APCP Neurodisability Group

Survey Report for Physiotherapy Injectors

July 2018

Introduction

In June 2018, the APCP Neurodisability (ND) Group conducted a survey of physiotherapists, primarily paediatric/APCP members, who inject Botulinum Toxin-A for Management of Focal Spasticity in Children. An annual survey to assess APCP member's learning needs and to support their development is part of our 5 year work plan. For 2018, the ND group decided to look at an area of Advanced Practice.

The survey was sent to all APCP members with an invitation to share the survey with any other therapists they knew to be injecting within a paediatric setting. The survey was open for 4 weeks with a reminder message sent after 2 weeks.

In 2008, the APCP published *Use of Botulinum Toxin in Children with Neurological Conditions* [1]. The guidelines did not cover injection or dosage as at that time very few therapists were injecting. Much has changed over the past 10 years. Although the numbers remain small, there is a growing number of therapists in both tertiary and district general settings injecting Botulinum Toxin-A (BoNT-A) for management of focal spasticity.

The ND group felt that a scoping exercise for determining how many members, and non-members, were injectors. In this specialist area of expertise, we felt it would be beneficial to clarify the educational requirements to become an injector, review competencies for maintaining skills, and establish common practice. Determining ways to support colleagues already injecting, and those wishing to develop their

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skills in the future was also an important aim of the scoping exercise. Physiotherapists have been extending their roles to include injecting for several years. Guidelines for adult physiotherapy injectors were first published in 2007 [2]. The Chartered Society of Physiotherapy (CSP) published their expectations for educational programmes in injection therapy for physiotherapists' in 2011 [3] and updated them in 2016 [4].

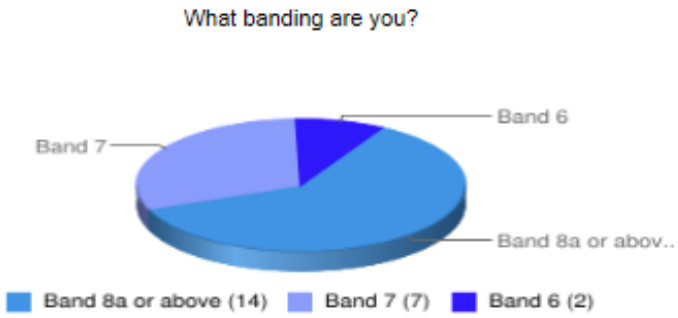
Survey responses

26 responses were received. 3 of the respondents did not inject and were therefore unable to continue with the survey. Results of the entire survey are provided in the diagram form at the end of this report.

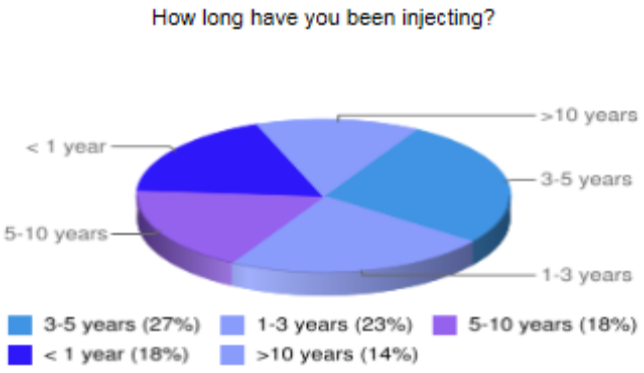
Who is injecting?

All respondents were Paediatric Physiotherapists. 19 of the 23 (83%) were APCP members.

In regards to of level of experience, 18 (78%) had been qualified for >10yrs before injecting with the remaining 5 (22%) having been qualified for 5-10yrs. Twenty-two (96%) have been working in Paediatrics more than 10 yrs with 1 injector working between 3-5yrs. As for banding,14 were Band 8a (61%) or above with 7 at Band 7 (30%) and 2 working at Band 6 (9%).

