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Ambulatory epistaxis pathway: the Scottish experience

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Main Article

Jimmy Ng takes responsibility for the integrity of the content of the paper

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Abstract

Background. Evidence shows that patients with non-dissolvable intranasal packing can be safely managed without hospital admission. However, admission remains standard practice in most UK centres. This study presents the Scottish experience of an ambulatory pathway for packed epistaxis patients.

Methods. In this Scottish ENT Trainee Research Network project, health boards in Scotland conducted two 'Plan, Do, Study, Act' cycles between July 2024 and August 2025, applying exclusion criteria agreed by an expert panel. In cycle two, exclusion criteria were adapted locally.

Results. The pathway had no adverse events in the community. Patients felt safe and satisfied, and none re-presented within 30 days. 6 per cent of patients in the first cycle were ambulated successfully, increasing to 13 per cent in the second cycle.

Conclusion. Our pan-Scotland experience demonstrated the ambulatory epistaxis pathway is safe. Future intentions are to refine and embed the pathway nationally and collate evidence to inform UK guidelines.

Introduction

Epistaxis is one of the commonest reasons for presentation to the emergency department and hospital admission. It affects up to 60 per cent of the population in their lifetime,[1] with around 25 000 acute presentations to National Health Service (NHS) hospitals each year.[2] In Scotland, epistaxis accounts for around 33 per cent – approximately 2177–2725 per year, or 396–495 per million population per year – of all ENT emergency admissions.[3,4] Intranasal packing with non-dissolvable material can be part of epistaxis management if a bleeding point is not identified or if cautery fails.[5]

During the coronavirus disease 2019 pandemic, multiple measures were introduced to reduce the spread of infection, including avoiding admission of those who presented to hospital with acute epistaxis.[6] Large-scale audits of practice in 2016 and 2020 found ambulatory management of epistaxis patients – that is, sending patients home with intranasal packs with a follow up for further management – to be safe, with no adverse events related to uncontrolled bleeding in the community.[2,7] Healthcare institutions that have adopted this approach found the practice to be safe, beneficial to patients,[8,9] and financially efficient where a significant number of bed-days were saved[9,10] and 49.2 per cent of packed epistaxis was managed at home.[2] One study found that £61 984.18 was saved over a three-month period with a similar approach to epistaxis management.[11] However, data on patient experience in ambulatory management are lacking.

Despite studies demonstrating the safety of admission avoidance and financial efficiency, and this being part of clinical care during the pandemic, it is still routine practice across Scottish NHS health boards that patients with intranasal pack(s) are admitted to ENT wards. The Scottish ENT Trainee Research Network (SERN) therefore aimed to undertake a pan-Scotland quality improvement project in which

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Table 1 Expert-panel-developed exclusion criteria

Exclusion criteria	NHS Grampian	NHS Greater Glasgow & Clyde	NHS Highland
Shocked on arrival	Yes	Yes	Yes
Bilateral or posterior pack*	Yes	Posterior pack	Yes
Anticoagulant use*	Warfarin > target range	Warfarin > target range	Case-by-case basis
Haemoglobin <10 g/dl or significant drop	Yes	Yes	Yes
More than 30 minutes from hospital*	45 minutes	60 minutes	Case-by-case basis
No responsible adult at home	Yes	Yes	Yes
No own access to transport	Yes	Yes	Yes
No telephone	Yes	Yes	Yes
Re-presentation within 48 hours	Yes	Yes	Yes
Patient anxiety	Yes	No	Yes
Frailty	Yes	Yes	Yes
Clinician discretion	Yes	No	Yes

Note: If a patient meets any of the exclusion criteria, they are excluded from the ambulatory epistaxis pathway. *Denotes criteria that were varied locally by participating sites in the second 'Plan, Do, Study, Act' cycle. NHS = National Health Service; Yes = included in the exclusion criteria; No = not included in the exclusion criteria

the prevailing practice of admitting all patients with an intranasal pack was changed to an ambulatory epistaxis pathway for suitable patients. We describe our experience in this project involving seven participating health boards across Scotland, covering approximately 50 per cent of the population. The project comprised a preliminary survey, retrospective data collection, collaborative protocol development between ENT and emergency department colleagues, gathering of patient experience feedback, and delivering practice change.

