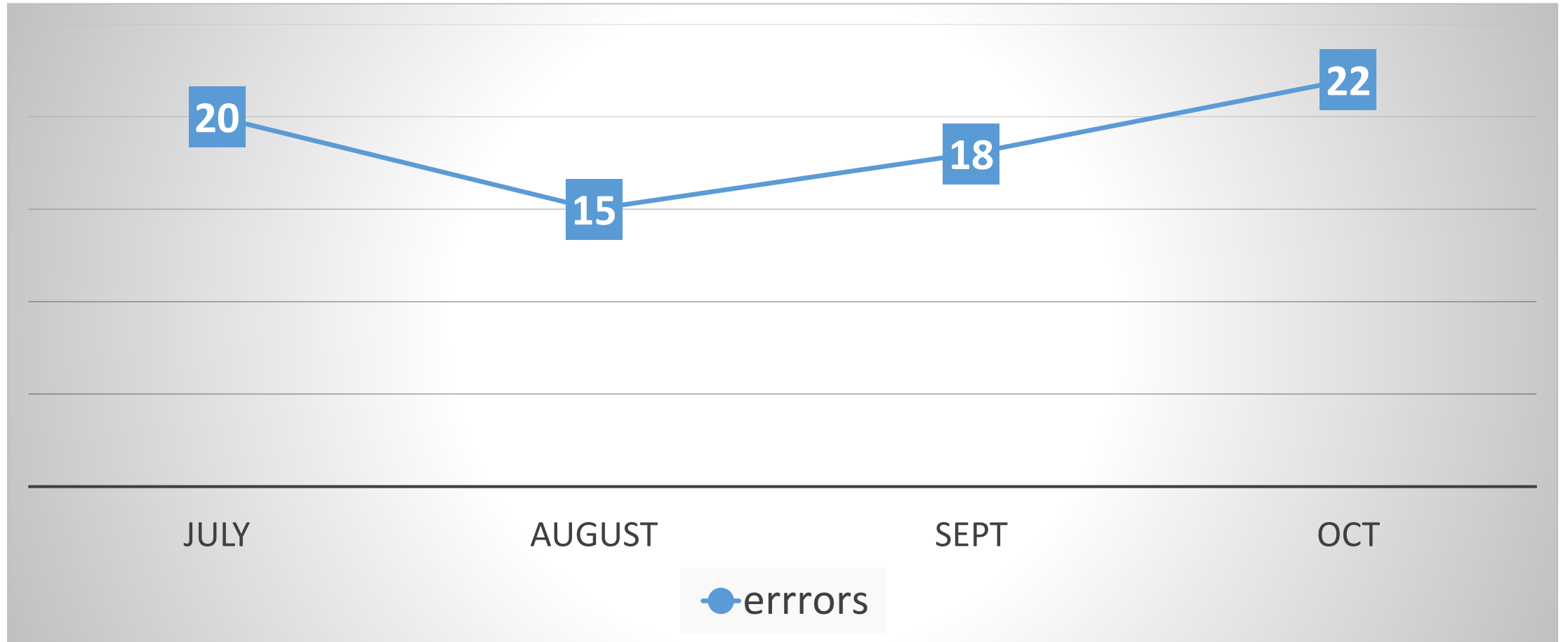
- Digital documentation improves communication & quality
  - Ryan 2011, Govier 2012, Delardes 2021
- Surgery cancellation (Viftrup 2021)
  - ↑ patient anxiety
  - ↓ patient satisfaction
- Need for up-to-date information



# NCHD Workload

Week	TAC CASES	TIME LOG	WTE
<b>31/05/21 - 07/06/21</b>	243	81 HRS	2

# Communication Errors





# ORIF of fracture clinics with a Digital Platform for Orthopaedic Patient Management



Ian McGovern



# Solution



DIGITAL  
PLATFORM



INTEROPERABLE  
WITH THE  
HOSPITAL  
ADMINISTRATION  
SYSTEM



STANDARDISED  
SYSTEM



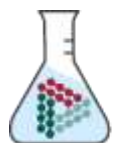
IMPROVE  
COMMUNICATION  
& PATIENT CARE



