NATIONAL CLINICAL PROGRAMME
FOR TRAUMA & ORTHOPAEDIC SURGERY

Virtual Fracture Assessment Clinic (VFAC)

Hospital Level Report

January – June 2025

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Virtual Fracture Assessment Clinic

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Virtual Fracture Assessment Clinic (VFAC)

Hospital Level Report

January – June 2025

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On behalf of the National Clinical Programme for Trauma and Orthopaedic Surgery

Executive Summary

Since the publication of the Model of Care in 2015, the National Clinical Programme for Trauma and Orthopaedic Surgery has advocated for the implementation of Virtual Fracture Assessment Clinics (VFAC) across Ireland to support the management of patients presenting with simple, stable fractures. Early adoption of this approach occurred at Midlands Regional Hospital, Tullamore, University Hospital Limerick and Children's Health Ireland (CHI) at Crumlin.

The COVID-19 pandemic in 2020 served as a key catalyst, accelerating the rollout of VFAC services across all hospitals receiving orthopaedic trauma. This expansion was made possible through sustained collaboration between orthopaedic teams, Emergency Departments (ED), and Injury Units (IU).

In the years since, the programme has advocated for resources to sustain the service while also developing a national dataset and three core Key Performance Indicators (KPIs) to measure the efficacy of the service both for the patient and the health care system.

This report, covering the period January – June 2025, continues to demonstrate that VFAC remains one of Ireland's best performing Modernised Care Pathways. During this time, 32,085 patients were managed across Ireland, through a VFAC service. Of these, just 36% (11,563) required an in-person fracture clinic appointment. This service redesign has delivered significant cost savings. While there is some variation in service delivery across hospital sites, the programme encourages teams to use their local data to support meaningful engagement with stakeholders. The goal remains clear ensuring patients receive timely, appropriate care, as close to home as possible, with optimal clinical outcomes.

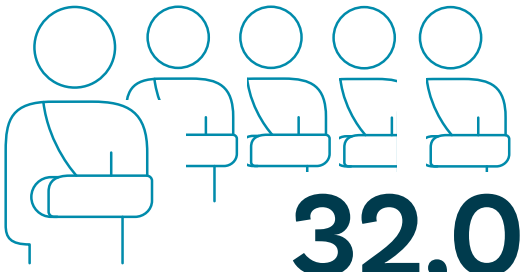
Finally, the programme recognises that for some sites, returning data using manual systems can be challenging. We would like to acknowledge and thank all the teams for their time and effort in collating and returning the data. We will continue to advocate for a digital solution.

This report is the first in a planned series of biannual reports and marks a significant step toward continuous quality improvement, and we welcome all feedback. Please contact **Micheál Bailey** at vfac@rcsi.ie.

Key Recommendations

1. Use local data to drive service improvement and funding discussions with local stakeholders.
2. Leverage VFAC cost savings to support ongoing national roll out of a digital patient flow and data capture system (e.g. eTrauma).
3. Reduce incorrect referrals through standardisation of referral pathways.
4. Continue to strengthen integrated care by aligning VFAC clinical pathways with Emergency Departments, Injury Units, Orthopaedics, Nursing and Health and Social Care Professions.

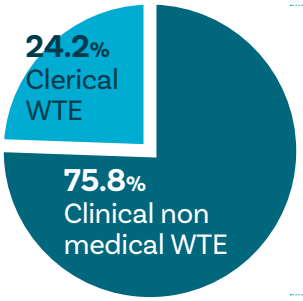
Key Highlights January - June 2025

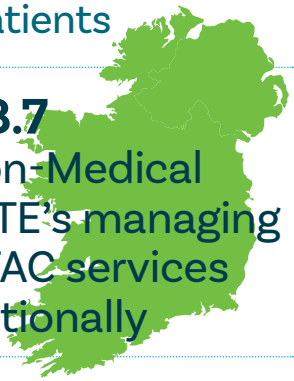


32,085
Patients Managed

33% referred from Injury Unit

25.4% Paediatric Patients

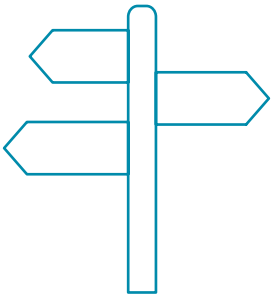




38.7 non-Medical WTE's managing VFAC services nationally

18 Hospitals

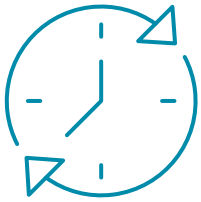
93.4% Patients on the 'correct pathway'



The % of patients who are booked directly for surgery or referred to an alternative pathway of care ranges from **0%** to **15.9%** across the hospitals, but mostly patients referred to VFAC were appropriately assigned to the pathway