Materials and methods

The quality improvement project followed the 'Plan, Do, Study, Act' cycle across participating sites in NHS Scotland. Local Caldicott approval was obtained for each participating site for information governance purposes. A preliminary survey of stakeholders, including Scottish ENT clinicians, emergency department clinicians and general practitioners, was conducted. Baseline data were collected retrospectively in four participating sites (NHS Ayrshire & Arran, NHS Grampian, NHS Lanarkshire and NHS Tayside). An expert panel comprising ENT and emergency department consultants developed a list of exclusion criteria (Table 1) for patients presenting with epistaxis who were subsequently packed with non-dissolvable material such as RapidRhino. If any of the exclusion criteria were met, patients were excluded from the ambulatory pathway. A sample algorithm (Figure 1) containing the exclusion criteria was developed and distributed to participating sites. Apart from the exclusion criteria, participating sites had freedom to adapt the rest of the algorithm to reflect the local practice and pathway in managing epistaxis patients.

Participating sites had six weeks between July and September 2024 to conduct the first Plan, Do, Study, Act cycle. Local data were collected prospectively using Microsoft 365 Forms and Excel, with anonymised national data collected by the national lead. Promotional materials such as a poster, patient information leaflet and project information document were distributed via email to increase awareness.

Following the first Plan, Do, Study, Act cycle, data were analysed. It was agreed by SERN and the expert panel that the new exclusion criteria for the second Plan, Do, Study, Act cycle would allow local adaptation and adjustment by participating sites, and any changes would be reported to and agreed by the national project lead.

Local adaptations to study protocol

The variations between sites related to anticoagulation use, distance from hospital, and bilateral or posterior packing. Some sites included those on anticoagulants, those with bilateral packing and/or those living further from hospital. Site feedback on these variations informed changes to the protocol for the second cycle. This second Plan, Do, Study, Act cycle was conducted by participating sites across six weeks between June and August 2025. Again, data were collected prospectively.

Patient experience data collection

For patients who were on the ambulatory pathway, anonymous patient experience data were gathered using a questionnaire (Table 2) based on validated HowRwe[12] and Friends and Family Test[13] questionnaires. HowRwe is a short generic patient experience measure with good readability, which was originally designed for gathering patient experience in a pre-admission setting in orthopaedic surgery. The Friends and Family Test is used extensively in NHS England as a powerful instrument to track and inform service improvement. In addition to being easy to use with minimal respondent burden, the expert panel felt both instruments were generic enough for use in our study pre- and post-protocol for direct comparison of in-patient and ambulatory services. Other instruments such as the In-Patient Survey,[14] Picker Patient Experience Questionnaire,[15] Generic Short Patient Experiences Questionnaire,[16] NHS Scotland Health and Care Experience Survey[17] and Glasgow Benefit Inventory[18] were considered but deemed too burdensome and not suitable for obtaining directly comparable patient experience data for in-patient and ambulatory epistaxis services.