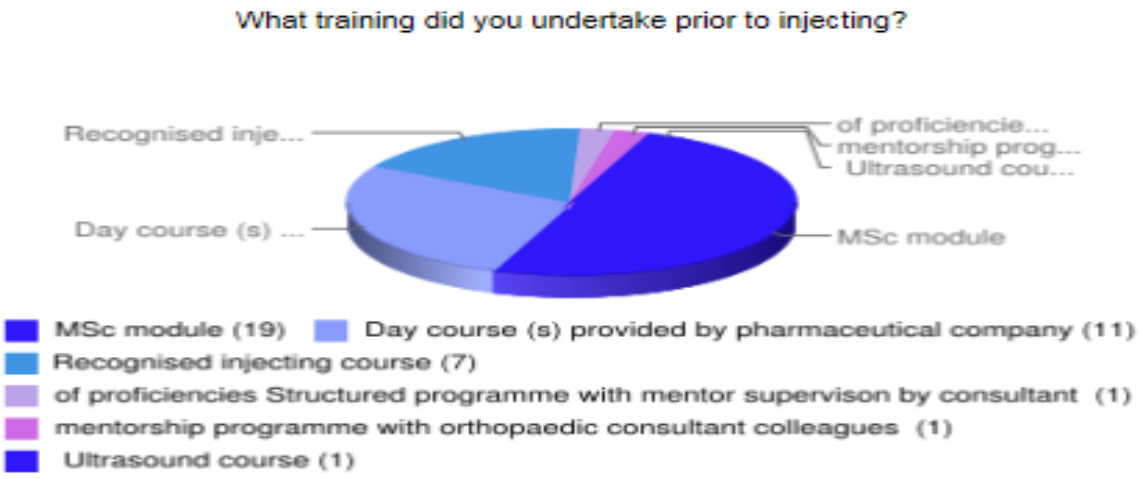


Two therapists have been injecting for more than 10yrs. Four have been injecting 5-10yrs. Five have been injecting for 3-5yrs as well as another 5 injecting for 1-3yrs. Five therapists have been injecting for less than 1 year and 2 did not respond to the question.



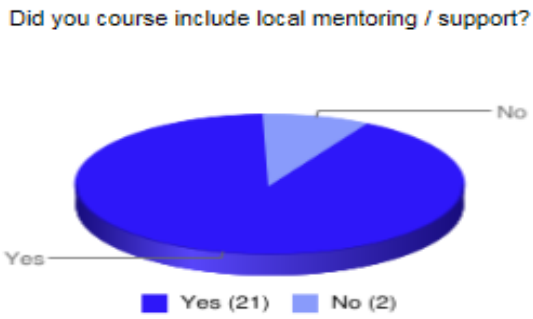
What training was completed?

19 (83%) completed an MSc module as part of their training to become an injector. Of these 19, 11 (58%) undertook additional training such as recognised injection courses, ultrasound training and day courses offered by pharmaceutical companies



Four (17%) respondents completed day courses. 2 (50%) of these therapists also had a structured programme of proficiencies with a mentor and supervision by consultant. The other 2 completed recognised injecting courses.

Twenty-one (91%) of respondents had local mentoring/support as part of their training. Training specifically focussing on management of paediatric focal spasticity was included for 17 (74%) of the respondents.



Clinical governance

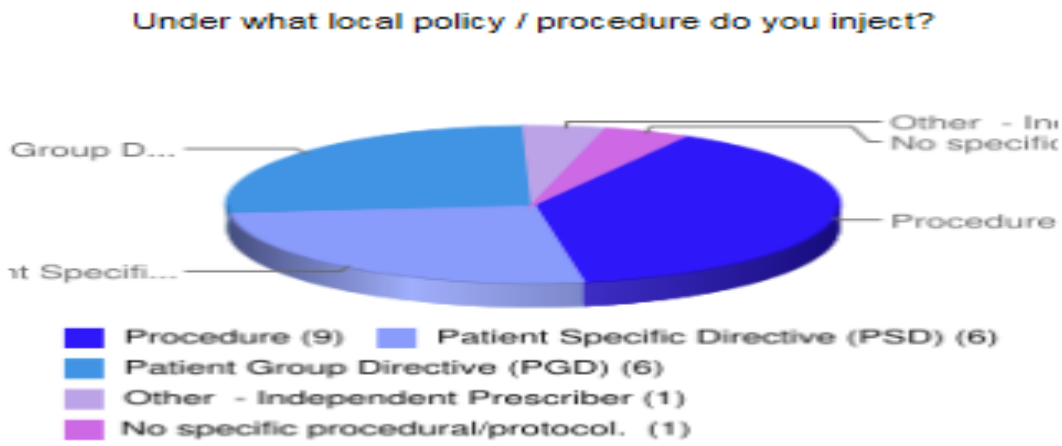
In relation to guidance documents, most respondents (21 = 91%) were familiar with the 2009 European Consensus on the use of Botulinum toxin for children with

