Queen Elizabeth National Spinal Injuries Service

Annual Report

2025/2026

NHS Greater Glasgow & Clyde

Queen Elizabeth National Spinal Injuries Service

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Executive Summary

The Queen Elizabeth National Spinal Injuries Unit is situated on the Queen Elizabeth University Hospital campus and is hosted by NHS Greater Glasgow and Clyde Health Board.

Aim and Date of Designation of Service

The service is responsible for the management of all patients in Scotland who have a traumatic injury to the spinal cord. Commissioned in 1992 it has continued to develop the management of the acute injury and lifetime care of all its patients to maximise function and to prevent the complications of paralysis.

Facilities in the custom-built Unit include a combined admission ward and HDU, a rehabilitation ward with a Respiratory Care Unit. An Outpatient Department, gym, hydrotherapy pool and therapy kitchen complete the clinical facilities.

In addition, there is a dayroom, dining room, conference room along with a Step-Down Unit for patients and relatives. The Research Mezzanine (Glasgow University) ensures researchers are embedded in the Unit.

Clinical services are provided at the Glasgow Centre and outreach clinics throughout Scotland.

Description of Patient Pathways and Clinical Process

The Unit accepts all patients who are injured or domiciled in Scotland and are referred with a spinal cord injury. In addition, it accepts some patients with complex fractures without neurological injury whose injuries exceed the capacity of the treating health board. To avoid patient harm, the Unit admits a small number of patients where it is not clear at the point of referral whether they are neurologically injured.

Patients are primarily referred from Trauma Services, but referrals are also received from General Medicine, Neurosurgical, Vascular and Cardiovascular units throughout Scotland. The Unit admits most new patients within hours or days of injury. There is a HDU for ill and ventilated patients and spinal surgery is performed in around one third of cases. Patients with paralysis may remain in the Unit for several months after emergency treatment for rehabilitation, the Unit provides lifelong care, support and follow up.

There are close links with national patient support groups and charities whose teams are embedded in the Unit.

The Unit is also a major clinical trial centre for investigations in both acute and long-term spinal injury.

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Key activity

During the reporting period, April 2025 to March 2026, the Unit admitted 157 new patients, treated 198 day cases and 2,321 out-patients, including 289 patients in outreach clinics across the country. Surgeons performed 48 spinal operations

Further details can be found on the dedicated website at www.spinalunit.scot.nhs.uk

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1. Service Delivery

The Queen Elizabeth National Spinal Injuries Unit hosted in NHS Greater Glasgow and Clyde manages the acute injury, primary rehabilitation and lifetime care of all patients with a traumatic spinal cord injury in Scotland to maximise function and to prevent complications of paralysis. This includes people with traumatic spinal cord injury and people suffering from an acute non- traumatic injury to the spinal cord (for example spinal abscess or surgical injury) where it is identified that there are clinical and social benefits of intensive rehabilitation. The service was nationally designated in 1992.

Spinal cord injuries (SCI), whether from traumatic or non-traumatic causes, are life changing. Highly specialised, multidisciplinary care in a specialist spinal cord injury centre, followed by comprehensive rehabilitation reduces complications, optimises treatment and long-term outcomes and results in a significant life expectancy for the majority of this population.

Between 1994 and 2013, incidence of SCI in Scotland increased from 13.3 per million to 17 per million, this trend is replicated internationally. An increasingly elderly population has led to a growing number of falls resulting in a SCI. The demand for the service is therefore likely to increase as the population of Scotland ages.

The nationally commissioned service admits people with a SCI, American Spinal Injury Association Impairment Scale (ASIA) A to D who are over 16 years of age who are ordinarily resident in Scotland.

To avoid patient harm, it is recognised that the Unit will admit a small number of patients where it is not clear at the point of referral whether they are neurologically injured. Patients for whom SCI has been ruled out, are out of scope of the nationally funded pathway.

It is recognised that the needs of some patients with complex spinal trauma, but no paralysis, may exceed the capacity of local teams. Subject to capacity these cases can be cared for by the Unit.

Patients under the age of 16 are not routinely cared for in the Unit. Referrals of patient's under the age of 16 made to the Unit are considered for admission or transition on a case by case basis, a multi-disciplinary decision is made as to the most appropriate location for the child to be provided with the best possible care, taking into consideration the clinical and social needs of the child as well as the views of parents and carers.

The service undertakes:

- Initial referral into the service, assessment and management
- Admission to treatment
- Rehabilitation
- Discharge and lifelong follow up care

Facilities include a combined Admission Ward and HDU (Edenhall) and a Rehabilitation Ward (Philipshill) with a Respiratory Care Unit. In addition, there is a custom-built Step-

Down Unit for patients and relatives and a Research Mezzanine (Glasgow University) which ensures that researchers are embedded in the Unit. Clinical services are provided at the Glasgow centre and outreach clinics throughout Scotland.

Patients are primarily referred from Acute Trauma Services but referrals are also received from Accident and Emergency, General Medicine, Neurosurgical, Vascular and Cardiovascular Units throughout Scotland. The service provides advice to the referring hospital on initial management and safe transfer to the Unit. This advice is available on a 24-hour basis.

The service liaises with referring departments to ensure the efficient retrieval and early admission of acute SCI patients for specialised care.

The Unit admits most new patients within hours or days of injury. There is a High Dependency Unit for ill and ventilated patients, and spinal surgery is performed in approximately one-third of cases.

Once referred, where patients are not admitted to the Unit within 48 hours of referral e.g. their other health concerns take priority, the service provides outreach support where appropriate, through visits or telephone advice on pressure area care, bladder and bowel management etc.

Multi-disciplinary rehabilitation is the keystone of the workload in this patient population. Surgical support is required from neurosurgery, urology, orthopaedic and maxillofacial surgeons.

All referrals and new admissions are discussed at the weekly MDT meeting involving spinal, surgical and radiology consultants along with residents. This ensures a consensus approach to management for the benefit of patients and mutual support of consultant staff with difficult clinical decisions. Patients' scans are reviewed at this weekly MDT, an MS Teams meeting led by a neuroradiologist. Spinal fixation surgery is performed by spinal neurosurgeons. The Unit maintains a theatre list in the Queen Elizabeth University Hospital (QEUH) for thoracolumbar fixations and elective surgery e.g. urological surgery.

Following the acute phase of treatment, patients receive both physical and psychosocial rehabilitation to enable them to reach their full potential for independent living. Health promotion and patient education are incorporated into daily activities.

The Unit offers a full range of training and support for patients and carers including:

- Self-care teaching programmes for patients and carers
- The training of carers for patients requiring respiratory assistance in the domiciliary setting
- Participation in the health-related aspects of retraining to enable patients, where appropriate, to pursue a career in the general workforce or within a sheltered work setting
- A custom-built Step-Down Unit for patients and relatives
- There are close links with national patient support groups and charities whose teams are embedded in the Unit.

FREQUENCY	LOCATION
DAILY	GLASGOW: DROP IN CLINIC
WEEKLY	GLASGOW: NEW, HALO, URODYNAMICS, SPASM, INTRATHECAL PUMP, SKIN, ANNUAL REVIEW CLINIC, NEAR ME (VIRTUAL), HOUSING CLINIC
BI WEEKLY	GLASGOW: ORTHOTIST
BI MONTHLY	GLASGOW: SEXUALITY, CATHETER CARE, BOWEL CARE, NEUROSURGERY
MONTHLY	NEUROPROSTHETICS, RESPIRATORY UROLOGY, FERTILITY, EDINBURGH (OUTREACH),
TWO MONTHLY	ABERDEEN, INVERNESS (OUTREACH)
SIX MONTHLY	DUMFRIES, BORDERS, ARBROATH (OUTREACH)
ANNUALLY	HUNTLY (OUTREACH)

The location and frequency of out-patient clinics and outreach services are based on the demographic data held on the National Database and ensure convenient local access for patients across Scotland. Medical, nursing and AHP staff attend the clinics accompanied by partner organisations for peer group support.

Patient Pathway

Spinal patient pathway.xls

(see attachment)

2. Activity Levels

The service is commissioned to admit all patients with non-progressive cord injury, but there continues to be a large number of referrals of patients out with this group who do not require admission.

The total number of referrals increased to 446. The national referral/admission ratio (RAR) remains stable at 35%, meaning that just over one third of referred patients are admitted.

Eighty seven patients were referred from primary care this year electronically via TrakCare, largely inappropriate referrals requesting rehabilitation for patients with very minor trauma, degenerative disease of the spine or back pain.

The Unit admits acutely injured spinal patients as soon as their condition allows. There is no waiting list for admission. In 2025/2026 12% of patients were admitted within one day of injury, 24% within two days, and 56% within one week. The time to admission from injury is difficult to decrease because some polytrauma patients will always require several days for resuscitation and treatment of life and limb-threatening injuries before they are fit for transfer.