2,405
VFAC Clinics Run

90% led by Orthopaedic Consultant



72% of Patients reviewed within **72 Hours**

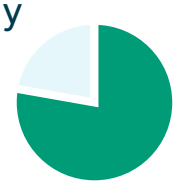
€12,690,463
Total Cost Savings for 6 months

Only 36% of Patients needed to attend a Physical Fracture Clinic

National KPI Performance

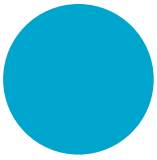
% of occasions where KPI was achieved nationally

79% KPI 1: Access to Care



52% KPI 2: Capacity Building

100% KPI 3: Pathway Validation



Introduction

The Virtual Fracture Assessment Clinic (VFAC) is recognised as one of the HSE's exemplars of a service re-design, embodying the principles of Sláintecare by delivering a safe, patient-centred, and cost-effective approach to acute trauma care. Led by a consultant orthopaedic surgeon and supported by a multidisciplinary team, VFAC provides a streamlined pathway for patients with simple stable fractures to access rapid expert review and timely appropriate care while reducing unnecessary hospital visits and optimising use of available resources resources. With the concept proven and implemented in Glasgow since 2011, and introduced in Ireland in 2015, this virtual model expanded rapidly during the pandemic in 2020.

32,085 patients nationally have been managed by a VFAC service for this 6-month reporting period (January – June 2025). This report presents cumulative retrospective monthly data, alongside comparative national averages, from the 18 orthopaedic departments currently delivering a Virtual Fracture Assessment Clinic (vFAC) service across several hospital sites. These data illustrate activity and performance against three National Key Performance Indicators (KPIs).

The accompanying map demonstrates the growing reach of vFAC services nationwide. There are now 39 sites referring into this service across all Regional Health Areas — a major step forward in delivering accessible trauma care. This includes 18 hospital Emergency Departments and 21 Injury Units (IUs), with two new sites established within the past year

Local Injury Units now contribute over one-third of all vFAC referrals, underscoring their crucial role in early triage and in reducing unnecessary travel for patients. Notably, one in four referrals from outside the Dublin CHI hospitals are paediatric cases, highlighting the expanding role of vFAC in regional paediatric trauma care.

Together, this data and the national map reflect a strong, coordinated, and growing vFAC network that continues to enhance accessibility, efficiency, and quality in fracture care across Ireland.

Table 01 Activity Overview January - June 2025

Patients Reviewed at VFAC	32,085
Patients not needing to attend F2F Fracture clinic	20,522 (64%)
Patients referred to onward Fracture clinic	11,563 (36%)
% Paediatric referrals	25.4%
% Referred from Injury Unit	33.4%
Number of clinics run	2,405
% Delivered by Orthopaedic Consultant	90%
Direct Cost savings: 11,563 x101+ (20,522 x 436.40 [101+ {€129 x 2.6}])	€10,123,663
Indirect Societal cost savings: €80 x 32,085	€2,566,800

KPI	Description	KPI Target	National Result
KPI 1	Access to Care: % reviewed with 72 hours	50%	72.2%
KPI 2	Capacity Building:% not requiring F2F Fracture clinic follow-up	60%	61.5%
KPI 3	Pathway Validation: % not requiring surgery	<10%	1.1%

PARTICIPATING HOSPITAL & INJURY UNITS SITES A DELIVERING VFAC SERVICE

Regional Health Area	Hospital Abbreviation	Hospital Name
HSE Dublin North and North East	BH	Beaumont Hospital
	CH	Connolly Hospital Blanchardstown
	MMUH	Mater Misericordiae University Hospital
	OLOLD	Our Lady of Lourdes Hospital Drogheda
HSE Dublin and Midlands	MRHT	Midlands Regional Hospital, Tullamore
	NGH	Naas General Hospital
	SJH	St James's Hospital, Dublin
	TUH	Tallaght University Hospital, Dublin
	CHI	Childrens Health Ireland, Crumlin
HSE Dublin and South East	SVUH	St Vincent's University Hospital
	UHW	University Hospital, Waterford
HSE South West	CUH	Cork University Hospital
	UHK	University Hospital Kerry
HSE Midwest	UHL	University Hospital Limerick
HSE North & and North West	LUH	Letterkenny University Hospital
	MUH	Mayo University Hospital
	SUH	Sligo University Hospital
	GUH	Galway University Hospital

VFAC Activity January – June 2025

Data on 32,085 patients has been received by the National Clinical Programme for Trauma and Orthopaedic Surgery for the six-month period being reported on. Outlined in the table below is the average number of patients reviewed at VFAC per month per site.