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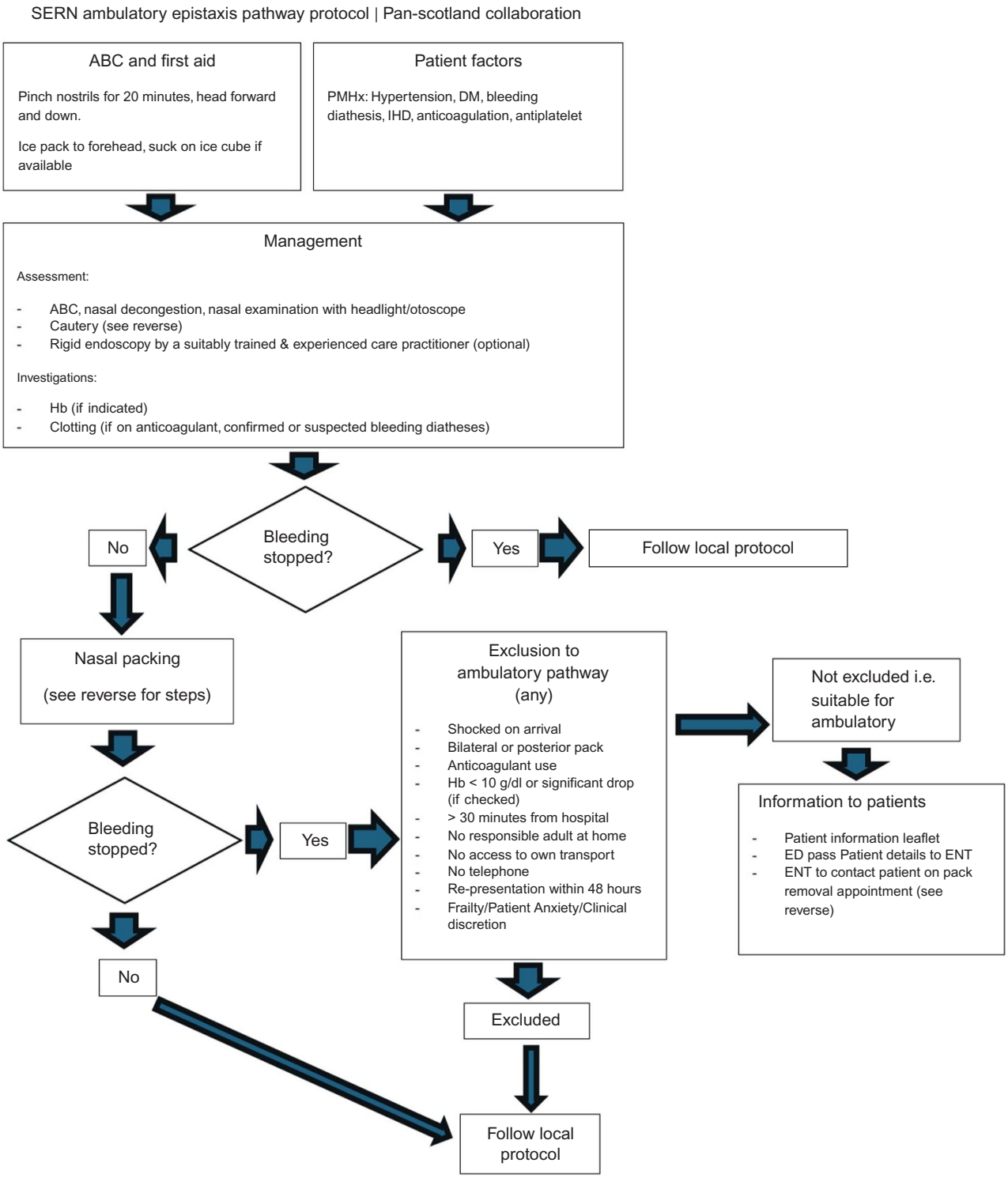


Figure 1. Sample algorithm distributed to participating sites across Scotland. Except for the exclusion criteria for the ambulatory pathway in the first cycle, participating sites were able to adapt the rest of the algorithm based on local practice. In the second 'Plan, Do, Study, Act' cycle, the exclusion criteria for participating sites, if varied, are presented in Table 1. 'See reverse' refers to additional guidance (on cautery, nasal packing and pack removal) printed on the reverse of the protocol, which is not shown. SERN = Scottish ENT Trainee Research Network; ABC = airway, breathing, circulation; PMHx = past medical history; DM = diabetes mellitus; IHD = ischaemic heart disease; Hb = haemoglobin; ED = emergency department.

Results and analysis

There were 97 respondents in the preliminary survey, of whom 45 per cent worked in the emergency department, 37 per cent in hospital other than the emergency department, and 18 per cent in the community; 89 per cent of all respondents thought the project should go ahead.

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Table 2 Responses from patient experience survey

Questions	Responses or response options	Number of responses
How safe did you feel at home during daytime?	Very safe	8
	Somewhat safe	5
	Neither	0
	Somewhat unsafe	0
	Very unsafe	0
How safe did you feel at home during night-time?	Very safe	6
	Somewhat safe	6
	Neither	1
	Somewhat unsafe	0
	Very unsafe	0
How much pain did you experience at home?	0	0
	1	2
	2	1
	3	3
	4	2
	5	1
	6	1
	7	2
	8	1
	9	0
	10	0
How well organised was your treatment?	Extremely well	9
	Somewhat well	4
	Neutral	0
	Somewhat disorganised	0
	Extremely disorganised	0
How well do we listen and explain?	Extremely well	10
	Somewhat well	3
	Neutral	0
	Somewhat not well	0
	Extremely not well	0
Overall, how satisfied were you with your treatment?	Very satisfied	8
	Somewhat satisfied	5
	Neutral	0
	Somewhat dissatisfied	0
	Very dissatisfied	0
How likely are you to recommend this pathway to friends and family if they had the same problem as you?	Very likely	9
	Somewhat likely	4
	Neither	0
	Somewhat unlikely	0
	Very unlikely	0