By comparison, the mean admission time to most UK specialist spinal centres remains greater than three months.

Table 1

New Admissions: Total and Neurologically Injured

	SA level	23/24	24/25	25/26	92-26
ALL NEW ADMISSIONS		129	121	**157**	**5,194**
Neurological	130	125	119	**153**	**3,193**
Non-neurological		4	2	**4**	**1,906**

All 153 patients referred with a neurological injury were admitted as soon as clinically stable following referral. Numbers of paralysed patients are increased this year, the national figure had previously remained stable at around 125 per year, a crude incidence rate of 2.3/100,000.

Table 2

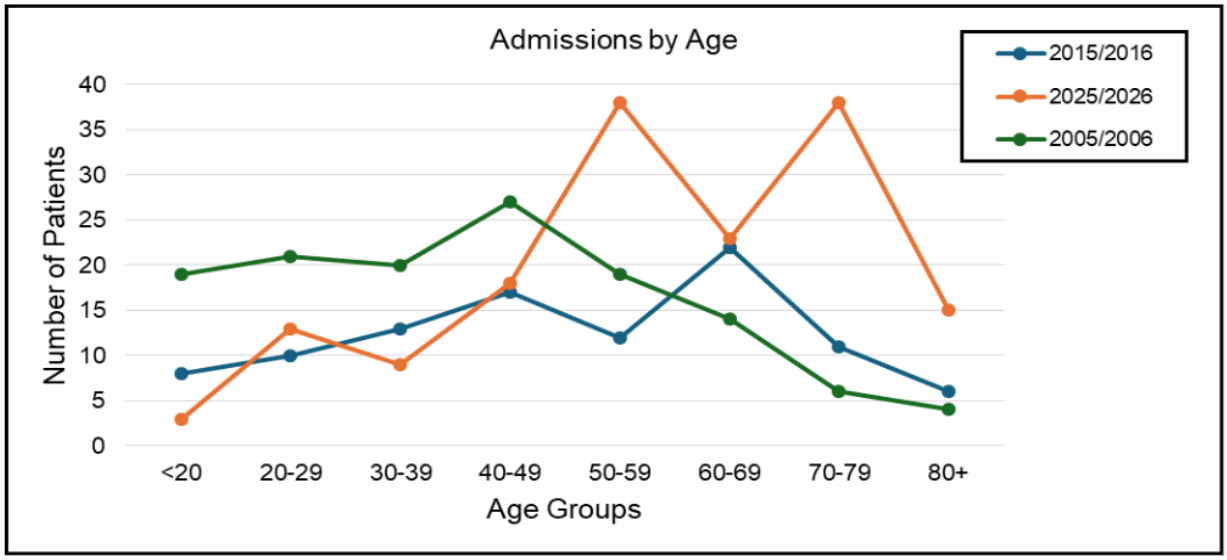
Neurologically Intact Patients

Health Board	No of Patients	Total Bed Days
Greater Glasgow & Clyde	3	27
Fife	1	5
Total	**4**	**32**

In 2025/2026 four patients were admitted to the Unit who after full assessment had not suffered a SCI. Numbers of neurologically intact patients remain low. This is in keeping with national policy to treat such patients locally whenever possible. There is likely to be a long-term small number of patients without cord injury because of uncertainty of paralysis at time of referral. There are also a small number of patients with complex fractures but no neurological deficit whose injuries exceed the capacity of the local hospital.

Figure 1

Admissions by Age



Overall, the admission age profile has changed little over the last few years with the peak age cohort now well established as the 50-79 year old patients. The mean age of admissions was 58 this year; it was 46 twenty years ago, and 53 ten years ago as demonstrated above. This older group has greater co-morbidity affecting their capacity for rehabilitation. They make large demands on general medical care, far beyond the original medical capacity envisaged when the Unit was created.

Table 3

Mechanism of Injury

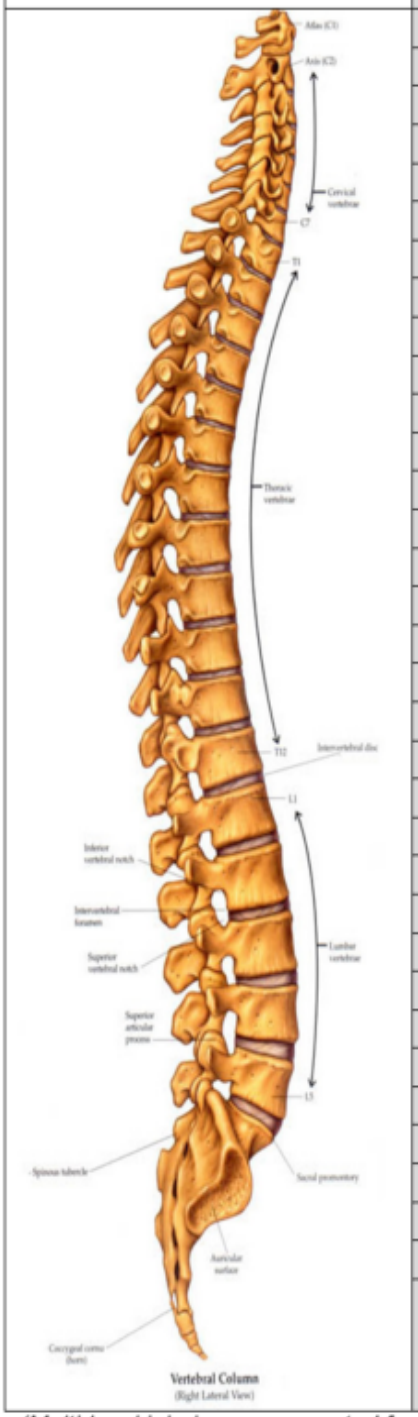
	2023/ 2024	2024/ 2025	2025/ 2026
Fall*	**65**	**74**	**82**
RTA	**21**	**16**	**24**
Motor vehicle	10	8	12
Motorcyclist	4	3	7
Bicyclist	7	4	4
Pedestrian	0	1	1
Medical	21	27	32
Industrial Injury	0	1	1
Assault	0	1	0
Penetrating Injuries	0	0	0
Sporting Injury	8	1	9
Domestic Injury	0	1	0
Self Harm	8	0	6
Other	6	0	3
Total	**129**	**121**	**157**

** includes diving injuries*

Falls remain the most common cause of injuries, there was a further increase this year in the number of patients sustaining a SCI due to fall. There has been an increase in the number of patients admitted with infection or ischemic insult as the cause of their SCI also, similar to other specialist centres in the UK. Numbers of patients with sporting related injury and SCI related to deliberate self-harm remain variable.

Table 4

Admissions by Anatomical Level and Severity



Level	Complete	Incomplete	Intact Injury level	Total
C 1	0	2	0	2
2	1	8	1	10
3	2	11	0	13
4	12	42	0	54
5	3	12	0	15
6	0	5	0	5
7	0	1	1	2
8	0	2	0	2
Sub-total	18	83	2	103
T 1	1	0	0	1
2	1	0	0	1
3	1	1	0	2
4	4	1	1	6
5	1	4	0	5
6	0	3	0	3
7	1	3	0	4
8	1	2	0	3
9	1	3	0	4
10	2	2	0	4
11	1	10	0	11
12	0	0	0	0
Sub-total	14	29	1	44
L 1	1	5	1	7
2	0	1	0	1
3	0	0	0	0
4	1	1	0	2
5	0	0	0	0
Sub-total	2	7	1	10
S1-5	0	0	0	0
Sub-total	0	0	0	0
TOTAL	34	119	4	157

(Multi-level injuries were counted from the highest level)

Cervical injuries continue to predominate at 66% of total injuries. This is now an established pattern and a change from the early days of the Unit when the split was 50:50 cervical:thoracolumbar. The overall preponderance of tetraplegic patients continues to put increasing demands on nursing and occupational therapy time. The number of high complete tetraplegics has increased to 15 (11 in 2024/2025).

Table 5

Supporting Surgical Services

Service	Acute Operations	Elective Operations
Neurosurgery	**48**	**0**
Urology	**0**	**16**
Other	**20**	**13**

Multi-disciplinary rehabilitation is the keystone of the workload in this patient population. Surgical support is required from neurosurgery, urology, orthopaedics and maxillofacial surgical colleagues. The proportion of patients requiring an acute spinal surgical procedure is stable at one third. Spinal fixation surgery is performed by spinal neurosurgeons. The Unit maintains a theatre list in the QEUH for thoracolumbar fixations and elective surgery e.g. urological surgery. 21% of the Unit's QEUH lists were cancelled this year at short notice due to theatre staffing shortages. The mean time to spinal fixation surgery post trauma was 14.5 days this year, the median time was eight days.