cerebral palsy [5]. Twenty (87%) were aware of the Use of Botulinum Toxin in Children with Neurological Conditions [1] published by APCP in 2008. Nineteen (83%) were familiar with Spasticity in Adults: Management Using Botulinum Toxin. National Guidelines Royal College of Physicians 2009 [6]. Only 65% (15/23) were aware of the CSP expectations of educational programmes in Injection Therapy for physiotherapists (2nd Edition) [4].

NICE guidelines for Spasticity in under 19s [7] and an international consensus document relating to managing adult spasticity [8] were also noted by 2 respondents. One respondent did not complete this section.

In terms of annual competencies and on-going training, almost all respondents (22= 96%) completed annual training in CPR and infection control. 70% (16/23) completed an update in anaphylaxis. 52% (12/23) completed an update in localisation. Two respondents undertook an update in safeguarding/child protection, 1 completed a case review and 1 respondent did a literature for their Patient Group Direction (PGD).

There was much variation in terms of what local policy/procedures the respondents were able to injection under. Only 1 respondent was an independent prescriber. The largest majority (9/23 = 39%) of therapists inject under a procedure. Equal numbers of respondents (6/23 = 26%) inject under a Patient Specific Direction (PSD) or a Patient Group Direction (PGD). One respondent had no specific procedure/protocol in place.



Provision for peer review was established for 11 (48%) of the respondents.

Additional comments in relation to clinical governance procedures in place indicated that regular and structured systems were established in most areas. Multidisciplinary working and training with consultant paediatricians, orthopaedic surgeons, nurses, occupational therapists and pharmacists were noted within injection settings as well as during regular service reviews including audit. Areas of audit were noted as outcomes, annual service review, adherence to local policies and training as well as APCP guidelines of good practice.

Patient safety was noted by reference to risk assessment and preparation for any adverse event during/after injections. Two respondents specifically noted always working in pairs. Standard operating procedures for consent, recording and sedation were also mentioned.

Autonomy

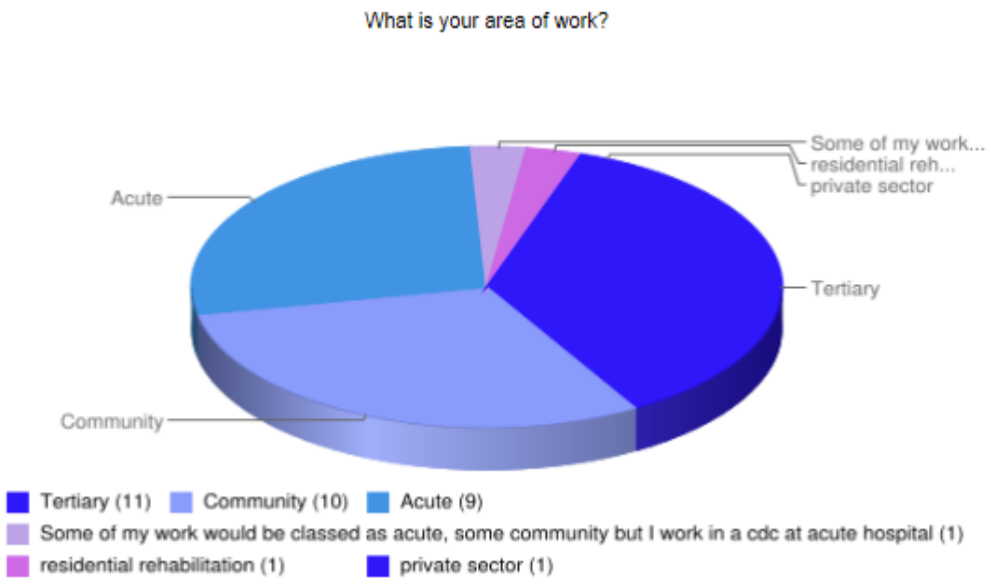
Many respondents (13 = 57%) noted a significant level of autonomy for all aspects of the injection process including patient selection, dosage, muscles to be targeted,

type of sedation as well as the injections themselves. Multidisciplinary team working and decision making was also frequently commented on. Respondents worked with consultant paediatricians/neurodisability paediatricians (9 = 39%), orthopaedic consultants (8 = 35%) and neurologists (4 = 17%).