Table 02 Average Monthly Activity January – June 2025

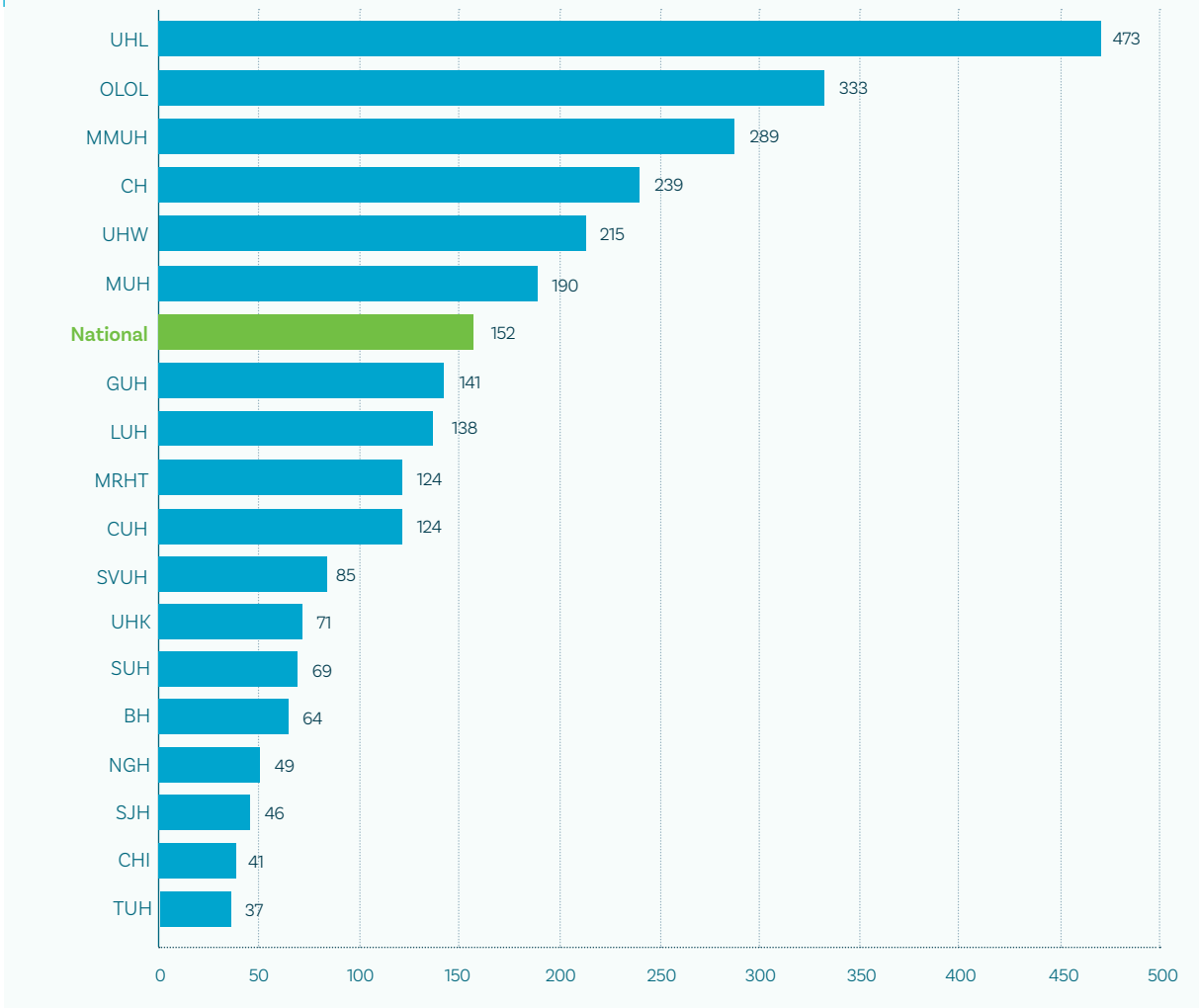
Hospital Abbreviation	Average Number of patients reviewed at VFAC **per month**
OLOLD	822
UHW	695
UHL	670
CUH	558
MRHT	487
UHG	423
National Average	297
MMUH	289
BH	193
MUH	190
LUH	156
UHK	141
CH	120
SVUH	115
SJH	105
SUH	104
TUH	101
NGH	98
CHI	83

Figure 1 highlights the (non-medical) **multidisciplinary team WTE ratio** that delivered the VFAC activity for this reporting period. The non-medical component of the Multidisciplinary team includes:

- Physiotherapists
- Occupational Therapists
- Nursing
- Physician Associates
- Clerical Staff.

This ratio is calculated by dividing the average monthly VFAC activity by the average number of WTEs - both clerical and clinical(non-medical) reported as actually working on VFAC in each month. This highlights the **productivity** of local teams. This allows us to compare sites not just by volume, but also by how effectively they're using their resources allocated to deliver care. Together, this data helps identify not only variation in delivery but also opportunities to improve equity in resourcing across all regions.

Figure 1 VFAC monthly multidisciplinary team WTE/ Activity ratio



The sites that are above the national average (Table 02) all work in collaboration with several Injury Units, who refer into the VFAC service, highlighting how these partnerships in the community can drive both volume and efficiency. Four of the six hospital sites have implemented a patient flow IT system (eTrauma) which has improved not only service efficiency but also has increased the ease at which high quality data is collected.