Table 6

Out-patient Activity

	SA level	23/24	24/25	25/26
Return	1900	1,900	2,200	**2,321**
New	60	62	45	**36**

Out-patient activity of the Unit is focused on the post discharge management of acute injuries and lifelong follow up. Dedicated clinics in Spinal Medicine and Neurosurgery supplement the nurse led Annual Review Clinics for those patients with a neurological deficit. The sustained increase in out-patient activity, is probably due to the increased convenience of telephone and Near Me consultations.

There is an open-door policy for Nurse Led Clinics. Medical advice is always available. A small number of patients with established paralysis move to Scotland every year, and the maximum waiting time for these new elective outpatient appointments is about two months.

Table 7

Attendance and Location Outreach Clinics

Location	% Attendance 24/25	% Attendance 25/26	Number of Clinics	Number of Patients
Aberdeen	**86%**	**85%**	**5**	**67**
Inverness	**100%**	**87%**	**4**	**48**
Dumfries	**95%**	**84%**	**2**	**10**
Arbroath	**89%**	**87%**	**3**	**27**
Borders	**79%**	**88%**	**2**	**14**
Huntly	**94%**	**94%**	**1**	**15**
Edinburgh	**92%**	**78%**	**11**	**108**
Ave Rate	**91%**	**85%**	**28**	**289**

Table 8

Out-patient Activity by Specialty at QENSIU

	23/24	24/25	25/26
Neurosurgery	273	235	**229**
Urology	22	73	**29**
Skin Care	0	4	**2**
Pain / Spasm	22	16	**0**
Neuroprosthetics	9	35	**40**
Orthotics	227	205	**187**
Sexual Dysfunction	6	3	**8**
Respiratory	13	18	**15**
Fertility	1	2	**0**
MDT Therapy	0	25	**0**

Catheter Care	0	1	**0**
Bowel Clinic	0	0	**107**
Housing Clinic	0	15	**301**
Spinal Injury Annual Review	1,017	1,236	**1,114**
Total	**1,590**	**1,853**	**2,032**

Table 9

Day Case Activity - Day Case Attendances by Reason

	23/24	24/25	25/26
Urology/Urodynamics/Catheter Care	56	82	57
Halo Fixation	24	23	60
Skin	0	0	0
Orthopaedic/Neurosurgery	0	0	0
Acupuncture / Pain / Spasm	237	67	81
Sexual Dysfunction	4	1	0
Fertility	2	9	0
Other	0	0	0
Total	**323**	**182**	**198**

Day case activity includes minor surgical procedures, medical interventions and nursing care. Acupuncture / Pain / Spasm Day case numbers have reduced significantly, largely due to the low number of Spasticity Clinic appointments offered this year with medical staff shortages. The level of day case activity is self-limited due to the finite population of spinal injured patients. It is suspected that sexual dysfunction attendance is under-recorded due to the nature of consultations, which often take place out with the standard clinic environment.

Day case activity remains limited by geographical constraints and there is a natural trend towards seeing patients closer to Glasgow. Patients who live out with the West of Scotland attend local Halo and Spasticity clinics.

3. Performance and Clinical Outcomes

3.1 Equitable

Details of Referral and Admission by Region

The service is commissioned to admit all patients with non-progressive cord injury, but there continues to be a large number of referrals of patients out with this group who do not require admission. The referral itself is not a neutral process, and inappropriate referrals can lead to delays in management locally.

The total number of referrals has increased to 446. The national referral/admission ratio (RAR) remains stable at 35% meaning that just over one third of referred patients are admitted. The RAR in the early 2000's was around 70%.

Eighty seven patients are referred from primary care electronically via TrakCare, largely inappropriate referrals requesting rehabilitation for patients with very minor trauma, degenerative disease of the spine or back pain.

Table 10

Referral and Admission by Region

Referring Board	Total Referrals	Admissions	Not Admitted	% Admitted	Complex Advice Given
Greater Glasgow & Clyde	240	47	193	20	81
Lanarkshire	44	17	27	39	3
Ayrshire & Arran	29	15	14	52	3
Dumfries & Galloway	8	5	3	63	1
Borders	3	1	2	33	0
Highland	12	6	6	50	0

Grampian	16	10	6	63	3
Forth Valley	9	6	3	67	0
Tayside	22	11	11	50	0
Fife	16	15	1	94	0
Lothian	36	19	17	53	10
Shetland	0	0	0	0	0
Western Isles	4	0	4	0	0
Orkney	0	0	0	0	0
ECR	7	5	2	71	0
Total	**446**	**157**	**289**	**35**	**101**

There is a historic over-referral pattern from some Health Boards. Two hundred and eighty nine patients with suspected spine pathology were referred but not admitted as they fell outside the scope of the service. Two hundred and two of these non-admitted referrals had acute spine trauma, they were managed in the referring hospital with appropriate advice and support from consultant medical staff. Eighty seven patients were referred from primary care NHS GGC electronically via TrakCare, largely inappropriate referrals requesting rehabilitation for patients with very minor trauma, degenerative disease of the spine or back pain.

Some patients were seen by consultant staff in ITU/HDU, the neurosurgical, orthopaedic and medical wards of the QEUH and other hospitals. The QEUH, a Major Trauma Centre (MTC), attracts increasing numbers of trauma from a very wide area, and this has led to demands of consultants' time to see patients who would have previously merited telephone advice only.

Numbers referred from GGC remain inappropriately high (only 20% of referrals were admitted), however this includes 87 semi elective referrals, referred from primary via TrakCare, 31% of acute injury referrals from GGC were admitted. Referrals for non-traumatic and progressive conditions are redirected appropriately. The number of patients not admitted but requiring complex advice has increased to 101. In these cases, the referring team will have contacted the Unit several times for advice, and occasionally these patients will be seen by consultant staff largely in the QEUH, most often when the diagnosis of SCI is uncertain. It remains appropriate for consultants to assist the local team with the management of especially complex cases where patients are neurologically intact.

Table 11

Admissions by Health Board and Referring Specialty

Referring Board	Referring Specialty				Total
	Trauma & Ortho	Neuro	A&E	Other	
Greater Glasgow & Clyde	16	12	17	2	**47**
Lanarkshire	7	4	2	4	**17**
Ayrshire & Arran	5	5	4	1	**15**
Dumfries & Galloway	3	1	1	0	**5**
Borders	1	0	0	0	**1**
Highland	4	0	1	1	**6**
Grampian	5	4	0	1	**10**
Forth Valley	1	3	2	0	**6**
Tayside	1	10	0	0	**11**
Fife	5	8	2	0	**15**
Lothian	6	10	2	1	**19**
Shetland	0	0	0	0	**0**
Western Isles	0	0	0	0	**0**
Orkney	0	0	0	0	**0**
ECR	2	0	2	1	**5**
Overseas	0	0	0	0	**0**
Total	**56**	**57**	**33**	**11**	**157**

The number of patients admitted from Ayrshire and Arran, Fife, Grampian, Lothian and Tayside was unusually high this year.

Table 12

Admissions by ASIA impairment scale by NHS board

2025/2026	A	B	C	D	E	Total	Total 2024/2025
Ayrshire and Arran	4	0	1	10	0	**15**	9
Borders	0	0	1	0	0	**1**	2
Dumfries & Galloway	2	0	0	3	0	**5**	4
Fife	2	1	3	8	1	**15**	2
Forth Valley	3	1	0	2	0	**6**	6
Grampian	2	1	2	5	0	**10**	5
Greater Glasgow & Clyde	8	1	10	25	3	**47**	40
Highland	1	0	2	3	0	**6**	8
Lanarkshire	3	2	5	7	0	**17**	19
Lothian	3	2	4	10	0	**19**	13
Overseas	0	0	0	0	0	**0**	1
Shetland	0	0	0	0	0	**0**	0
Tayside	3	0	1	7	0	**11**	7
Orkney	0	0	0	0	0	**0**	0
Western Isles	0	0	0	0	0	**0**	2
ECR	3	0	1	1	0	**5**	3
TOTAL	**34**	**8**	**30**	**81**	**4**	**157**	**121**

The ASIA grading system is recognised internationally as a measure of spinal cord dysfunction and can be used to classify improvements over time.

The Unit continues to admit patients from all areas of Scotland. The distribution of admission of paralysed patients, and the annual variation since the Unit opened, justifies the clinical and economic benefits of a national service.

3.2 Efficient

Table 13

Bed Utilisation

National Spinal Injuries Unit **Edenhall HDU = 12 Beds**		**Philipshill = 32 Beds**	
Funded Bed Complement	**SA level**	**Actual Occupied Bed Days** **By SCI patients**	**% Occupied by SCI patients**
44	**13,610**	**11,298**	**89%**

Occupancy figures for spinal cord injured patients have increased. Due to bed pressures in NHS GG&C, the Unit accommodated 123 non-spinal injured patients who are not counted in the above figures, occupying a further 563 bed days.