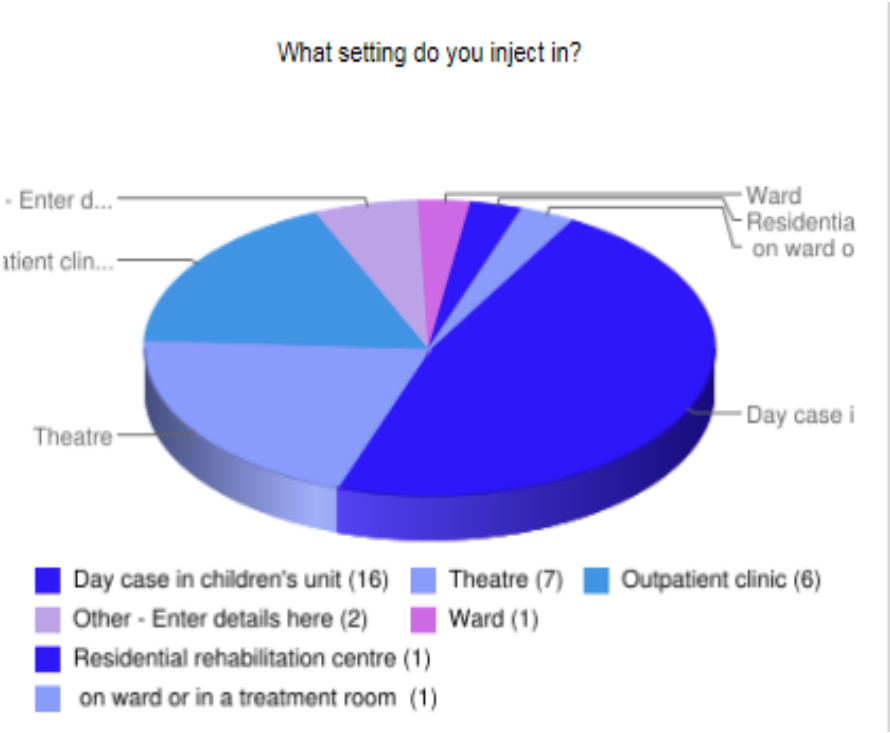
Who is being injected where and how?

The most common diagnostic category that respondents noted for injection was cerebral palsy (21/23 = 91%). This was followed by acute brain injury (8/23 = 35%), spinal cord injury (6/23 = 26%) and 'other' (5/23 = 22%). Many therapists injected children in more than one category.

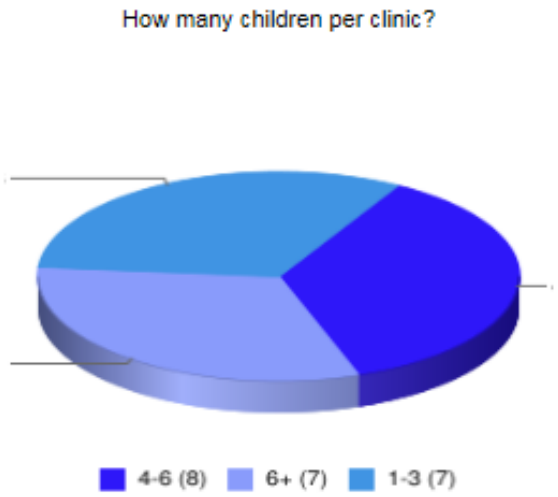
Therapists worked in a variety and combination of settings – acute (10/23), community (11/23), tertiary (12/23) and residential rehab (1/23).



The location for injections to be carried out also varied with respondents injecting in more than one setting. The most common was as a day case in a children's unit (16/23). Theatre (7/23), out-patient clinics (6/23), ward (2/23) and residential rehab (1/23) were also used. Two respondents noted 'other' (2/23).