REAL TIME  
INFORMATION ON  
PROGRESS &  
ACTIVITY



SAFE & SECURE



**HSE Digital Labs**



**IPPOSI**



# Timeline

1

January 2021

Stakeholder  
Engagement

2

October – Dec 2021

Vendor  
Procurement &  
Selection

3

March - May 2022

Pilot Pathpoint  
eTrauma Digital  
Platform



# PATHPOINT eTrauma

- 35 NHS Trusts
- 70+ Hospitals
- 800,000 patient episodes
- Fully interoperable



**Interoperable with hospital systems & workflows**

No integration costs  
Full open API policy



**Responsive, agile & scalable technology**

Unlimited users  
Powerful collaboration



**Coded data**  
**Secure & compliant**  
Consistent clinical language with information governance



**Cloud-based service facilitating regional connectivity**  
Responsive, agile cloud software

# Launch April 2022

- Launch Drogheda and Dundalk 21/04/22
- Launch Tullamore 28/04/22



## Diagnosis\*

× Fracture of ankle

Search for a clinical term (e.g [injury] of [region] of [bone]) and select the closest code. You can enter multiple values and choose "Right and Left" on the side field when both sides are involved.

### Ankle Fractures

The following ankle fractures should be **reduced** and **immobilised**, then referred to the **on-call**

#### Orthopaedic team:

- Weber B, with talar shift
- Weber C (with or without talar shift)
- Bimalleolar
- Trimalleolar
- Isolated **displaced** medial malleolus
- Distal / pilon
- All **open fractures**

Ankle fractures suitable for VFC:

- **Weber A fibula fracture:** Boot, full weight bearing, VFC referral
- **Weber B fibula fracture, no talar shift:** Boot, weight bearing as tolerated, VFC referral
- **Isolated non-displaced medial malleolus fracture:** Exclude associated proximal fibula fracture. Boot, Touch weight bearing, VFC referral.
- **Paeds (0-12years):** Minor ankle fractures (non-displaced fractures): Analgesia, Walking boot / Below

Separate multiple phone numbers with commas.

Enter a valid email address.

Please **verify** the patient's **current** mobile number and email address for their outcome and care plan to be sent electronically.

Address

Country

- None -



## Notes\*

Give a concise summary of the problem and some brief notes of the history and examination findings...

Images

## Red flags

Please consider discussing this referral with the on-call team if any of the red flags below are present.

### Neurovascular status\*

### Soft tissue integrity\*

### Rotational deformity\*

### Other red flags\*

Unable to weight-bear

Straight leg raising absent

No active range of ankle extension

Haemarthrosis of knee

Intellectual disability

Safeguarding concern

Make sure you assess for any **red flags** one-by-one.

No other red flags

Select if there are no other red flags.

### Mechanism of injury\*

### VTE assessment

See the [VTE Assessment Score guidance](#).

### Provided treatments\*

Patient given verbal advice

Fitting of arm sling or polysling



See the [VTE Assessment Score guidance](#).

**Provided treatments\***

- Patient given verbal advice
- Patient given written advice
- Administration of analgesic
- Antibiotic therapy
- Anticoagulant therapy
- Administration of intravenous fluids
- Application of dressing
- Application of bandage
- Application of tubigrip
- Closed reduction of dislocation
- Removal of foreign body
- Irrigation of wound
- Closure of skin wound
- Application of neighbour strapping
- Application of mallet splint
- Application of Futura splint
- Application of collar and cuff sling
- Fitting of arm sling or polysling
- Application of thumb spica splint
- Application of below elbow back slab
- Application of volar slab
- Application of ulnar gutter slab
- Application of below elbow plaster cast
- Application of above elbow plaster cast
- Fitting/adjustment of crutches
- Application of long leg splint or cricket pad
- Provision of ankle walker (long)
- Provision of ankle walker (short)
- Provision of heel walker
- Application of below knee plaster cast
- Application of above knee plaster cast
- Application of equinus plaster cast
- Application of cylinder cast, thigh to ankle
- Application of scaphoid plaster cast

Your child has a

## Buckle Fracture – Distal Radius

This is a specific type of fracture that occurs in children's bones.