Table 14

Ventilated Bed Days

	No. patients	**Total Ventilated Days**	**Mean Ventilated Days**
Edenhall	21	582	27.7
RCU	3	1,129	

Patients with high-level SCI often require temporary or permanent ventilator support. The Respiratory Care Team consists of Consultants in Spinal Injuries and a Respiratory Care Spinal Nurse Specialist who work closely with the neuro-anaesthetic service providing in-patient care and a domiciliary ventilation service throughout Scotland.

Each patient is counted only once but may be responsible for multiple episodes of care or inter-ward transfers if their condition varies. Edenhall, the HDU ward, again provided care for a significant number of acutely ventilated patients. Acutely ventilated

patients require 1:1 nursing, the Edenhall nursing team supported by medical and physiotherapy colleagues have therefore been under additional pressures caring for this group. The number of patients with a high complete tetraplegia (C0 to C4) this year was 15, twenty one patients required to be ventilated acutely. All but one newly injured patient requiring ventilation this year were successfully weaned again from ventilation. The mean time to wean a patient from a ventilator in Edenhall was 28 days this year. The mean age of ventilated patients was 48 this year.

When medically stable, established long term ventilator dependent patients are moved to the Respiratory Care Unit (RCU) in Philipshill. Three ventilator dependent patients who were long term delayed discharges in RCU were discharged safely to the community this year, in total these three patients accounted for 1664 of the delayed discharge bed days.

Table 15

Percentage of Utilised Bed Days by ASIA Scale

Discharged patients 2025/2026

ASIA scale on admission	No. of patients	Mean length of stay (days)	Range	Utilised bed days %
A	35	167	3 – 1,083	42
B	7	158	15 - 337	8
C	26	102	20 - 206	19
D	81	54	2 – 208	31
E	4	8	2 - 20	0.2
Total	**153**	**92**	**2 – 1,083**	**89%**

One hundred and fifty three patients were discharged from the Unit this year, the length of stay in the tables above is the actual length of stay per ASIA Impairment Scale in total, it includes the 2,543 delayed discharge bed days, thereby extending the reported length of stay.

3.3 Timely

Table 16

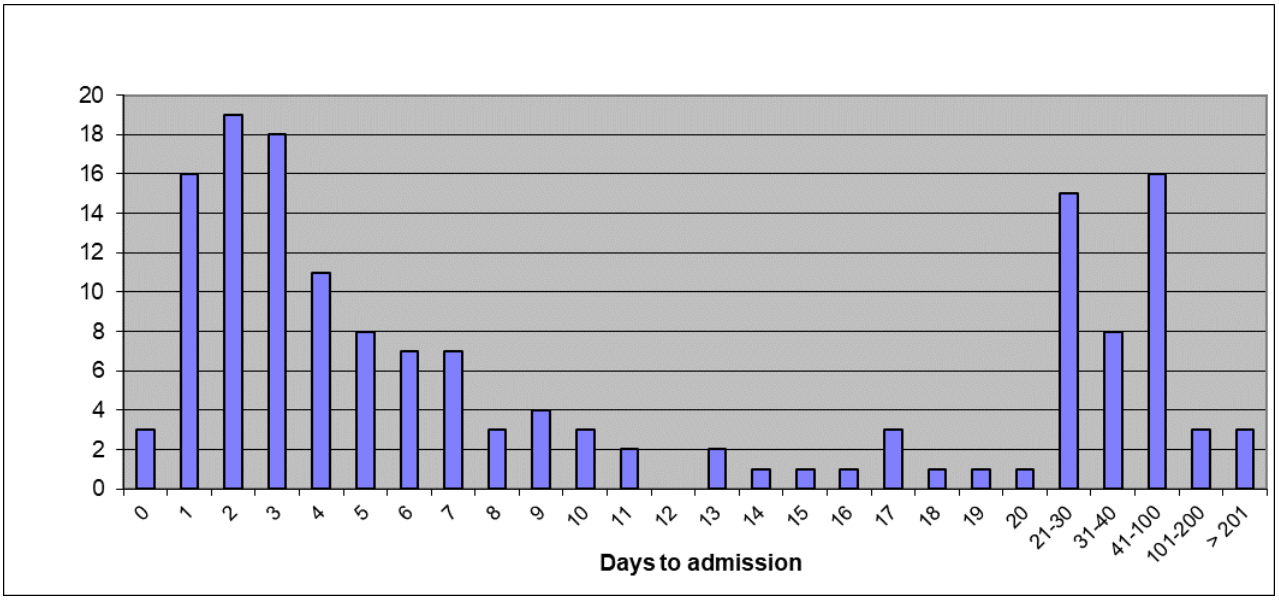
No. Of days from injury to admission

	No. of patients	Mean Time (days)	Range of time
2023 - 2024	129	29	0 – 1,126
2024 - 2025	121	206	0 - 21,838
2025 - 2026	**157**	**34**	**0 - 2,129**

The Unit admits on grounds of clinical priority and safety of transfer. Appropriate support facilities are available in the majority of hospitals in Scotland, but international and regional data supports early transfer if possible. Current national policy is to transfer patients to QENSIU as soon as clinically stable, and this has proved a robust admission policy for over 30 years. There were no delays in transfer due to lack of beds. Time to admission has increased in 2025/2026, with ongoing delayed referral of trauma patients, fewer patients are referred from the Emergency Departments directly but from ITUs or Major Trauma Wards once stabilised in MTCs and from Trauma Units following local assessment.

Figure 2

Time from Injury to Admission



The policy is of immediate admission for all patients once they are clinically stable. Early referral is encouraged. In 2025/2026 12% were admitted within 24 hours of injury, 24% of patients were admitted within 48 hours of injury, and 35% were admitted within 72

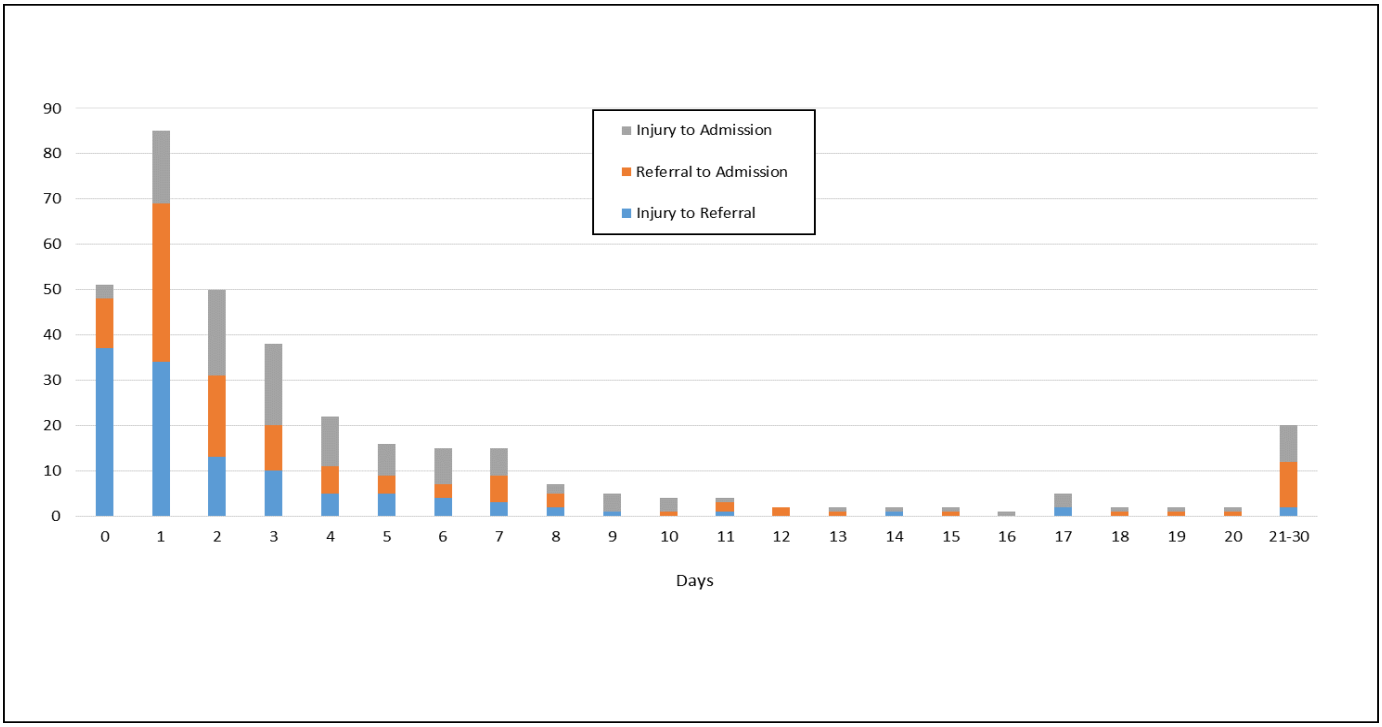
hours, 56% were admitted within one week, 30% of trauma patients were admitted within 48 hours of trauma.

