It is time for podiatry to deliver evidence based/informed practice in nail surgery using PASCOM-10 (P-10) to support the College of Podiatry’s (CoP) strategic plan 2018-2022 by demonstrating the true volume and quality of work being undertaken by UK podiatrists regarding these procedures.

Nail avulsion procedures +/- phenolic matricectomy to manage deformed and ingrown toe nail plates are the fourth most commonly performed surgical procedures, as outcomed on the PASCOM-10 (P-10) audit tool by UK podiatrists.

Despite this P-10 ranking, the procedures remain significantly under-reported and the P-10 app, which is potentially transformative in demonstrating national nail surgery activity, remains underutilised.

The translation of research and its evidence into practice is a vital part of transforming patient services and improving outcomes. The recently published CoP report Podiatry: Driving value, improving outcomes acknowledges that there is a lack of data collection by NHS trusts regarding the impact of podiatry. This viewpoint is advocated further by a recent King’s Fund report, which identifies ‘a significant data gap’ relating to both impact and quality of AHP services within the NHS.

With specific reference to national nail surgery activity, we find low levels of reporting of these procedures via P-10, the audit tool endorsed by the CoP since 2010.

In 2015, Modha et al published the first data on nail surgery procedures using P-10 in Podiatry Now. It represents the first article to publish a P-10 data set on nail avulsions +/- phenol, and has set a benchmark in nail surgery practice. It also provides a window into our current practice to other professions and health organisations.
Modha et al demonstrated that the integration of P-10 to evaluate nail avulsion +/- phenol confirms that these minor surgical procedures have high impact and outcome characteristics of high satisfaction and low complication rates. Yet despite its early adoption by some NHS teams, there appears to have been a decision by the profession not to adopt its use. Collection of these data is essential to ensure NHS leaders and commissioners recognise podiatry as being both the first profession and the right profession to be consulted regarding the surgical management of deformed, painful or ingrown toe nail plates.

THE CENTRAL LONDON COMMUNITY HEALTHCARE TRUST EXPERIENCE OF P-10

In 2015 the Hammersmith and Fulham Podiatry team (Central London Community Healthcare (CLCH) NHS trust) explored the use of P-10 to evidence nail surgery. We sought to re-imagine a nail surgery session and identify how and when P-10 could be integrated to support it without additional resources and to contribute to the national profiling of this procedure. This exercise was thought to be a fundamental step prior to adopting P-10 as a key performance indicator (KPI) for our service to deliver evidence-based/informed practice, a key impact point and aspiration of the current ‘Allied Health Professions into Action’ campaign. Since 2015, the department has produced three sets of data that have indicated the top three procedures performed by the team:

- Single toe partial nail avulsion (PNA) one side.
- Single toe PNA two sides.
- Single toe total nail avulsion (TNA) with phenolisation.

The other metrics for these procedures – pre- and post-op MOXFQ (which relates to changes in pain, walking, standing and social interaction), surgical site infection (SSIs), sequelae and regrowth – have demonstrated significant health improvement to the patient and low complication rates that have remained consistent (3%) over three years.

In parallel to P-10, we produced an Excel spreadsheet to evidence outcomes in subsets of patients (non-diabetic and diabetic patients with risk stratifications of low, medium and high). We hope to demonstrate that nail avulsions are a safe and effective component in a diabetic foot protection plan.

Additional value has also been extracted from P-10 data relating to the banding of podiatrists performing the procedures; we have been able clarify that patients receive equitable care/outcomes regardless of which clinician undertakes the procedure.

How did we embed P-10 into practice?

Within our team there had been resistance to P-10; anecdotally the feeling was that attempts at completing the original P-10 training pack were unsuccessful as it was too dense and time-absorbing to complete.

P-10 training

In 2015, the PASCOM-10 online training process was made more accessible and streamlined, and now consists of 10 videos available on YouTube totalling 13 minutes. Successful completion of a 10-question online test, which takes 30 minutes to complete, allows access to the PASCOM-10 live site. Staff were supported through this process collectively at a team meeting.