Figure 2 VFAC monthly activity for the 6 sites above the national average

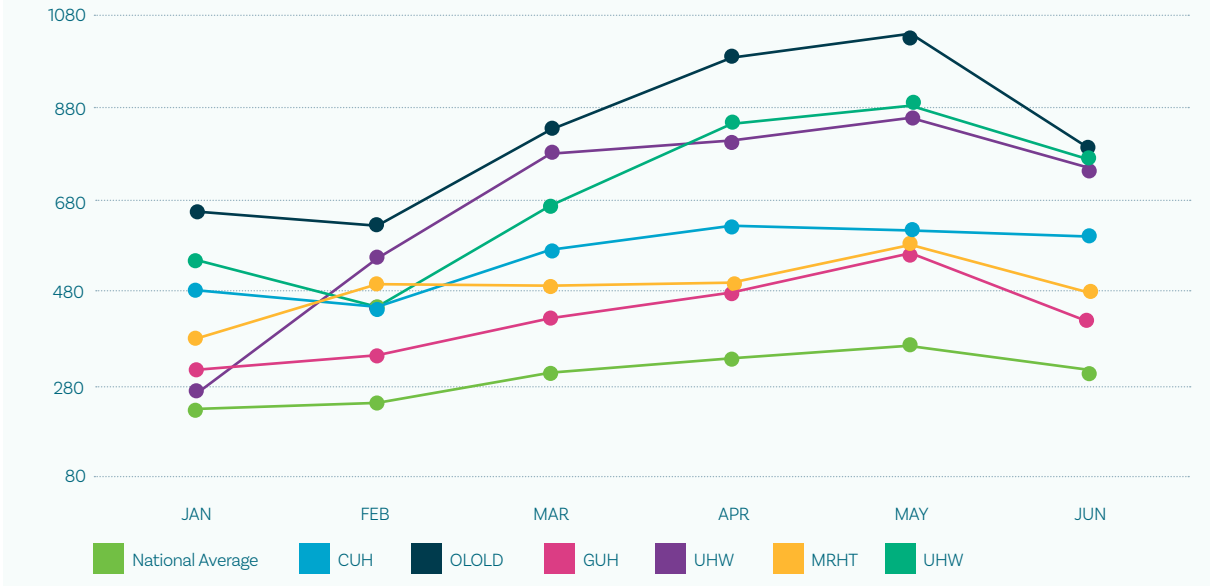
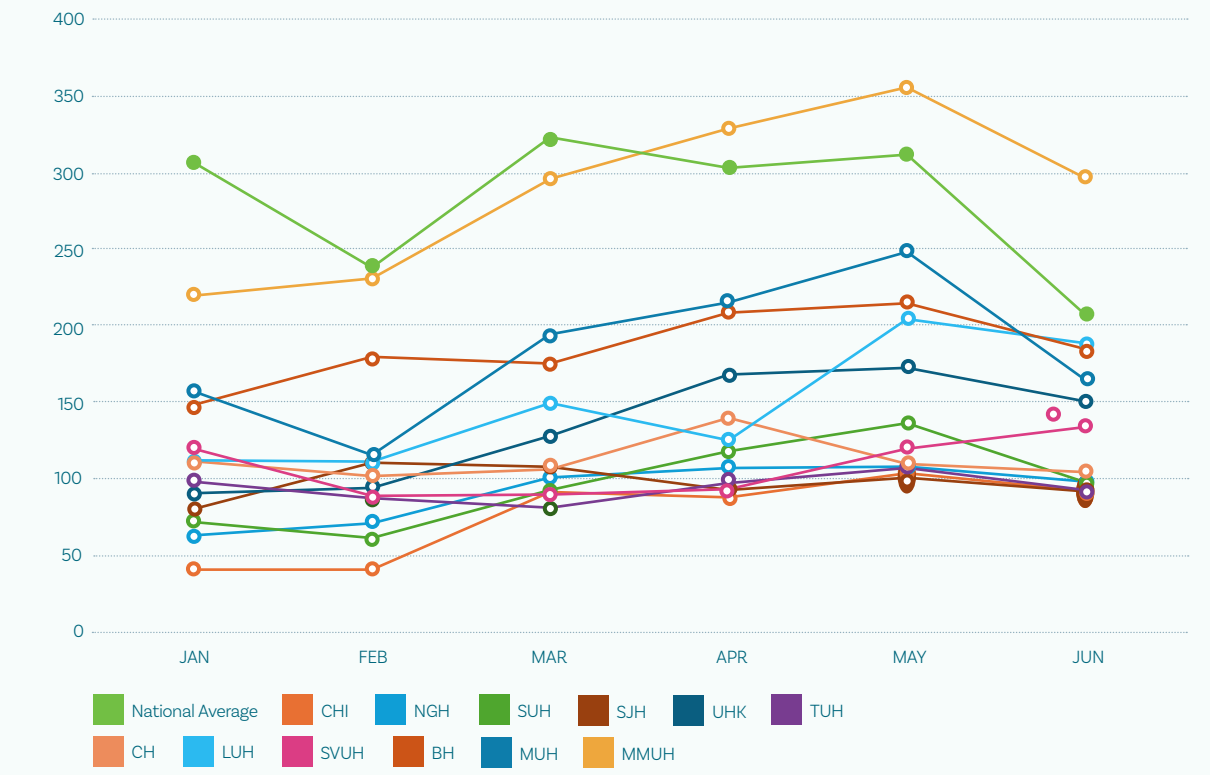