The patients with non-traumatic injuries tend to skew admission times to the right because the initial spinal damage is often not so obvious and diagnosis and treatment of these patients is undertaken in neurological and medical units out with the trauma system. They are referred and admitted much later than the trauma patients. Where appropriate patients with non-traumatic conditions were assessed within 2 weeks of referral. As usual, a "long tail" of patients were admitted weeks and months following injury. This time pattern is consistent with previous years. Table 16 shows mean time to admission for all first-time admissions. This includes some patients who were initially managed outside QENSIU and admitted years, sometimes decades, after injury for elective treatment. These patients are coded as "new injuries" and grossly skew the mean time to admission, but these numbers are included for consistency and transparency.

The emphasis remains on early admission to provide immediate support to the patient and family and to prevent complications.

Figure 3

Time from Injury to Referral to Admission



Early referral and cooperation between the staff in the Unit and the referral hospital ensures immediate admission if clinically indicated. Consultant telephone advice is available 24/7 for those patients who are not immediately transferred. The referral proforma (recently reviewed), transfer documentation and admission form (currently under review) continue to be successful in facilitating and auditing the process.

A pattern of delayed referral of traumatic spinal cord injured patients has been noted since the establishment of all MTC's in Scotland. Of the 125 patients admitted to the Unit with a traumatic SCI this year, the median time from referral to admission was two days and four days from injury to admission to the Unit.

Approximately 20% of patients have associated orthopaedic injuries. Cooperation between ITU, the referring hospital and other specialised units can be required (Plastic Surgery, Oral and Maxillofacial Surgery, Renal, etc.).

Time to First Goal Planning Meeting

Eighteen percent of patients had their first Goal Planning Meeting within three weeks of mobilising. A recent spot audit of inpatients confirmed the average time to first goal planning meeting post mobilising was 28 days. As per the Service Level Agreement, a record will be kept moving forward of the patients who have their first goal planning meeting taking place within four weeks of mobilising, this will be reported in future years.

Discharge

Despite discharge planning weeks or months ahead, a number of patients continue to have delays in discharge, previously generally due to lack of suitable accommodation. If accommodation or necessary carers are unavailable, patients are transferred back to the referring hospital once they have completed their rehabilitation. Across Scotland challenges recruiting carers has led to significant delay to discharge. Staff at the Unit continue to work with local Health and Social Care Partnerships and housing organisations to minimise delays returning home.

Table 17

No. of Patients Discharged by Location of Discharge

Location of discharge	No. of patients discharged
Home	**103**
NHS Transfer	**38**
Residential/Nursing home	**7**
Other	**3**

One hundred and three patients were discharged to their original family home following appropriate adaptations or to a new appropriate property with a care package if required. Seven patients were discharged to long term institutional care settings. Thirty eight patients were repatriated to an NHS bed in their own health board awaiting appropriate accommodation, care package or both.

Table 18

Delayed discharge

	No. of Patients Discharged	No. of Patients Delayed	Mean Delay (days)	Range of Delay (days)	No Delay
2023/2024	136	41	38	2 - 318	70%
2024/2025	116	28	37	1 - 230	76%
2025/2026	**153**	**40**	**64**	**2 - 899**	**74%**

Table 19

Delayed Discharge by Health Board

Health Board	No of patients	Total days delayed
Ayrshire and Arran	2	48
Dumfries & Galloway	1	17
Forth Valley	2	9
Grampian	1	20
Greater Glasgow & Clyde	17	1,720
Highland	3	120
Lanarkshire	7	174
Lothian	4	399
Tayside	2	33
Fife	1	3
Total	**40**	**2,543**

Two thousand, five hundred and forty-three bed days were occupied by delayed discharge patients making increasing demands on nursing time in particular. Seventeen patients from GGC were delayed accounting for a massive 1,720 bed days. In keeping with previous reports, for comparison, this 2,543 days includes all the delayed bed days of the 153 patients discharged. This year, three patients who are ventilator dependent and delayed from previous years were finally discharged to the community and included in this figure. These three patients accounted for a total of 1,664 delayed bed days.

Table 20

Patients Delayed by More than Six Weeks per Health Board

Health Board	No of Patients	Total Bed Days
Greater Glasgow & Clyde	3	1,525
Lanarkshire	2	107
Highland	1	76
Lothian	3	387
Total	9	2,095

Nine (6%) patients were not discharged from the Unit within six weeks of been deemed fit for discharge.

3.4 Effectiveness

Clinical Outcomes/External Benchmarking

The Unit has provided outcome and activity figures since 1998 in this Annual Report and in specialised reviews. Clinicians and researchers have published many papers in the literature on a number of topics. Details of publications are outlined in University of Glasgow - Research - Research units A-Z - Scottish Centre for Innovation in Spinal Cord Injury - Publications

External benchmarking remains difficult. We are not aware of any other publicly funded spinal service which provides care from injury to lifelong follow-up to such a geographically distinct population.

Some comparisons with English centres can be made using data from their national commissioning database. The average time from trauma to admission for most English centres is over three months, in Scotland it is much shorter. Studies have confirmed that early and direct admission to specialist spinal injuries centres reduces complication rates and length of hospital stay. The effects of early or direct admission to a specialised spinal injury unit on outcomes after acute traumatic spinal cord injury | Spinal Cord

3.5 Safe

Hospital Acquired Infection

Infection Control Precautions

Standard Infection Control Precautions (SICPs) are the basic infection prevention and control measures necessary to reduce the risk of transmission of infectious agents from both recognised and unrecognised sources of infection. To be effective in protecting against infection risks, SICPs must be used continuously by all staff.

This year both ward areas were audited twice, compliance varied between 87% and 93% a significant improvement on last year.

Table 21 Standard Infection Control Precautions Audits

Ward	Results	Audit date	Action Plan
Philipshill	90%	24/4/25	
Edenhall	87%	24/4/25	Completed improvements implemented and added to Care Assurance and Improvement Resource

Ward	Results	Audit date
Philipshill	93%	21/10/2025
Edenhall	90%	21/10/2025

Table 23

Hospital Acquired Infection

	22/23	23/24	25/26
COVID	**6**	**9**	**0**
Salmonella	**0**	**0**	**0**
Clostridium Difficile	**0**	**1**	**2**

Streptococcus pyogenes	**0**	**1**	**0**
Scabies/TB/varicella Zoster	**1**	**0**	**0**
MDR Acinetobacter	**0**	**3**	**0**
HAI Influenza			**4**

With the support of the GGC Infection Control Team, all patients with hospital acquired infection (HAI) are isolated or cohorted appropriately within the Unit to limit the spread of infection, keeping other patients and staff safe.

Edenhall Ward receives patients in the early stages after multiple trauma, and many come from ITU or HDU areas, with a few coming from overseas, they are a high-risk group. As per GGC Infection Control guidance, all appropriate patients are initially nursed in single rooms with screening protocols performed before being transferred to a bay. On admission to the Unit screening of patients this year confirmed colonisation with Candida Auris, Vancomycin-resistant Enterococcus and Carbapenemase Producing Enterobacterales, such patients remained isolated in single rooms for the duration of their inpatient stays The relatively low rates of infection acquired within the Unit continue to be a tribute to the standard of nursing care and policies within the Unit.

Readmissions

Most neurologically injured patients discharged from the Unit never require readmission. Once re-established in the community, they attend annually at the Outpatient Department for lifelong follow up. In some cases, readmission must be regarded as a failure, most often due to skin problems and self-neglect. There were 15 readmissions to the Unit during the year, a shortfall on the contract estimate of 35 readmissions, most often due to elective surgery or top up rehabilitation to optimise independence.

During the year of the 153 patients discharged following primary rehabilitation, four patients were admitted to their local hospital acutely within 30 days of discharge with a complication of SCI e.g. urinary tract infection

Morbidity and Mortality

All deaths are presented at regular morbidity and mortality meetings (M&M). There were two deaths in the Unit in 2025/2026, both were expected.

3.6 Person centred

Across the year, the Unit carries out interviews with patients at the point of discharge to gain an understanding of their experience and their appraisal of their stay in rehabilitation. These patient reported outcome measures are then used by the Team to acknowledge

successes and highlight areas in need of ongoing improvement. Consisting of 40 minute semi-structured interviews, the current evaluation was formed from a sample of patients across 2025.