### Healing:

This normally takes approximately 3-4 weeks to heal.

It is normal for it to continue to ache a little for a few weeks after this. Younger children normally get better quicker.

### Pain and swelling:

Taking pain medication and elevating their wrist will help. This is usually only needed in the first few days.

### Using the arm:

It is ok to use and move the arm for normal tasks such as getting dressed and gentle play, writing etc. avoid any high impact activities where there is a chance of falling on it such as trampolining, scooters, football, bikes etc for 6 weeks.













### The Splint:

The splint helps their pain by keeping the arm still. They can use the splint for 3-4 weeks as needed for pain relief. It doesn't need to be worn at night and can be taken off to wash hands or to give your child's skin a rest from the splint.



# Theatre Planning, Daily Referrals & In-patient Organisation

The screenshot shows the Pathpoint eTrauma Procedure Planner interface. At the top, there is a navigation bar with the Pathpoint logo and a search field. The main header includes a support contact number and navigation tabs for Dashboard, Referrals, Admissions, Procedures, and Assessments. The 'Procedure planner' tab is active, showing a sub-menu with Planner, List, Overview, Board, Postoperative, Waiting list, and Op Notes. A green bar indicates '19h 45m (Planned)'. Below this are filter buttons for NOT READY, SCHEDULED, DETAILS, PMH, and NOTES/COMMENTS. The main content area displays a table of procedures for 'Thu, 28/04/2022 - Theatre 1 (Trauma)'. The table lists patient details, procedure names, and operating surgeons. A right-hand sidebar contains filter options for Type, Theatre, Consultant, and Tag, along with a 'FILTER PROCEDURES' button.

Thu, 28/04/2022 - Theatre 1 (Trauma)			
<b>Kelly, Cormac</b> 05/06/2001(20yo) 0 (263409(MRHT))	<b>Arthroscopy of ankle</b> <i>Ankle Arthroscopy + lateral ligament stabilisation + syndesmosis tigtrope</i> Chronic ankle instability (None)	Elective operation / Bayer, Thomas	 
<b>Barlow, Lorraine</b> 12/05/1973(48yo) 0 (617021(MRHT))	<b>Open reduction of dislocation of ankle 120m (120m)</b> <i>Open dislocation of talus   Open fracture of medial malleolus (Left) - 18/04/2022 (-)</i>	Trauma operation / Bayer, Thomas <b>I/P</b> Tullamore: Orthopaedic Trauma Ward   030 / 03:00	 
<b>Crawford, Andrew</b> 27/11/1938(83yo) 0 (548774(MRHT))	<b>Cx1 Intramedullary nailing of tibia 120m (240m)</b> <b>Covid Swab Negative</b> <i>Right Tibia Intramedullary Nail</i> Fracture of tibia AND fibula (Right) - 26/04/2022 (11d)	Trauma operation / Kennedy, Muiris <b>I/P</b> Tullamore: Surgical Ward   013 / 03:00	 
<b>Cleary, Anne</b> 31/07/1954(67yo) 0 (176987(MRHT))	<b>Cx1 Intramedullary nailing of femur 120m (360m)</b> <b>Covid Swab Negative</b> <i>Cephalomedullary nail</i> Closed fracture proximal femur, subtrochanteric (Left) - 26/04/2022 (8th)	Trauma operation / Kennedy, Muiris <b>I/P</b> Tullamore: Orthopaedic Trauma Ward   015 / 03:00	 
	<b>Cx1 Open reduction with internal fixation, Primary uncemented</b>	Trauma operation / Kennedy, Muiris <b>I/P</b>	 