(*Continued*)

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Table 2 (*Continued.*)

Questions	Responses or response options	Number of responses
Do you have any other comments or feedback for us?	'Great initiative'	
	'Main concern was tickling of some blood stained secretions'	
	'Very happy with experience'	
	'Excellent treatment from ENT department. Able to go on holiday in New Zealand for a couple of weeks after with no issues'	
	'Packing was sore'	
	'Pain wasn't very well controlled, everything else was good'	

Note: Only ambulatory patients were asked to complete the questionnaire, anonymously.

Table 3 Findings from baseline, first and second 'Plan, Do, Study, Act' cycles

Parameter	Baseline	First PDSA cycle	Second PDSA cycle
Total *n*	31	64	69
Scottish NHS site (*n*)			
– NHS Ayrshire & Arran	7	–	–
– NHS Borders	–	1	7
– NHS Grampian	7	12	7
– NHS Greater Glasgow & Clyde	–	22	26
– NHS Highland	–	16	12
– NHS Lanarkshire	5	–	17
– NHS Tayside	12	13	–
Ambulatory pathway (*n* (%))	NA	4 (6)	9 (13)
Aged over 71 years (*n* (%))	25 (80)	36 (56)	46 (66)
Median hospital stay (days)*	2	2	2
Re-presentation within 30 days (*n* (%))	12 (39)	18 (27)	21 (30)
Shocked on arrival (*n* (%))	0 (0)	4 (6)	4 (6)
GA* (*n* (%))	3 (10)	9 (15)	4 (6)
IV administration of medication, fluids or blood products* (*n* (%))	6 (19)	17 (28)	16 (27)
Complication (*n* (%))	0 (0)	1 (2)	2 (3)
Mortality (*n* (%))	0 (0)	0 (0)	1 (1)

*Data only for hospital admissions. PDSA = Plan, Do, Study, Act; NHS = National Health Service; NA = not applicable; GA = general anaesthesia; IV = intravenous

Baseline data

Four participating sites collected baseline data in February 2024 (NHS Ayrshire & Arran, NHS Grampian, NHS Lanarkshire and NHS Tayside – Table 3). There were 31 episodes of patients who were admitted with a nasal pack for epistaxis, of which 39 per cent were re-presentations following discharge within 30 days. Median hospital stay was 2 days. Ten per cent of patients had intervention under general anaesthesia (GA), and 19 per cent were given intravenous (IV) medications, fluids and/or transfusion as in-patients. There were no complications or deaths.

First Plan, Do, Study, Act cycle

Five participating sites – NHS Borders, NHS Grampian, NHS Greater Glasgow & Clyde, NHS Highland and NHS Tayside, covering a total estimated population of 2.65 million people – conducted the first Plan, Do, Study, Act cycle across six weeks between July and September 2024 (Table 3). A total of 64 episodes involving packed epistaxis patients were recorded: 1 in NHS Borders, 12 in NHS Grampian, 22 in NHS Greater Glasgow & Clyde, 16 in NHS Highland and 13 in NHS Tayside . Of these, 4 (6 per cent) were on the ambulatory epistaxis pathway and 60 (94 per cent) were admitted for a median of 2 days.

Of all the recorded episodes, 27 per cent were re-presentations within 30 days of discharge. Six per cent of patients had haemodynamic shock on arrival, 15 per cent had intervention under GA, and 28 per cent were given IV medications, fluids and/or blood products. One patient (2 per cent) required intensive care admission. Of those admitted, there was one complication in which a patient developed pulmonary oedema secondary to blood transfusion. There were no deaths. Those who were on the ambulatory pathway did not re-present within 30 days, and there were no adverse events amongst this group.