Figure 3 VFAC monthly activity for the sites below the national average



Each of the hospitals that are performing below the national average are all single site units i.e., the VFAC service receives referrals from their Emergency Department only.

National KPI Performance

Table 04 Overview of National KPI Performance

KPI	Definition (Target)	National KPI Score	% of Occasions Target Achieved
KPI 1 – Access to Care	≥50% of patients reviewed at VFAC within 72 hrs of ED/ IU presentation	72.2%	79%
KPI 2 – Capacity Building	≥60% of VFAC patients discharged without onward fracture clinic referral	61.5%	52%
KPI 3 – Pathway Validation	<10% of VFAC patients require surgery	1.1%	100%

KPI 1: Access to care Target: 50% of all patients who are referred to the VFAC clinic are reviewed within 72 hours of presentation to ED/ IU.

British Orthopaedic Association Standards for Trauma and Orthopaedics recommends:

"Following acute traumatic orthopaedic injury, patients should be seen in a new fracture clinic within 72 hours of presentation with the injury. This includes referrals from emergency departments, minor injury units and general practice".

This KPI is a measure of how easy it is for patients to access the most appropriate care for their injury. The national average exceeded this KPI at 72.2%. This reflects strong coordination between Emergency Departments, Injury Units, and orthopaedic teams.

Table 05 Percentage KPI 1 achievement per site per month

Hospital	JAN	FEB	MAR	APR	MAY	JUN	Average Score KPI 1
BH							100
CH							59.6
CHI							93
CUH							42.5
LUH							91.7
MMUH							43.9
MRHT							85.8
MUH							73.4
NGH							47.4
OLOLD							100
SJH							85.7
SUH							96.2
SVUH							85.5
TUH							33.2
UHG							93.2
UHK							82.5
UHL							74.8
UHW							11.2
National							72.2

KPI 2: Capacity Building Target: 60% of all those seen at VFAC clinic do not need onward referral to a physical fracture clinic.

This is calculated as follows:

Total seen at VFAC minus patients referred onward to a Fracture clinic = d/c from Ortho OPD

Table 06 Percentage KPI 2 achievement per site per month

Hospital	JAN	FEB	MAR	APR	MAY	JUN	Average Score KPI 2
BH							42.4
CH							61.5
CHI							83.1
CUH							78.9
LUH							78.2
MMUH							60.2
MRHT							70.2
MUH							72.4
NGH							47.4
OLOLD							65.8
SJH							58.1
SUH							82.3
SVUH							27.7
TUH							47.4
UHG							54.5
UHK							50.5
UHL							53.1
UHW							73.8
National							61.5%

This service redesign enables sites to deliver their in person fracture clinics within safer clinic guidelines as outlined in the programme's 2015 Model of Care. This builds capacity for patients seen virtually and ensures that patients requiring an in-person appointment are scheduled for this in a timely manner. The national average exceeded this KPI at 61.5%. It also highlights a key area for improvement — especially in building confidence around discharge protocols and standardising pathways.

KPI 3: Pathway Validation Target: < 10% of all patients who commence their journey through VFAC will require surgery.

This KPI validates the pathway – if a high number of patients are identified here, then these patients are on the wrong pathway.

Table 07 Percentage achievement KPI 3 per site per month. All sites exceeded this KPI at 1.1%.

Hospital	JAN	FEB	MAR	APR	MAY	JUN	Average Score KPI 3
BH							2.0
CH							0.6
CHI							0.5
CUH							0.0
LUH							0.4
MMUH							1.2
MRHT							3.4
MUH							0.7
NGH							1.0
OLOLD							3.9
SJH							0.3
SUH							0.0
SVUH							2.0
TUH							1.0
UHG							0.4
UHK							1.0
UHL							0.0
UHW							0.6
National							1.1

This measures whether the right patients are being referred into the service. The benchmark is that fewer than 10% should require surgery. We're exceeding this by a wide margin, with a national score of just 1.1%, and 100% of sites meeting the target. So overall, sites are safely selecting patients for referral to a VFAC service.

These hospital-level insights are essential for targeting support where it's most needed and ensuring the model works equitably across the country.