Feedback from patients would suggest that staff communication remains clear and patients felt informed and involved in their care. Patients felt listened to and respected by staff and acknowledged the role goal planning played in shaping their rehabilitation. While it was common to feel uncertain about discharge, patients typically felt they had achieved their inpatient goals given the extent of their injuries. At the point of discharge, most believed it was the right time to be leaving the Unit and were aware of the ongoing support they could access from the Unit as an outpatient. A comparison of data across the years suggests that high standards have been maintained over time with the only real alterations in feedback pertaining to the impact of reduced nursing staff levels upon care in 2025. The positive experiences of patients are captured in the direct quotes below:

- "The education classes were great. There was a lot I didn't know. Well worth getting along"
- "The multidisciplinary team helped me set realistic goals. It was a lot at once, but they helped break it down so that I understood."
- "The hand therapists were brilliant. I didn't think I'd be able to write but they worked with me and I can do it now…"

While the majority of feedback was positive, patients reported that nursing staff shortages had impacted negatively upon their stay in rehabilitation, both in terms of care and the timeliness of care. This was a recognised challenge for the service during the earlier part of the year. Gladly, the successful recruitment of additional nursing staff would be expected to filter through into next year's data and lived experience for patients. Patients continue to desire increased access to additional hours of therapy, despite this not being supported in the scientific evidence base. Some of the challenges and frustrations of patients are captured by some of the comments below:

- "While the nurses were great, I could tell some of the bank staff perhaps didn't have the same level of expertise….at night time and at weekends things didn't seem as well covered as during the day."
- "If I wasn't dressing myself quickly enough, sometimes they could give me a hand, which wasn't always needed."

The Unit remains committed to addressing those areas of performance which are amenable to improvement. The general themes of feedback gathered from patients suggests that the Unit continues to be perceived positively and delivers a high quality of care and rehabilitation.

Table 24

Method of Mobilising by Level of Injury on Discharge

Level	Walking	Mobilising by wheelchair	Total
C1 – C4	46	35	**81**

C5 – C8	12	12	**24**
T1 – T12	16	22	**38**
L1 and below	7	3	**10**
Total	**81**	**72**	**153**

At discharge 53% of patients were functional walkers with 47% requiring a wheelchair for mobilising.

Ninety three percent of patients had their Spinal Cord Independence Measure recorded on admission, at the start of rehabilitation and on discharge.

Table 25

Out-patient DNA Activity

	23/24	**24/25**	**25/26**	**%**
Return	1,900	2,200	**2,321**	**N/A**
DNA Return	327	281	**331**	**14%**
New	62	45	**36**	**N/A**
DNA New	16	8	**10**	**28%**

The DNA rate is stable, all clinic appointments within the Unit and at Outreach are offered face to face apart from NHS Lothian Outreach Clinic which remains displaced and therefore virtual. At patient request, an increasing proportion of appointments are by telephone or Near Me consultation for patient convenience.

4. Quality and service Improvement

We continually strive to embrace new ideas in the Unit and encourage staff to share improvement ideas with the Team. Staff are encouraged to gain quality improvement (QI) training opportunities to enhance both staff and patient experience, leadership programmes are shared and offered to all staff.

Additional therapy staffing

The comprehensive review of the service in 2017 noted that the Unit's therapy departments were considerably understaffed compared to peer specialist centres in the UK and further investigation confirmed that the Unit was also understaffed in comparison to rehabilitation services of MTCs. A Business Case was submitted to the national commissioners for funding additional therapy time, funding was approved resulting in enhanced therapy staffing. All additional therapy staff are now in post including most recently a B7 0.6 WTE Dietitian in December 2025. Quality and service improvement within therapy teams is being led by these senior clinical specialist therapists.

The speech and language service into the Unit continues to develop, providing regular, structured input for SCI patients requiring assessment and therapeutic intervention for communication and/or swallowing impairments. This service has taken on a Key Worker role and contribute to the rolling programme of patient and staff education within the Unit.

Support was provided to an MSc project by the occupational therapy (OT) service looking at the confidence of OTs working in the community, working with people with a SCI after discharge from the Unit. This showed low confidence and a need for further training for OTs working in the community. Spinal specific education for community-based OTs is ongoing with most OTs being keen for training from the Unit staff either in person or online. Following completion of Scottish Improvement Foundation Skills training by the Clinical Specialist OT, a timetabling of patient activity has been introduced into the Unit, therapy health care support workers (HCSW) now take the lead contributing to the organisational component of timetabling. Timetabling has been found to be of benefit to patients and staff.

The physiotherapy team is actively engaged in quality improvement that support evidence-based rehabilitation and multidisciplinary working. This includes ongoing involvement in clinical research and assessment activity, such as coordination and participation in EMSCI, DISCUS and SCIRUS projects. The team also contributes to patient education programme alongside workforce development through education and training sessions for newly qualified nurses, doctors and AHPs, as well as external training including on-call education and presentations to community rehabilitation teams, social work and OT colleagues. Current quality improvement projects focus on maximising and standardising hydrotherapy provision, strengthening community integration within rehabilitation with particular emphasis on wheelchair skills, and updating physiotherapy assessment processes to increase the consistent use of outcome measures throughout the rehabilitation pathway.

Delayed discharge short life working group

In recent years the numbers of patients who experienced a delayed discharge has increased significantly, discharging patients with especially complex needs to the community proves particularly challenging. A multidisciplinary short life working group, including senior partners from Glasgow Health and Social Care Partnership (HSCP), was established last year to review barriers to discharge and consider potential solutions. Some practice changes e.g. the establishment of the Housing Clinic, process of referral to Scottish HSCPs and involving each patient's regional trauma coordinator at discharge planning were established along with supporting HSCPs to develop appropriate facilities and skills in the community to support our patients. As a result, delayed discharge days will be reduced, this improvement will be reflected in future years reports e.g. three ventilated patients who were delayed long term in the Unit were discharged this year.

Healthcare Support Workers and the Improvement they make to Patient Care and Experience

The introduction of trained HCSWs to deliver bowel care procedures within the Unit has proven to be a safe, effective, and an enhancement to service delivery. This change, underpinned by national guidance and Clinical Governance approval, has strengthened the Unit's ability to provide timely, dignified, and person-centred bowel care. While participation varied among HCSWs, those who engaged reported increased confidence, a greater sense of value and greater autonomy in their roles. Importantly, patients experienced more consistent care, fewer delays to essential rehabilitation therapies, and a notable improvement in overall dignity. The transition has also enabled registered nurses to refocus on clinical priorities that require advanced assessment and decision-making, supporting safer and more efficient use of the nursing workforce. Overall, this initiative demonstrates that thoughtful role development, supported by clear governance and competency-based training, can deliver meaningful benefits for patients and staff.

Improvement Plan Journey

Philipshill is a busy 32-bedded rehabilitation ward. Throughout 2025, the ward faced significant staffing challenges and the acuity across the ward remained high. This created challenges around skill mix, leadership, and opportunities for junior staff to develop skills. The aims of an improvement plan were to strengthen patient safety, leadership, communication, rehabilitation planning, staff morale and retention, professional conduct, and the overall ward environment. Using quality improvement methodology, an improvement plan was created with clear time frames and achievable goals. There is ongoing monitoring of this journey, interim results indicate enhanced staff wellbeing and a noticeable boost in morale, sickness absence has reduced, communication is improved and clinical indicators show positive progress.

5. Governance and Regulation

Senior medical and nursing staff meet quarterly with colleagues in the Directorate Clinical Governance programme, specifically as part of the INS Medical Specialties/Spinal Injuries Clinical Governance Meeting. Standing items include Significant Adverse Event Reviews (SAER), Mortality Review, Risk Register and putting audit into practice. The Unit continues to adopt National Management Guidelines, as appropriate. In person teaching on Friday afternoons are now re-established, a great forum for discussion around evidence-based practice.

The Bowel Management Protocol and Bladder Management Protocol are under review, following review, these protocols will be submitted to Regional Clinical Governance for approval

5. 1 Risks and Issues

Table 26

Clinical Incidents

Slips Trips &Falls	65	Fire	3
Violence & Aggression	25	Medicine Supply	3
Medicine	14	Medicine Patient Induced	3
Other Incidents	11	Needlestick	2
Staffing	9	Cardiac Arrest	2
Challenging Behavior	9	Communication	2
Moving & Handling	9	Self Harm	2
PU	6	Medicine Prescribing	2
Abscondment	6	Information Governance	1
Discharge or Transfer	6	Radiation/Imaging Incident	1
Medical Devices & Equipment	6	Radiation/Imaging Incident	1
Contact with an object	5	Patient Observations	1
Security	4	Transfusion	1
Exposure to Hazard	3		

A formal Critical Incident Reporting system is in place with a clinical incident defined as a potential or actual dangerous event to patients, which could have been prevented by a change in practice. The Unit utilises the DATIX Incident Reporting system and these incidents are reviewed within defined timeframes. The Unit is included in the Regional Services Directorate for reporting purposes. Regular review of the DATIX system enables identification of commonly occurring incidents, practice change, sharing of best practice and incident reduction.