Of those excluded from the ambulatory pathway in the first cycle, the commonest criteria for exclusion were anticoagulant use

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Table 4 Criteria excluding patients from ambulatory pathway in first and second cycles

Reasons for exclusion	First cycle (*n* (%))*	Second cycle (*n* (%))†
Shocked on arrival	4 (7)	4 (7)
Bilateral or posterior pack	21 (35)	8 (13)
Anticoagulant use	31 (52)	27 (45)
Haemoglobin <10 g/dl or significant drop	10 (17)	12 (20)
Distance from hospital	19 (32)	9 (15)
No responsible adult at home	2 (3)	10 (17)
No own access to transport	6 (10)	5 (8)
No telephone	0 (0)	2 (3)
Re-presentation within 48 hours	7 (12)	10 (17)
Patient anxiety	4 (7)	4 (7)
Frailty	6 (10)	18 (30)
Clinician discretion	21 (35)	12 (20)

Note: Refer to Table 1 for participating sites' variation in exclusion criteria during the second cycle. Percentages are for admitted patients only. *Total $n = 64$; number of admissions = 60. †Total $n = 69$; number of admissions = 60.

(52 per cent), bilateral or posterior packing (35 per cent), clinician discretion (35 per cent), and distance from hospital (32 per cent), as presented in Table 4.

Second Plan, Do, Study, Act cycle

Five participating sites – NHS Borders, NHS Greater Glasgow & Clyde, NHS Grampian, NHS Lanarkshire and NHS Highland, covering a total estimated population of 2.79 million – conducted the second Plan, Do, Study, Act cycle across six weeks between June and August 2025 (Table 3). There was local variation amongst the participating sites for exclusion criteria (Table 1). A total of 69 episodes were recorded: 7 in NHS Borders, 26 in NHS Greater Glasgow & Clyde, 7 in NHS Grampian, 17 in NHS Lanarkshire and 12 in NHS Highland. Of these patients, 9 (13 per cent) were on the ambulatory epistaxis pathway and 60 (87 per cent) were admitted for a median of 2 days.

Of all the recorded episodes, 30 per cent were re-presentations within 30 days of discharge. Six per cent of patients had shock on arrival, 6 per cent of patients had intervention under GA, and 27 per cent were given IV medications, fluids and/or blood products. No patients required intensive care admission. There were two complications: one patient was discharged from the emergency department but bled shortly afterwards, requiring packing and admission; one patient was sent home on the ambulatory pathway but developed a vasovagal response during unpacking in hospital, and was therefore admitted for observation and IV fluids. There was one in-patient death, which was unrelated to epistaxis (the patient was admitted for stroke and aspiration pneumonia). Those who were on the ambulatory pathway did not re-present within 30 days and there were no adverse events related to epistaxis in the community.

Of those excluded from the ambulatory pathway, the commonest criteria for exclusion were anticoagulant use (45 per cent), frailty (30 per cent), clinician discretion (20 per cent), and haemoglobin of less than 10 g/dl or a significant drop from baseline (20 per cent), as presented in Table 4.

Patient experience (ambulatory pathway)

From both cycles, a total of 13 responses were gathered (Table 2). Eight patients felt they were very safe at home during the day, and six felt they were very safe at home at night, whilst none felt unsafe. The scores for pain experienced ranged from 1 to 8 out of 10, with 10 being the most severe. Thirteen patients felt either very satisfied or somewhat satisfied overall. Thirteen patients were either very likely or likely to recommend the service to friends or family if they had the same problem.

Discussion

Impact of ambulatory epistaxis pathway

Overall, the participating sites in our study across the two cycles covered a population of 2.7 million people, which is approximately half of the Scottish population. Some of the sites also serve remote populations, including NHS Highland and NHS Grampian, where access to an ENT department in a hospital is not readily available. Based on estimates from previous studies using data from the Information Services Division of NHS National Services Scotland,[3,4] we would expect between 123 and 154 ENT epistaxis admissions in each cycle. Our data of 64 episodes in the first cycle and 69 in the second cycle were consistent with the observations by Walker *et al.*[4] that admissions were fewer in the summer months (e.g. risk ratio of 0.59 in August *vs* 1.00 in January) and that there was a steady decline in incidence of epistaxis admission over the years.[3,4] This means that our data are reflective of the current incidence of epistaxis admissions during the corresponding study periods at each participating health board.