VFAC Outcomes

PRIMARY OUTCOMES

Once a patient's treatment pathway has been decided, their primary outcome is recorded as one of the following, (with referral to):

- Nurse
- Physiotherapist
- Occupational Therapist
- Fracture Clinic
- Pre-Fracture Clinic Advice
- Booked for surgery
- Validated Green Discharge

Those patients not suitable for the VFAC clinic are recorded as "Alternative Care Pathway" or "Inappropriate Referral".

"Pre-Fracture Clinic Advice" is given to patients who are returning to fracture clinic and on a consultant's request will need Physio/OT/Nurse input beforehand; no secondary outcome data is recorded for them.

Figure 4 shows the breakdown of work completed by the multidisciplinary team.

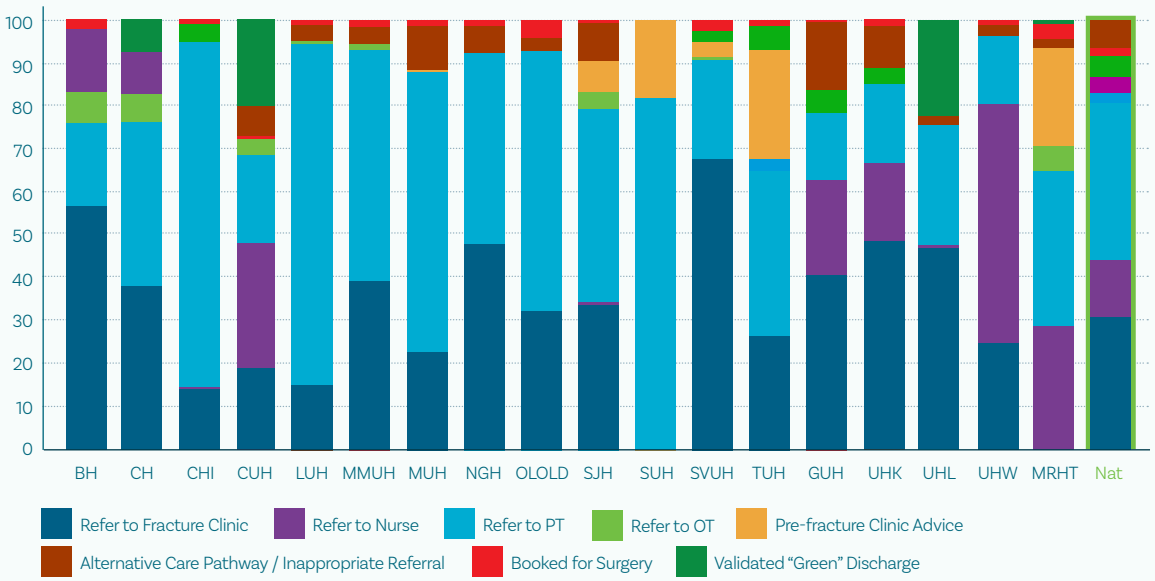
Table 8 National Breakdown of Primary outcomes made within the VFAC clinic. Only those patients referred to Nurse or Physio (n=16,530) have data collected on the secondary outcome made following that intervention (*Figure 5*).

Table 08 National Breakdown of Primary outcomes made within the VFAC clinic.

Refer to Physical Fracture Clinic	Pre Fracture Clinic Advice	Refer to Nurse	Refer to Physio	Refer to OT	Alternative Pathway	Booked for Surgery following review at VFAC	Validated Green Discharges
10,098* (31.5%)	1,059 (3.3%)	4,757 (14.9%)	11,773 (36.7%)	688 (2.1%)	1,682 (5.2%)	428 (1.3%)	1600 (5%)