For system SUPPORT please call our freephone number on 00448081695766

# Incoming referrals

Incoming Triage Rejected Draft

Acute trauma referrals since *Wed, 27/04/2022 08:00*

↑ PENDING ↑ REJECTED ↑ PMH ↑ NOTES ↑ COMMENTS

Accepted but not admitted			
<b>Reilly, Nicole</b> - 22/10/1996(25yo) 0 (383856(MRHT))	Displacement of lumbar intervertebral disc without myelopathy (None) Acute trauma referral / Bayer, Thomas	Wed, 27/04/2022 - 13:51 Tullamore: ED	  
<b>Heffernan, Emma</b> - 06/06/1981(40yo) 0 (566570(MRHT))	Displacement of lumbar intervertebral disc without myelopathy (None) Acute trauma referral / Bayer, Thomas	Wed, 27/04/2022 - 17:33 Tullamore: ED	  
<b>McGivney, Marcella</b> - 27/05/1981(40yo) 0 (292176(MRHT))	Fracture of phalanx of finger (Left) Acute trauma referral / Bayer, Thomas	Wed, 27/04/2022 - 21:46 Tullamore: ED	  
<b>Sherwin, Eimear</b> - 14/05/1974(47yo) 0 (314382(MRHP))	Degeneration of lumbar intervertebral disc (None) Acute trauma referral / Bayer, Thomas	Wed, 27/04/2022 - 21:52 External: Home	  

Consultant

Is one of x ▼




- Select -

Referrals since

27/04/2022 📅 08:00 🕒

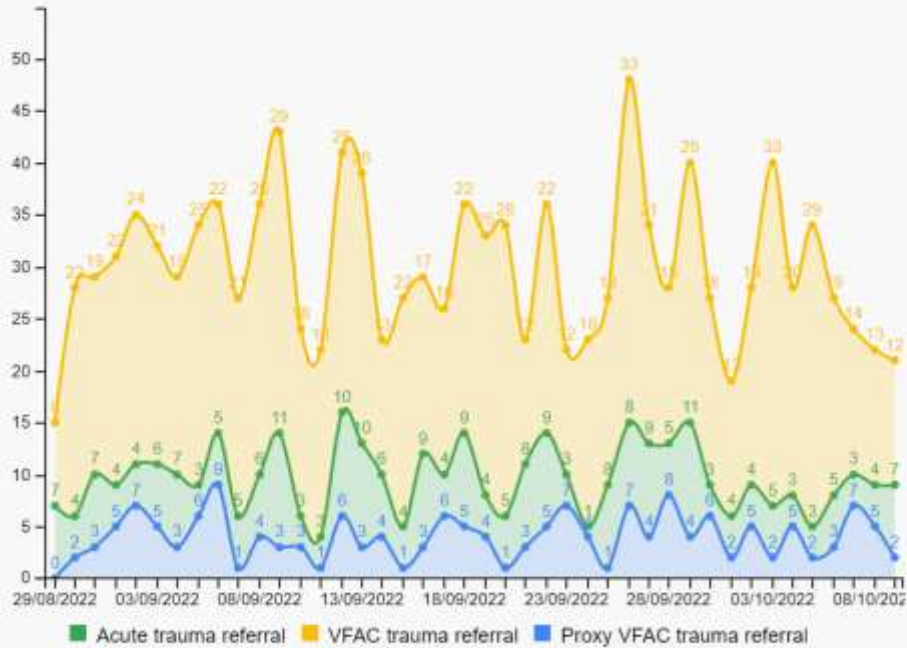
Strict since date

**FILTER REFERRALS**

Accepted and admitted			
<b>ED</b>			
<b>Sheehan, Margaret</b> - 21/06/1938(83yo) 0 (1546799(MRHT))	Fracture of neck of femur (Right) Acute trauma referral / Bayer, Thomas <span>I/P</span>	Wed, 27/04/2022 - 15:40 Tullamore: ED	  

For system SUPPORT please call our freephone number on 00448081695766

Trauma referrals



7

ADMISSIONS PER DAY



33

CURRENT INPATIENTS



99%

ASSESSED WITHIN 72H



58%

DISCHARGE RATE

Activate Windows

Go to Settings to activate Windows.