Table 27

Critical Incident by Category

1 – Negligible	139
2 – Minor	56
3 – Moderate	5
4 – Major	0
5 – Extreme	0
Total	**200**

All category four and five clinical incidents are investigated according to NHS GGC policy. During the year there were zero incidents in these more serious categories

Red Flag Update

We continue to carry out our Unit red flag alert system of any skin lesions inherited or acquired in the Unit. Lesions include rash, excoriation, skin injury from trauma, moisture lesions and pressure sores. In line with NHS GGC policy, all pressure sores of grade two and above are reported through the Datix system. This year there were six reported grade two pressure sores acquired in the Unit, all were unavoidable and none deteriorated.

The red flag alert system allows us to identify pressure damage at an early stage and make appropriate changes in patient care to prevent further deterioration. This year the red flag system has allowed us to identify 28 early warning sign pressure sores, preventing further deterioration and subsequent delays in patient rehabilitation.

5.2 Complaints / Compliments

Complaints

A formal complaint system is in place in NHS GGC. This has proved invaluable in monitoring quality and modifying the service. The management team recorded nine formal complaints, one was partially upheld and four fully upheld, there were no complaints investigated by the Scottish Public Services Ombudsmen. The complaints upheld and partially upheld were in relation to facilities e.g. excess noise and care within Philipshill the rehabilitation ward in 2025, the Improvement Plan was put in place, interim results indicate a reduction in complaints.

The Unit also receives feedback via Care Opinion, a QR code to access Care Opinion is available throughout the Unit.

Compliments

Significant contributions are received from grateful patients, families and community groups to assist in purchasing items for patient treatment and comfort. This year contributions were put towards the refurbishment of the Unit Dayroom at the request of many generous donors.

5.3 Equality

NHS GGC maintains comprehensive equality, diversity, and inclusion policies designed to prevent discrimination, enhance accessibility, and foster an inclusive culture for patients and staff. The Team within the Unit follow all policies and procedures e.g. Reasonable Adjustment Guidance and Flexible Working Pattern Policy. NHS GGC has recently been awarded the Equally Safe at Work (ESaW) Bronze accreditation, making it the first NHS Board in Scotland to achieve this milestone. It is independent, external assurance that the work NHS GGC has done to advance gender equality and prevent sexual harassment, Violence Against Women and Gender-Based Violence is real, evidenced, and stands up to scrutiny.

Equality, diversity and human rights e-learning module is live on LearnPro. All staff are required to complete the module as part of their statutory and mandatory training. Robust systems have been put in place to monitor compliance with all LearnPro modules for all staff.

As per NHS GGC policies all members of staff supporting any element of the recruitment process must complete further mandatory Equality and Human Rights training

6. Financial reporting and workforce

NHS Greater Glasgow & Clyde
Acute Services Division
Regional Services Directorate
Spinal Injuries Unit

Financial Report for the Year end of 2526

	AfC Banding		Contract Value	Contract Value YTD	Actual YTD	Variance YTD	Year End Forecast	Year End Forecast Variance
Consultant		5.71	1,239,016	1,239,016	1,140,531	98,484	1,140,531	98,484
Specialty Doctor		1.00	116,585	116,585	0	116,585	0	116,585
Senior Medical		***6.71***	**1,355,601**	**1,355,601**	**1,140,531**	**215,069**	**1,140,531**	**215,069**
Junior Medical		**2.48**	**208,959**	**208,959**	**226,880**	**-17,922**	**226,880**	**-17,922**
		9.19	**1,564,559**	**1,564,559**	**1,367,412**	**197,148**	**1,367,412**	**197,148**
Administrative	4	6.50	290,630	290,630	290,630	0	290,630	0
Administrative	3	0.14	5,723	5,723	5,723	0	5,723	0
Administrative	2	2.49	93,794	93,794	93,794	0	93,794	0
		9.13	**390,147**	**390,147**	**390,147**	**0**	**390,147**	**0**
Senior Manager	8a	0.50	42,780	42,780	42,780	0	42,780	0
Nursing	7	10.10	726,791	726,791	554,587	172,204	554,587	172,204
Nursing	6	9.96	*647,141*	647,141	*764,380*	*-117,239*	764,380	-117,239
Nursing	5	53.30	*2,897,036*	2,897,036	*2,714,221*	*182,815*	2,714,221	*182,815*
Nursing	2	23.88	899,519	899,519	1,366,348	-466,829	1,366,348	-466,829
Housekeepers	2	2.00	75,337	75,337	192,905	-117,569	192,905	-117,569
Phlebotomist	2	0.53	19,964	19,964	21,633	-1,669	21,633	-1,669
		100.47	**5,308,568**	**5,308,568**	**5,656,855**	**-348,286**	**5,656,855**	**-348,286**
Psychologist	8B	1.00	*101,150*	101,150	*101,150*	*0*	101,150	0
Orthotist	7	0.20	14,371	14,371	14,371	0	14,371	0
AHP	7	12.06	867,853	867,853	867,853	0	867,853	0
		13.26	***983,374***	**983,374**	***983,374***	***0***	**983,374**	**0**
Qensiu Ahp Project - G39841								
Physiotherapist	7	1.00	71,960	71,960	60,859	11,101	60,859	11,101
Occupational Therapist	7	1.00	71,960	71,960	55,566	16,394	55,566	16,394
Dietician	7	0.60	43,176	43,176	15,779	27,397	15,779	27,397
Occupational Therapist	6	0.00		0		0	0	0
Speech & Language Therapist	7	0.80	*57,568*	57,568	*57,568*	*0*	57,568	0
SALT Support	4	1.00	*44,712*	44,712	*44,712*	*0*	44,712	*0*
		4.40	**289,375**	**289,375**	**234,484**	**54,891**	**234,484**	**54,891**
Total Staff		**136.45**	**8,536,023**	**8,536,023**	**8,632,271**	**-96,248**	**8,632,271**	**-96,248**

Supplies Costs							
Drugs		£ 183,484	183,484	£ 192,876	-£ 9,392	192,876	-9,392
Surgical Sundries		£ 542,012	542,012	£ 184,856	£ 357,156	184,856	£ 357,156
CSSD/Diagnostic Supplies		5,039	5,039	3,985	1,054	3,985	1,054
Other Therapeutic Supplies		125,140	125,140	90,120	35,020	90,120	35,020
Equipment/Other admin supplies		62,413	62,413	86,474	-24,062	86,474	-24,062
Hotel Services		45,703	45,703	53,530	-7,827	53,530	-7,827
Direct Supplies		**963,790**	**963,790**	**611,841**	**351,949**	**611,841**	**351,949**
Charges from other Health Boards							
Lothian Spinal Clinic		**6,942**	**6,942**	**0**	**6,942**	**0**	**6,942**
Charges from other Health Boards		**6,942**	**6,942**	**0**	**6,942**	**0**	**6,942**
Allocated Costs							
Medical Records		133,074	133,074	133,074	0	133,074	0
Building Costs		230,026	230,026	230,026	0	230,026	0
Domestic Services		109,284	109,284	109,284	0	109,284	0
Catering		292,032	292,032	292,032	0	292,032	0
Laundry		109,527	109,527	109,527	0	109,527	0
Neuroradiology		127,588	127,588	127,588	0	127,588	0
Laboratories		128,949	128,949	128,949	0	128,949	0
Anaesthetics		58,635	58,635	58,635	0	58,635	0
Portering		118,614	118,614	118,614	0	118,614	0
Phones		60,479	60,479	60,479	0	60,479	0
Scottish Ambulance Service		12,301	12,301	12,301	0	12,301	0
General Services		35,275	35,275	35,275	0	35,275	0
Allocated Costs		**1,415,784**	**1,415,784**	**1,415,784**	**0**	**1,415,784**	**0**
Total Supplies		**2,386,516**	**2,386,516**	**2,027,625**	**358,891**	**2,027,625**	**358,891**
Overhead Costs							
Total Overheads		**668,725**	**668,725**	**668,725**	**0**	**668,725**	**0**
Total Expenditure	**136.45**	**11,591,264**	**11,591,264**	**11,328,621**	**262,643**	**11,328,621**	**262,643**
Postgraduate Dean Funding		**-159,516**	**-159,516**	**-159,516**	**0**	**-159,516**	**0**
Total Expenditure net of Postgraduate **Dean Funding**		**11,431,748**	**11,431,748**	**11,169,105**	**262,643**	**11,169,105**	**262,643**
Income from non-Scottish resident patients				-116,961	116,961	-116,961	116,961
Income from delayed discharges: NHS Tayside					0	0	0
Income from delayed discharges: NHS Lanarkshire					0	0	0
Total Net Expenditure	**136.45**	**11,431,748**	**11,431,748**	**11,052,144**	**379,604**	**11,052,144**	**379,604**

	£	£
Fixed	10,440,302	10,440,302
Variable	611,841	611,841
	11,052,144	**11,052,144**

7. Audit & Clinical Research / publications

7.1 Audit

The clinical audit meetings are held typically once a month in a hybrid format. The invitation has been extended to include other rehabilitation teams to promote learning an improve networking. All members of the Multidisciplinary Team have been involved in carrying out and presenting these audits on a variety of different topics. Examples of some of the topics presented this year include:

- Venous Thromboembolism risk assessment and prescribing- rolling audit
- An Audit into the new therapy timetabling system.
- The Housing Clinic

Staff participate in National and Regional audits and have presented quality improvement resulting from audit at the corporate level.