Nail surgery domain

P-10 minor surgery is now represented by a nationally standardised nail surgery domain that is easy to read, straightforward to use and allows the registration and completion of a nail surgery episode in five minutes.

Staffing

Staffing of nail surgery was in line with current CoP guidelines. Each nail surgery session of 3.5 hours was staffed by a podiatrist and foot care assistant (FCA), providing a total of 420 minutes of clinical input per session (the CoP supports the registration of FCAs and clerical staff on the live site through sponsorship by a CoP member). This allowed the inputting of P-10 data to be a shared responsibility across the...
podiatry department for the treatment episode from registration to discharge. We identified a five-stage process to complete this and developed a standard operating procedure (SOP) for its administration. The next step was to break down the nail surgery process and assign responsibility for individual tasks. It was determined that, with appropriate training, PASCOM-10 data could be inputted by staff from band 3 upwards.

Nail surgery package of care

Nail surgery in CLCH is delivered at minor surgery hubs following a SOP (see Table 1) and defined package of care (POC). This ensures that all podiatrists work in the same way to the same quality assurance standards across the Trust (Figure 1). The homogeneity of nail surgery delivery allowed us to evaluate the service.

Podiatrist/FCA workload

Nail surgery is an elective procedure and, as such, we are able to plan our workload. We identified the important areas of activity within an appointment and the time spent on each activity. We produced a chart of time-locked tasks, which provides evidence of the roles of staff, expectations of when activities should be performed, and identifies time slots where P-10 data may be entered (Table 2). The aim was to allow the demise of the anecdotal refrain ‘we don’t have time’ from our department.

THE WAY FORWARD

Without question, nail surgery is transitioning. While, technically, nail surgery procedures have not changed, the way we view, seek to understand and present them has. The profession has a history of publishing stand-alone retrospective/prospective/studies relating to nail surgery outcomes, offering snapshots of practice for individual organisations and departments and are well profiled on NICE Evidence and Cochrane databases.

Since 2010, the CoP has advocated the embedding of P-10 parameters for each and every nail surgery procedure performed by podiatrists to demonstrate the scope, quantity and quality of procedures performed both in NHS and private practice.

The 2017 PASCOM-10 dataset indicates that the aggregate national nail surgery activity by our profession is reported at a total of 1,463 episodes from 52/245 registered units (communication with Anthony Maher, P-10 working party , 2018), the most productive year to date. The average number of nail surgeries outcomes on P-10 per annum since 2010 has remained static at around 1,000 cases per year (Figure 2) and

<table>
<thead>
<tr>
<th>P-10 Activity</th>
<th>Stage of process when P-10 completed</th>
<th>Responsibility</th>
<th>Narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Create new patient entry on P-10</td>
<td>Clerking &amp; re-consent on day of surgery</td>
<td>Band 3/5/6/7</td>
<td>1. The patient is handed a Pre-MOXFQ to complete as they arrive. The initial step is to register a new patient onto the P-10 system. This is undertaken by the clinical assistant while the operator is checking consent and paperwork.</td>
</tr>
<tr>
<td>2. Input data from Pre-MOXFQ to P-10</td>
<td>LA administration/block activation</td>
<td>Band 3/5/6/7</td>
<td>2. The completed Pre-MOXFQ data is inputted into the P-10 system during the short wait for activation of local anaesthesia (LA) at the surgical site by the clinical assistant.</td>
</tr>
<tr>
<td>3. Input procedure code/details of surgery</td>
<td>LA administration/block activation/post-surgery</td>
<td>Band 3/5/6/7</td>
<td>3. Simultaneously, the operator will input the data pertaining to the details of the surgical procedure, e.g. procedure code, details of local analgesia, etc. This may be updated post-surgery with details of tourniquet time.</td>
</tr>
<tr>
<td>4. Input any relevant sequelae, e.g. infection, regrowth, phenol flare</td>
<td>Follow-up appointment(s)</td>
<td>Band 3/5/6/7</td>
<td>4. At the initial and subsequent follow-up(s) it is imperative that any relevant sequelae, e.g. infection, phenol flare, regrowth, onycholysis, etc, are recorded accurately on the P-10 system by the clinician accountable for this appointment.</td>
</tr>
<tr>
<td>5. Input data from Post-MOXFQ/PSQ-10/Friends &amp; Family test</td>
<td>Final follow-up appointment (physical appointment or telephone consultation) at 8 weeks post operatively</td>
<td>Band 3/5/6/7</td>
<td>5. At the final review prior to discharge, the appropriate data collection must be undertaken to demonstrate the outcomes of surgery. These are: Post-MOXFQ, PSQ-10 and Friends &amp; Family test, to be undertaken by the clinician accountable for this appointment.</td>
</tr>
</tbody>
</table>