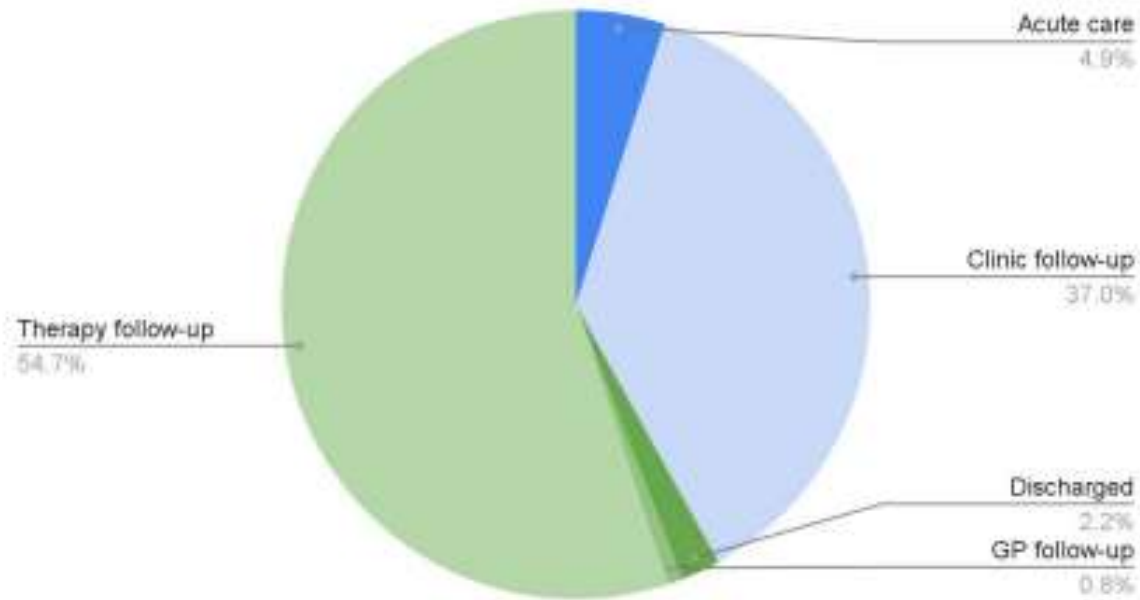
Discharge rate - 1 year

Clinic followup times - 1 year



# VFAC - Assessment outcome

VFAC Assessment outcome



55% discharged straight to therapy, physio or plaster room

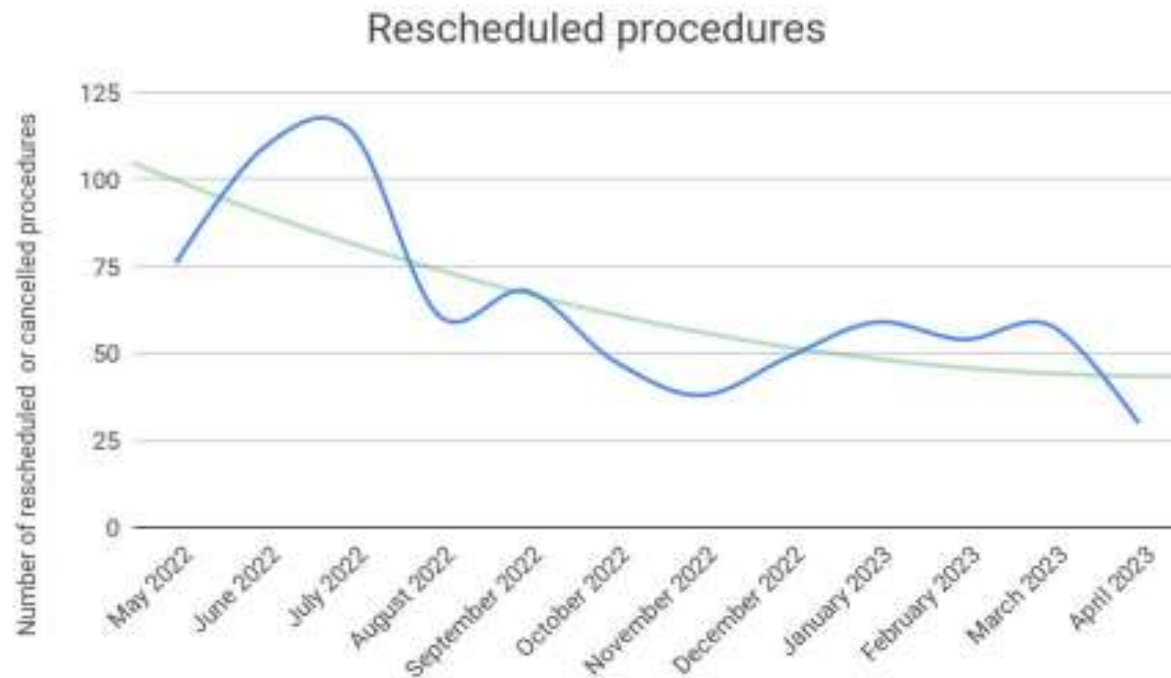
**Total discharge rate 58%**

Only 37% brought back to F2F clinic

**Benefits:** Pathway streamlined for patients (fewer unnecessary appointments and trips to hospital)

**4991 F2F clinic appointments saved**

# Rescheduled procedures



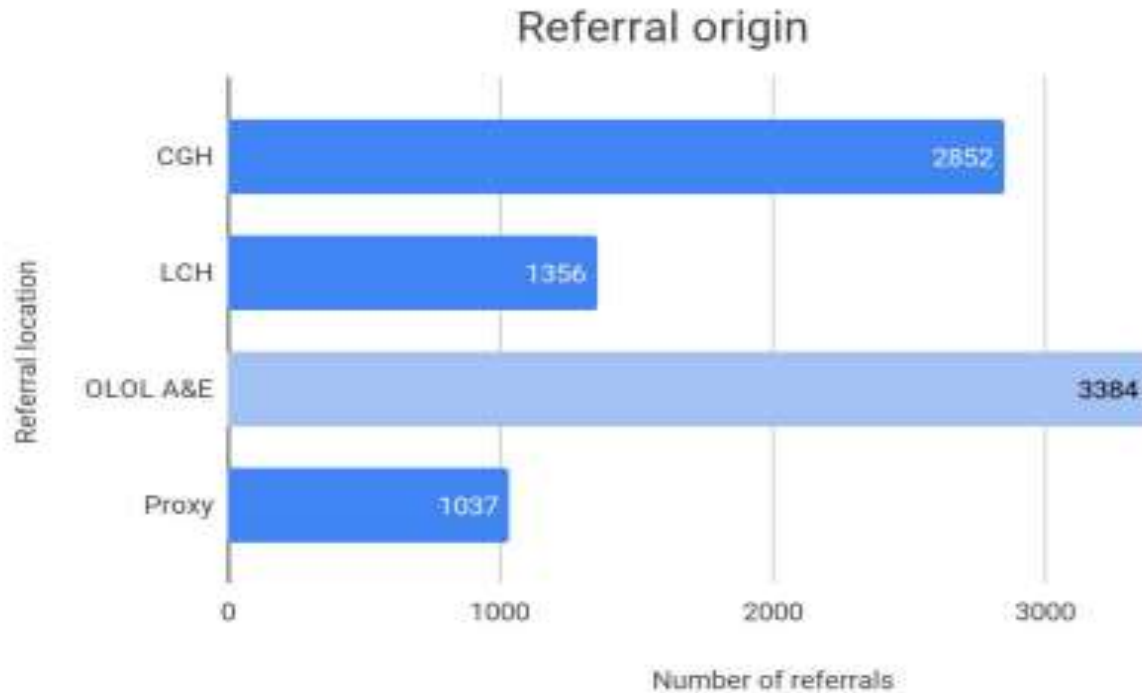
**Trend:** 74% reduction in number of rescheduled theatre cases from July 2022 to April 2023

**Explanation for reduction in rescheduled cases:**

Better oversight, coordination, organisation, communication, centralised visibility of outstanding workload and ability to open additional theatres, increased theatre utilisation and operating numbers

**Benefits realised:** Fewer cancellations, increased patient and staff satisfaction, increased theatre efficiency

# VFAC - Referral origin



**5425 (61%) referrals from off-site (dark blue)**

Of these 3056 (**56%**) were **discharged**

**Benefits:** 3056 patient journeys prevented (from regional referring site to OLOL Hospital),  
**59 saved trips per week**



# ORIF of OLOLH Fracture clinic