Although the numbers of ambulatory patients in each participating site were small, the impact over time and population should not be underestimated. Based on an annual estimate of 2725 epistaxis admissions in Scotland[3] and healthcare costs in 2023/2024,[19] data from the second cycle, where 13 per cent of patients were on the ambulatory pathway, could be extrapolated to suggest the potential prevention of 354 epistaxis admissions per year across Scotland, equating to annual savings of £888 000 or 708 bed-days (£2777 of total cost of ENT admission per case minus £268 of ENT out-patient cost per case, for a median of 2 bed-days per epistaxis admission). In addition, with improving confidence in the pathway in future, it is anticipated that the potential impact will be greater.

Outcome data alone do not tell the full story. When undertaking a change in established practice such as this, it is important to include the patient voice, so the patient is at the centre of change. We therefore collected patient experience data to ensure the change was acceptable to patients and to inform clinicians' decision-making. Patient experience data from those who were admitted were not collected as this is the established process, and the project aimed to explore whether ambulatory care was acceptable rather than comparing the two approaches to management. It was encouraging to find that patients were overall very satisfied with the service through the ambulatory pathway. The same questionnaire can be reused by participating sites going forward as a service audit tool. There was a range of pain scores reported in the second cycle (1 to 8 out of 10) and this has been fed back to the relevant sites to improve the patient experience going forward. It is

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worth noting that despite some of the high scores, patients still felt satisfied with the service.

The project found that although more than 50 per cent of admitted patients in both cycles did not require in-patient treatment such as IV medications, fluids or blood products, intervention under GA or critical care admission, this did not translate into 50 per cent of packed epistaxis patients being on the ambulatory pathway due to the exclusion criteria. However, an increase in the number of patients on the ambulatory pathway between the first and second cycles after local adjustment of the exclusion criteria demonstrated that the pathway is safe and feasible. We predict that centres will continue to ambulate more epistaxis patients as confidence in the pathway grows, and this could have a significant impact on the Scottish NHS service in terms of saved in-patient bed capacity.

Safety of ambulatory epistaxis pathway

Our experience has demonstrated that the ambulatory epistaxis pathway is safe and feasible, and results from the second cycle showed a reduction in admissions by 13 per cent. This pathway also aligns with previous studies,[2,8,9,11] as well as the clinical practice guidelines in the USA, where uncomplicated patients with controlled nosebleeds can be safely managed as out-patients even with non-resorbable packing.[20] Data from the first cycle revealed no complications, morbidity or re-presentations within 30 days in patients who were on the ambulatory pathway. In the second cycle, there was one complication whereby the patient had an episode of vasovagal syncope during removal of intranasal non-dissolvable packing material necessitating admission. As there is no reliable method to predict the occurrence of vasovagal syncope, and vasovagal syncope is a recognised complication of nasal packing, it is not necessarily a complication of being on the ambulatory pathway.[21,22] However, this highlights that unpacking should be carried out in a clinical setting, as in the case of the ambulatory pathway, as pain is a known trigger for vasovagal syncope. There was one death in the second cycle due to aspiration unrelated to epistaxis in a patient who suffered from stroke.

The exclusion criteria were developed with patient safety in mind, consisting of factors that the expert panel agreed are essential safety criteria and those which are relative safety criteria. Factors that cannot be controlled are frailty, low haemoglobin, lack of transport, no telephone, no responsible adult at home and shock on arrival. Therefore, these remain as exclusion criteria in both cycles. Factors that can be controlled or managed are anticoagulant use and distance from hospital, which were adapted by participating sites in the second cycle to match their different service designs.