Table 1. Standard operating procedure (SOP) for the use of P-10

Figure 2. National Audit Data. Total number of nail surgeries performed. Average 955 per year.
these data suggest a significant under-reporting of the true volume and quality of this surgical procedure by podiatrists; and a lack of uptake of P-10 by the profession. These missing data are potentially transformative and are available for collection at the point of care.

Despite eight years of data collection, the volume of procedures recorded is too small for the CoP to surmise the annual indicative activity for nail surgery nationally, and for these data to be used to lobby for podiatrists to be viewed as the first point of call to be consulted for the management of these conditions.

In 2015, a publication between Sheffield Teaching hospital and the CoP reviewed current patient populations being managed by podiatrists and attempted to quantify the frequency of ingrown toenails (IGTN). It is suggested that 10,000 new cases of IGTN present in general practice each year, however the reference used actually refers to patients presenting at GP practices rather than general practice podiatrists and dates back to 1986. The datasets available on nail surgery domains available to podiatrists since 2010 were clearly thought not to represent the profession adequately, so were not used. There is no counterpoint.

**Technology and healthcare**

The adoption of technology within the healthcare sector is generally slow and disparate. It was hoped that uptake of this digital audit tool by the profession would provide longitudinal multicentre data, allowing continuous and consistent measurement of these procedures. The CoP’s chosen model for P-10 adoption appears to be the ‘uptake by professionals’ model. In this model, the decision to purchase the technology (in this case free to all podiatrists) and use P-10 lies with unconnected individuals without mandate. While the CoP has provided guidance for engagement, implementation has occurred on a small scale.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Operator</th>
<th>Assistant</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient arrival/greeting</td>
<td>✓</td>
<td>✓</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Pre-MOXFQ given to patient (Collection opportunity 1)</td>
<td>✓</td>
<td></td>
<td>Handed to patient</td>
</tr>
<tr>
<td>Clerking &amp; consent</td>
<td>✓</td>
<td></td>
<td>5 minutes</td>
</tr>
<tr>
<td>LA administration/activation</td>
<td>✓</td>
<td></td>
<td>10 minutes</td>
</tr>
<tr>
<td>Data inputting for Pre-MOXFQ (Collection opportunity 2 - while LA is taking)</td>
<td>✓</td>
<td></td>
<td>While waiting for LA activation</td>
</tr>
<tr>
<td>Data inputting for surgical details</td>
<td>✓</td>
<td></td>
<td>While waiting for LA activation</td>
</tr>
<tr>
<td>Preparation for aseptic procedure</td>
<td>✓</td>
<td>✓</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Surgery undertaken</td>
<td>✓</td>
<td></td>
<td>15 minutes</td>
</tr>
<tr>
<td>Dressing</td>
<td>✓</td>
<td></td>
<td>5 minutes</td>
</tr>
<tr>
<td>Post-operative debrief &amp; advice</td>
<td>✓</td>
<td></td>
<td>5 minutes</td>
</tr>
<tr>
<td>Writing of progress notes</td>
<td>✓</td>
<td></td>
<td>5 minutes</td>
</tr>
<tr>
<td>Final entry of PASCOM data</td>
<td>✓</td>
<td></td>
<td>Simultaneous as operator completes progress notes</td>
</tr>
</tbody>
</table>

**Table 2. The podiatrist/ FCA workload demonstrates there are pockets of time where P-10 data may be completed.**

**Tipping point**

In his groundbreaking book, Malcom Gladwell defined ‘The tipping point’ as the moment at which big changes follow seemingly small events. But what small changes could the profession and the CoP make that could accelerate P-10 adoption and diffusion within the NHS (see Table 3)?