The number of children and frequency of clinics differed as well. Most areas (8/23 = 35%) saw between 4-6 children per clinic. Equal number of respondents (7/23 = 30%) saw either 1-3 children or 6+ children per clinic. 1 person did not respond to the question.



APCP Neurodisability Group – Survey for therapists injecting Botulinum Toxin-A for Management of Focal Spasticity in Children. August 2018.

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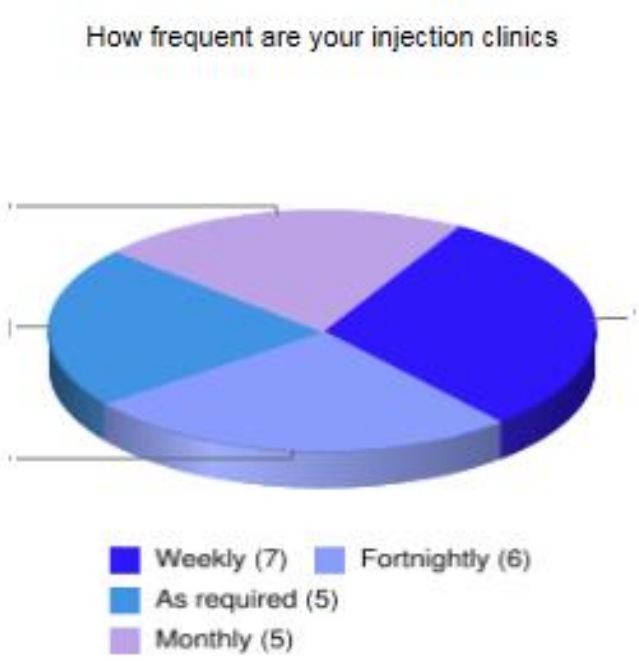
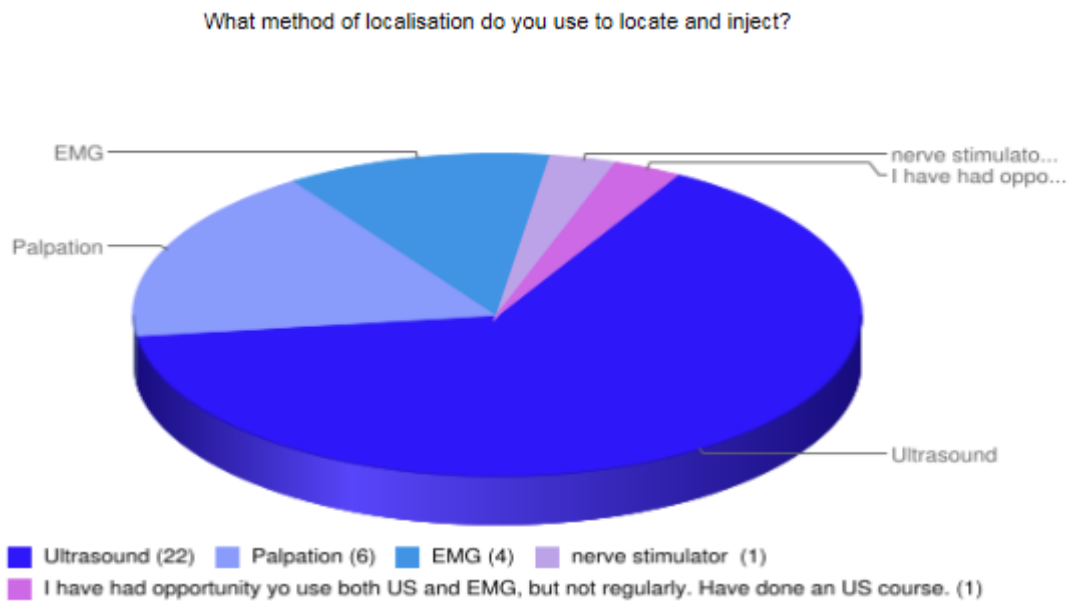
Seven (23%) of respondents ran weekly clinics. Six (26%) had clinics every two weeks and an equal number of therapists (5 = 22%) had clinics either monthly or ‘as required’.



All therapists used additional methods for localisation other than palpation alone, by ultrasound, EMG or nerve stimulator, although 7 (30%) did note palpation as a specific localisation method. Most (22/23) used ultrasound. Four (17%) used EMG and 1 used a nerve stimulator.