7.2 Research

The Scottish Centre for Innovation in Spinal Cord Injury (SCISCI) is an umbrella group to support translational research in a clinical setting. The Unit acts as an embedded research micro site within the NHS to promote research and to provide access and stimulation for clinicians, patients and researchers to work together.

2025/2026 was a busy year for the Unit with the culmination and publication of two international randomised controlled trials. Scottish patients with a SCI took part in a number of different clinical studies, with more research studies funded for 2026/2027.

Areas of Focus in 2025/2026 Included Trials Investigating:

- A European-wide data collection study investigating the changes in the body following a spinal cord injury (EMSCI).
- Electrical spinal stimulation to enhance walking function in chronic SCI (E-Walk)
- Intensive physiotherapy to improve rehabilitation outcomes for inpatients with spinal cord injury (Intensive motor training)
- Electroencephalograph predictors of central neuropathic pain in subacute spinal cord injury
- Mechanisms of neuropathic pain after spinal cord injury
- Motor conditioning to enhance the effect of physical therapy
- Neurofeedback to improve spasticity after incomplete spinal cord injury

Research Spotlight

Intensive physiotherapy to improve rehabilitation outcomes for inpatients with spinal cord injury (Intensive motor training)

We were delighted to see the results of our international trial investigating optimal dosing for inpatient physiotherapy published in the Lancet Neurology. In this 220 people who had sustained a new SCI in the previous 10 weeks, who had some motor function below the

level of injury and who were receiving inpatient rehabilitation were randomly assigned to receive usual standard of care or usual standard of care plus an additional 12 hours of intensive task-specific training targeting voluntary motor function below the level of injury per week. Both groups received 10 weeks of training and the results were compared. It was found that there was no significant difference in either Total Motor Scores or any of the secondary outcome measures after 10 weeks of training. In conclusion, intensive task-specific training did not result in significant benefits over current standard of care.

Electrical spinal stimulation to enhance walking function in chronic SCI (E-Walk)

The results of our flagship randomised controlled trial investigating the use of transcutaneous spinal cord stimulation (tSCS) to improve walking in chronic SCI were published in the Lancet eClinical Medicine. Fifty participants with chronic paraplegia were recruited from specialist centres across Australia, Scotland, Spain and the USA to take part in 12 weeks of either gold standard rehabilitation supported by tSCS or gold standard rehabilitation therapy alone. Results show tSCS plus 12-weeks of locomotor training did not improve walking more than locomotor training alone. This is the first randomised sham-controlled trial to assess the effects of tSCS combined with locomotor training in patients with chronic SCI and generates important data for the whole field of SCI research.

Upcoming Projects

Our researchers have already received funding to undertake three new large projects in 2026/27.

Spinal Stimulation

The aim of the study led by Dr Alexsandra Vuckovic from the University of Glasgow is to test the feasibility of delivering transcutaneous electrical spinal cord stimulation (tESCS) to tetraplegic patients undergoing primary rehabilitation by combining it with standard upper limb therapy. This is a randomised feasibility study, with the active and sham group having ten participants each. The participants in the active group will receive 60 minutes tESCS alongside conventional occupation therapy while the sham group participants will receive one min tESCS at the beginning of 60 minutes of occupational therapy.

The primary outcome measure is the feasibility of delivering 20 sessions over four weeks. We hypothesise that tESCS will be straightforward to implement and that it will not significantly burden staff or interrupt the existing patient schedule. Secondary outcome measures are short-term (immediately after therapy) and long term (four weeks following the last intervention session) changes in functional and neurological outcome measures.

Evidence for Living Well with a Spinal Cord Injury in the Community (ELSCI)

This research programme led by Dr Elaine Coulter of Glasgow Caledonian University aims to complete foundational work in preparation for a research programme to enhance the health and well-being of people with SCI, enabling them to lead active and meaningful lives in their communities while reducing healthcare and societal costs. Within this project we will conduct up to 20 interviews with representatives from specialist SCI centres and charities to map services offered across the UK. We will then recruit 80 people with SCI to explore physical function at three-time points, before discharge, and at six and 12 months post discharge from specialist SCI centres. We will also explore relationships between function, Physical Activity (PA) and individual characteristics. Thirdly, we will conduct a UK-wide survey to explore the lived experience of SCI using the International SCI Community

Survey, which explores health problems, activities, participation, PA and daily life, environment, healthcare needs/services and quality of life. A scoping review to identify factors affecting how people with SCI improve their function, PA and participation and what would be important in a future intervention will then be performed. Finally, we will work with key stakeholders to plan future research addressing key issues faced by people with SCI.

eWalk2

Following on from the eWalk project described above, Dr Euan McCaughey will partner with sites in Australia, Spain and the USA to examine whether transcutaneous spinal cord stimulation (tSCS) can improve the walking function of a wider range of patients living with SCI. This project will use an easily applied version of spinal stimulation with the hope that this technology can be applied in a community-based setting.

Our researchers are also actively involved in preparing a number of other research grants which will hopefully see us begin even more exciting research in 2026/2027.

7.3 Publications and Conferences

Our researchers published 13 articles on SCI in 2025/2026. More information about these articles can be found in our research report, or on the SCISCI website: www.scisci.org.uk.

Our researchers were also active at a number of conferences, presenting their work at the International Spinal Cord Society Annual Conference in Gothenburg, Sweden, and the British Society of Physical and Rehabilitation Medicine Annual Conference in Nottingham, England, amongst others.

Connect with us

Our dedicated research website is updated on a regular basis. Further information about our research activities can be found at www.scisci.org.uk. We can now also be found on @ScisciScotland

Research database

We continue to compile a database of people living with a SCI who would be interested in taking part in research. This will enable our researchers to conduct their research more efficiently and enable people with a SCI to have access to world leading research. All ethical and governance approvals are in place. More information can be found at: https://www.gla.ac.uk/research/az/scisci/getinvolved/

8. Looking ahead

We continue to see an increase in the number of new patients who are elderly with tetraplegia, 153 patients with spinal cord injury were admitted to the Unit this year, a significant increase on all previous years. These patients are very different from the younger group with paraplegia and make heavy demands on all departments. They are sicker with major co-morbidities, they are very consuming of nursing care and have complex rehabilitation needs which make high demands of the therapists.

We have welcomed the appointment of a locum consultant with an additional locum consultant due to join the Team Summer 2026, the re-establishment of a full complement of consultant staff will result in the unpausing of suspended specialty clinics and facilitate consultant presence at all Outreach Clinics across Scotland including in person Lothian Outreach Clinic.

The Housing Clinic established in the Unit, is a collaboration between the Unit Team and housing charity Housing Options Scotland, the clinic works with patients throughout their treatment to help reduce the worry of whether a patient will have somewhere to live when they are discharged. It also has a significant impact on reducing housing-related delayed discharge. The Clinic won the Working in Partnership category at the Chartered Institute of Housing's Scotland Housing Awards in November 2025. NHSGGC Housing Clinic wins national partnership award - NHSGGC

The soft refurbishment of the dayroom is complete thanks to very generous contributions from patients, families and community groups for the refurbishment

The Unit celebrated the launch of the Spinal App last year, an MDT developed resource for patients, families and their caregivers, in parallel with the App launch, the content and design of the Unit website, a more professional facing platform is almost complete.

The Horatio's Garden team have all approvals in place to commence the work to increase accessibility to the garden. Glazed automatic doors from four of Philipshill bays directly into the garden will benefit patients by allowing easier access to the many health and wellbeing benefits of being in the garden sanctuary, it will be much easier to facilitate those in beds to access the garden.

The Unit will continue to facilitate high quality research with universities in both the West of Scotland and across the world and publish findings in impactful peer reviewed journals.

The national pathway, designed over thirty years ago has proven to be robust and provides a safe model for delivery of care to spinal injured patients in Scotland. Despite an increase in numbers of paralysed patients, their age and severity of paralysis, the Unit continues to look after the majority of newly paralysed patients from the first week of injury through to lifelong care.

Thanks must be given to the National Services Division, NHS Scotland and NHS Greater Glasgow and Clyde for their help and support in delivering the service.