Anticoagulant use was removed as an exclusion criterion in some participating sites in the second Plan, Do, Study, Act cycle and this did not lead to complications such as further bleeding or re-presentation in those who were on the ambulatory pathway. There is no epistaxis-specific supporting evidence regarding the management of anticoagulants other than their use being a factor known to contribute to epistaxis. The British Rhinological Society has weak recommendations against stopping or reversing direct oral anticoagulants, warfarin, heparin and/or heparinoids in stable patients where bleeding has been controlled.[5] There is also no specific guidance on anticoagulant use being a contraindication to the ambulatory pathway in patients with an intranasal pack. Similarly, there is no epistaxis-specific evidence regarding the management of antiplatelet use. Our experience has demonstrated that patients on oral anticoagulants did not need to be excluded from the ambulatory pathway, and the withholding of oral anticoagulants whilst on the ambulatory pathway should be based on locally agreed practice. Oral antiplatelet use has not been considered as a relevant factor in the ambulatory pathway because the duration of effects of regularly used antiplatelets is between 7 and 10 days, which is longer than the duration of intranasal pack use in the context of epistaxis management. Patients will have had their intranasal packs removed within the duration of antiplatelet therapy whether they are admitted or ambulated.

In the context of myocardial infarction, distance from hospital was associated with increased mortality in one Scottish study;[23] however, another Scottish study found that those living further away had lower odds of mortality than those living closer when admitted under emergency general surgery.[24] Within the context of the ambulatory epistaxis pathway, the threshold for distance from hospital is determined by typical travel time to the hospital from patients' homes in minutes. Similar criteria are used to determine suitability for same-day discharge (day-case) after common ENT surgical procedures, such as thyroidectomy, tonsillectomy and rigid endoscopy. Most Scottish ENT units qualify patients for day-case procedures if they live within 30 minutes to an hour away, in accordance with the National Day Surgery Delivery Pack as part of the Getting It Right First Time programme.[25] As such, the distance from hospital criterion was increased from 30 minutes in the first cycle to up to 60 minutes in the second cycle. In NHS Highland, the distance from hospital is considered on a case-by-case basis due to the huge geographical area covered by the health board.

Strengths and limitations

The main strength of the project was participation from multiple sites across Scotland through the Scottish ENT Trainee Research Network, representing at least half of the Scottish population, including remote areas. Local site leads received regular communication and updates from the national lead, bolstered by regular SERN meetings. As with other large-scale projects that involve multiple sites, it was difficult to apply the same protocol or exclusion criteria to all sites due to variability in geography, departmental set-ups and so on. This was reflected in the second cycle, in which local sites were able to adapt the criteria to suit local settings.

The adaptability of the protocol to local settings in our study should not be underestimated, especially in health boards serving remote populations where access to hospital is not readily available. The safety of the ambulatory epistaxis pathway demonstrated herein should help to improve clinicians' confidence for the benefit of patients. Moreover, our experience demonstrated that collaborative working by ENT trainees and emergency department clinicians across Scotland in the real-world setting was possible for the benefit of patients and the system overall.

We sought to evaluate patients' experience of the ambulatory epistaxis pathway, including patients' perceptions of their safety whilst at home with intranasal packing and their pain levels. To our knowledge, this is the first time that patient experience has been assessed in this context. We did not compare patient experiences from those who were admitted with those on the ambulatory pathway. As there is no validated questionnaire for intranasal packing, and patients' in-hospital experiences are not necessarily specific to having an intranasal pack, we decided it would be unrealistic to have a meaningful comparison between the two groups. Moreover, we did not have an adequate ambulatory pathway sample size for significant comparisons.

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It is anticipated that the pathway will continue across Scotland, and local departments are now aware of the pathway through this project and various promotional materials. In addition, online accessible materials containing the pathway algorithm, patient information leaflet and patient survey enable the implementation of the pathway in any Scottish ENT unit. We also hope that this project can serve as evidence for setting standards of safety and feasibility of an ambulatory epistaxis pathway for other hospitals in and beyond Scotland.

- Patients with epistaxis packed with non-dissolvable material may not need to be admitted
- This pan-Scotland experience demonstrated an ambulatory epistaxis pathway for packed patients to be safe and feasible
- Patients reported feeling safe and satisfied
- The pathway can contribute to significant cost reduction or financial savings

Conclusion

In this collaborative, national quality improvement project, we have demonstrated the safety and feasibility of an ambulatory pathway for packed epistaxis patients. Increasing numbers of ambulatory patients over the two Plan, Do, Study, Act cycles suggest improved clinician confidence in the pathway. Patient feedback has demonstrated the acceptability of the pathway.

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Competing interests. None declared.

Ethical standards. The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant U.K. and NHS guidelines on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

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