This survey did not include use of sedation or topical anaesthetic.

Assessment and outcomes

Twenty-two (91%) respondents used locally created forms for assessment. Eighteen (82%) used a variety of recognised and/or standardised assessments alongside the local forms with the Gross Motor Function Measure (GMFM), Physician's rating scale, Tardieu, range of movement and gait recording/analysis noted most frequently. The diagram at the end of this report contains the complete list of comments. One respondent indicated 'other' but did not provide additional information.

In terms of outcome measures, 20 (87%) used some type of gait score. Goal Attainment Scaling (GAS) goals were used to assess outcome by 17 (74%) with 14 (61%) using the Care and Comfort Questionnaire. Two respondents answered 'other' for this question but did not provide additional information. Two respondents also

commented that it was difficult to find time for formal standardised assessment and follow-up.

Summary

The purpose of this survey was to establish the number of physiotherapists injecting BoNT-A for management of focal spasticity in children. The ND group also wanted to determine if there were areas of similarity within the practice of survey respondents, highlighting any differences that may exist as well as ascertaining if members desired to share practice.

The survey has shown that although the numbers of therapists injecting is small; they operate with a high level of experience and autonomy. The current APCP membership is approximately 2,100 members. This indicates that less than 1% of current APCP membership inject BoNT-A for focal spasticity.

Most respondents, 91%, were Band 7 or above. All but one respondent had more than 10 years of Paediatric Physiotherapy experience. This level of knowledge and experience is absolutely necessary to work in advanced/extended roles. The CSP guidance states that *within physiotherapy practice, injection-therapy is not simply a task-based procedure. Rather, it encompasses the full assessment, diagnosis and reasoning process to make a decision as to whether to select injection therapy as an intervention to offer patients* [4]. The CSP considers this to be a mandatory pre-requisite prior to commencement of an injection-therapy educational programme.[4]

Although there were a wide variety of procedures, assessments and outcomes used, there were many areas of similarity suggesting local variances, while underpinning the need for strong clinical governance. All therapists used additional localisation methods in line with best practice documentation [5]

Not all respondents were aware of CSP guidelines[4] which explicitly establish the expectation of educational programmes that facilitate therapists becoming competent in injection therapy. This document also defines the framework that physiotherapists may legally inject under such as Patient Specific Direction (PSD), a Patient Group Direction (PGD), Supplementary Prescribing and Independent Prescribing [4].

Annual training to ensure ongoing competency in assessment, outcomes, infection control and, most importantly, localisation was variable. In Scotland, therapists have established the *Scottish Paediatric Physiotherapy Injectors* group. They meet twice per year with one of the meetings focussing on competencies and the other on sharing practice. Less than 50% of respondents have peer review available to them. Twenty-two (96%) were keen to share practice and develop a support network.

Conclusion

From the results of the survey, there are several potential areas that could be explored to support physiotherapists who inject BoNT-A for focal spasticity in children as well as help more physiotherapists develop these skills.

With less than 1% of APCP membership injecting, an area for future development may promoting an injecting service led by physiotherapists as injectors. Supporting

therapists who work at Advanced Practice level will not only benefit members directly but will also impact on the service we are able to provide to the children and families under our care.

The cost savings of developing a topical anaesthetic BoNT-A service rather than use of general anaesthetic has previously shown to be significant [9]. The CSP has established criteria to develop injector competencies, but does not give guidance on how best to maintain these skills [4]. Twenty of the respondents shared their contact details. They have been sent this report and asked what their priorities would be to establish a support network as well as how this could be achieved logistically. The extent to which the ND group/APCP is involved will also need to be determined. Our next meeting is in January 2019 where we will discuss the survey report, email responses and how we can continue to support APCP members.

References

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6. Royal College of Physicans, British Society of Rehabilitation Medicine, Chartered Society of Physiotherapy, Association of Chartered Physiotherapists Interested in Neurology. *Spasticity in adults: management using botulinum toxin. National guidelines.* London: RCP,2009.

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9. Development of Botulinum Toxin-A service in Fife, Scotland

   https://casestudies.csp.org.uk/case-studies/development-botulinum-toxin-service-fife-scotland