** only includes where primary outcome equals refer to physical fracture clinic*

Figure 04 VFAC primary outcome for 32,085 patients from Jan – June 2025



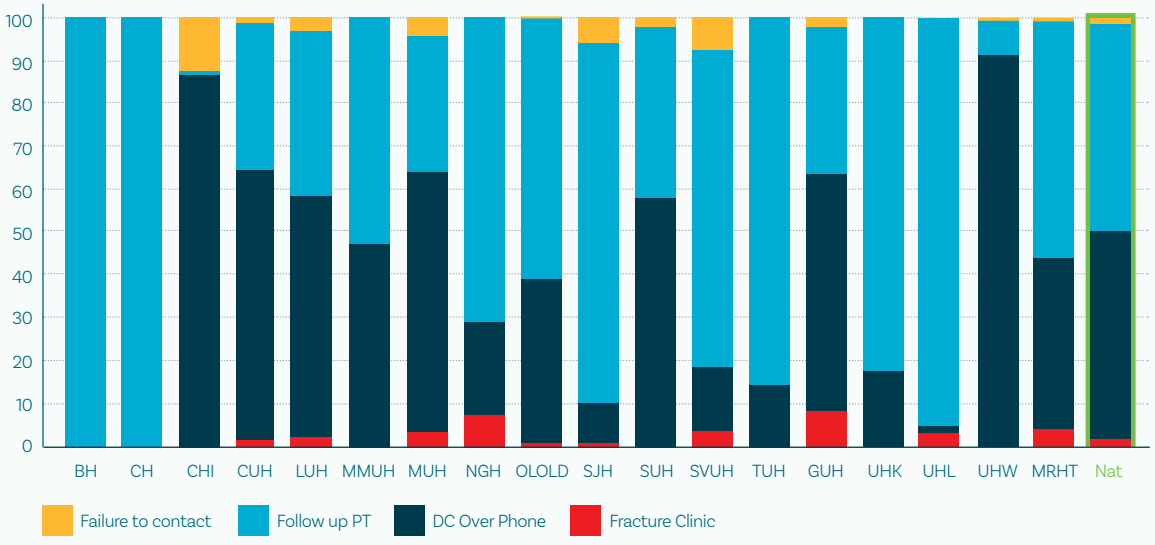
SECONDARY OUTCOMES

Following their a VFAC session, patients whose primary outcome is a referral to a Nurse or Physiotherapist (see Table 10) will have further data collected on their interaction. This information is recorded as the secondary outcome, with the following categories available for selection:

- Discharged
- Needing Onward Therapy
- Refer back to the fracture clinic
- Failure to contact

Secondary outcomes have been recorded for **16,530 patients nationally**. This data gives insight to resource management for this service.

Figure 05 VFAC reported secondary outcomes for 16,530 patients who have been referred to Physio/Nurse as a Primary outcome.



PATIENTS ON THE INCORRECT PATHWAY

Those patients not suitable for the VFAC clinic are recorded as “Alternative care pathway” or “inappropriate referral”. Similarly, those patients requiring a direct surgical booking from VFAC—highlight inefficiencies in patient selection for VFAC. In principle, these patients should not have been referred to VFAC in the first instance, as this represents an ineffective use of resources.

The combined percentage of such cases across sites over the six-month reporting period is highlighted below. This indicates a significant opportunity for improvement in local process design.

Table 09 Percentage of Patients on the incorrect pathway

Hospital Abbreviation	% of VFAC patients for Alternative Pathway & Booked Directly for Surgery
BH	15.9
UHG	15.8
MUH	11.9
UHK	11.0
CH	9.6
SJH	9.0
CUH	7.1
NGH	7.1
OLOLD	7.0
TUH	6.8
National Average	6.6
MRHT	5.6
MMUH	5.0
CHI	4.6
SVUH	4.2
UHW	3.4
UHL	1.5
LUH	0.6
SUH	0.0

The national average sits at 6.6%, but there’s significant variation — with some hospitals referring as few as 0%, and others as high as 15.9%. This variation suggests that while most sites are triaging well, there are still gaps in awareness or application of referral criteria. Improving consistency here would reduce unnecessary workload on VFAC teams and ensure patients are directed to the right care, first time. Further training, feedback to referers will help reduce inappropriate referrals going forward.

Cost Analysis

Table 10 Cost Benefit Analysis of delivering Virtual Fracture Assessment Clinics: Jan-Jun 2025

A	Potential Direct* (non-salary) cost to HSE if all patients needed to attend in person, their 1st fracture clinic appointment (€129)	32,085 x €129 = €4,138,965
B	Actual VFAC Direct* (non-salary) costs per patient (€28)	32,085 x €28 = €899,380
C	Cost saving on 1st visit A-B	**€3,240,585**
D	Return visit savings: discharged patients x 2.6 x €129	20,522 x 2.6 x 129 = €6,883,078
E	Direct cost savings C+D	€3,240,585 + €6,883,078 = **€10,123,663**
F	Indirect cost to society €80 per patient	32,085 x 80 = **€2,566,800**
G	Total Cost Saving for 6 months (E+F)	**€12,690,463**

This table outlines cost savings from switching from an in person fracture clinic to a virtual fracture clinic appointment. On average each initial in person visit leads to 2.6 in person return appointments. Costs to society relate to reduced time off work, travel and carbon emissions.

**(admin, x-ray , plaster room, not Salaries)*

Kiernan, C., Veronovo, T. and McMahon, C.J. (2017) An analysis of an emergent change model in a complex healthcare system: study of a regional orthopaedic unit. MBA Thesis. Michael Smurfit Business School, University College Dublin.

O'Reilly, M. and Sheehan, E. (2020) 'A national fracture clinic service: a more TACtful approach', International Journal of Orthopaedics Traumatology & Surgical Services, 6(1), pp. 28-41.

There is a significant economic benefit of shifting from traditional face-to-face fracture clinics to the Virtual Fracture Assessment Clinic model with direct healthcare savings of €10 million. In addition, there are estimated indirect savings of €2.5 million to society — e.g. reduced travel, fewer missed workdays, and less disruption to family and school life. That gives a total saving of nearly €12.6 million, all while maintaining safe, timely, and effective patient care. It's a powerful example of how virtual models can deliver both clinical and economic value when implemented at scale.

Conclusion and Recommendations

This report highlights the strong national progress in delivering timely, consultant-led care for patients with simple, stable fractures through Virtual Fracture Assessment Clinics (VFACs). The positive impact on service efficiency, patient experience, and resource utilisation continues to demonstrate the value of this model.

However, ongoing success relies on continuous improvement. The following recommendations are proposed:

1. **Strengthen Clinical Pathways**
   - Ensure that clearly defined care pathways are embedded at each site.
   - Update local protocols regularly to reflect national guidance and audit findings.
   - Engage multidisciplinary teams in pathway review and refinement.
2. **Enhance Data Quality and Reporting**
   - Improve completeness and accuracy of submitted data, reducing missing fields.
   - Increase the percentage of sites submitting data within the required timeframes.
   - Expand automated data extraction through platforms like eTrauma to reduce manual entry.
3. **Address Variability in Service Delivery**
   - Support lower-performing sites in achieving KPI targets through peer learning.
   - Use national data to identify outliers in areas such as inappropriate referrals, discharge rates, and delays.
   - Encourage site-level audit and clinical governance meetings to address local challenges.
4. **Promote Equitable Access**
   - Ensure all patients across regions have access to the vFAC model, regardless of geography.
   - Support expansion into smaller sites and injury units with shared consultant support models.
5. **Support Workforce Development**
   - Provide ongoing training for clinical and administrative staff involved in vFAC delivery.
   - Create a national forum or community of practice for shared learning.

These recommendations aim to support consistent, high-quality care across all VFAC services and promote continued alignment with Sláintecare, the HSE Modernised Care Pathways Programme, and the National Trauma Strategy.

Appendix A - Data Quality & Coverage

This initial report demonstrates that all eighteen sites from January to June 2025 are contributing to the data collection. An analysis of missing fields per site is presented below.

VFAC dataset returns should be submitted by the 2nd Tuesday of each month. The percentage of data-sets submitted on time is also presented.

Table 11

Site	Data Returns January – June 2025 (%)	Average of Missing Fields (%)	Submitted on Time (%)
MRHT	100	0	0
UHG	100	0	0
SJH	100	0	66.7
MUH	100	0	100
TUH	100	0	66.7
OLOLD	100	0	0
CHI	100	0	0
LUH	100	0.8	83.3
CUH	100	0.8	16.7
NGH	100	1.5	0
SVUH	100	3	16.7
UHL	100	9.1	16.7
SUH	100	13.3	66.7
UHK	100	19.7	50
MMUH	100	22	66.7
UHW	100	26.9	50
CH	100	28.8	16.7
BH	100	34.1	0
National	**100**	**8.9**	**34.3**

Appendix B - VFAC Whole Time Equivalency

The numbers referenced indicate the actual WTEs allocated to VFAC delivery for the reporting month. WTEs reflect the proportion of each staff member's role that is designated locally to VFAC work.

The table below outlines the average number of staff assigned versus the actual staff in post, highlighting current shortfalls across hospitals delivering VFAC services.

Staff groups included:

- Physiotherapists
- Occupational Therapists
- Nursing
- Physician Associates
- Clerical Staff

Consultant and NCHD numbers are not included in this table

Table 12

Hospital	WTE Clerical Assigned	WTE Clerical Actual	WTE Clinical Assigned	WTE Clinical Actual
BH	0.00	0.00	3.00	3.00
CH	0.00	0.00	0.50	0.50
CUH	0.50	0.50	4.00	4.00
CHI	1.00	1.00	1.00	1.00
LUH	0.15	0.15	1.00	1.00
MMUH	0.00	0.00	1.00	1.00
MRHT	0.50	0.50	3.41	3.41
MUH	0.00	0.00	1.50	1.00
NGH	1.00	1.00	1.50	1.00
OLOLD	1.00	0.79	2.00	1.69
SJH	1.00	1.00	1.50	1.26
SUH	0.50	0.44	1.00	0.88
SVUH	0.24	0.16	1.30	1.20
TUH	0.75	0.75	2.00	2.00
GUH	1.00	1.00	2.00	2.00
UHK	0.00	0.00	2.00	2.00
UHL	0.50	0.50	0.94	0.94
UHW	1.80	1.27	2.59	1.97
National	**0.55**	**0.51**	**1.79**	**1.66**

Those marked in Red, have been delivering their VFAC service on a compliment of staff that is less than was locally provided for. This can be for several reasons including unfilled maternity, sick leave and annual leave

www.rcsi.com/surgery/practice/national-clinical-programmes/trauma-and-orthopaedics

Email: **Vfac@rcsi.ie**

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