As an online digital platform, P-10 promotes both inclusivity and opportunity for podiatrists to align themselves in the collection of data relating to nail surgery, to contribute to the profiling of the profession and to deliver evidence-based/informed practice to their patients. The data may be used in multiple ways to support contemporary practice (see Table 4).

**Indicative activity plans for nail surgery**

Every podiatry department has an indicative activity plan (IAP) for minor surgery per annum. Yet, in 2018, the CoP is unable to surmise nationally the quantity or quality of nail surgeries being performed so is unable to publicise the impact of podiatric interventions or consolidate a perception of podiatry with policy makers, commissioners and the public. It can only do this if the membership collects this potentially transformative data at the point of care.

**P-10 as nail surgery intelligence tool – IAPs**

Should P-10 uptake only be at the discretion of NHS podiatry units? A change in strategic approach may be required for successful diffusion of P-10 into the NHS. Clinical Commissioning Groups (CCGs) may have a crucial role here – perhaps they should mandate providers to its use. CCG adoption of P-10 may be accelerated through dissemination by top-down, policy-led uptake; a possibility may be through its advocacy and inclusion by NICE evidence at the next nail surgery update.

P-10 could support the development of nail surgery intelligence packs. At a local level, CCGs should be expecting to see these if they commission this service for their patients. If an NHS trust provides services to multiple CCGs, this becomes a tool to drive improved outcomes within teams by making activity that was invisible visible, encouraging improvement, reducing unwarranted variation in care and supporting clinicians to do things differently. P-10 data should stimulate questions from CCGs – why does our CCG have no data on nail surgery procedures when other CCGs do? Why do we only see half the number of nail surgery patients as other CCGs when we allocate the same resources?

**National nail surgery activity projection**

Recent data suggest there are currently 211 CCGs in the UK, serving an average of 226,000 people. If we consider the Hammersmith and Fulham podiatry team to be an average department, providing two sessions a week of nail surgery, three interventions a session – six per week in total, then we have an IAP of 285 procedures per annum (Table 5).

If we project these figures to the 211 CCGs, presuming they all have a podiatry department, there is a projected potential for +/- 60,150 procedures to be performed and reported by the profession for each dataset if local IAPs are met in full. The reality will be somewhat different.

Collection of data at the point of care may be where, in part, the problem lies. The suggested layering of P-10 nail surgery data collection onto units’ existing work patterns has not resulted in uptake of P-10 for this procedure by the profession since its deployment in 2010. This may demonstrate the need for units to evaluate current clinical working practices in a nail surgery session prior to the transition of P-10 into units. Successful integration of P-10 into practice may come...
Rebranding of P-10 to NHS England /NICE/CCGs as a tool for CCGs to utilise /expect podiatry services to use to outcome commissioned services rather than relying on opt-in by podiatry units.

Development of undergraduate nail surgery domain for use on placements even if hosting organisation does not use P-10.

Development of CCG /public facing web portal – health informatics on nail surgery per CCG/region. Data transparent and open to drive improvement. National /regional data gaps will be visible and require filling where missing.

Advocacy for P-10 to be referenced on NICE evidence /inclusion in Cochrane database as audit tool of choice for outoming nail surgery procedures at the next update.

Pre-sets of nail surgery data descriptors: standard data entered with single click.

Pinning of P-10 to Microsoft tool bar – this will make P-10 website visible at a single click. ‘How to’ guide available to download from P-10 website.

Infographic template (editable) for trusts to download from P-10 website.

User friendly nail surgery descriptors, i.e. single toe, single side PNA, single toe bilateral PNA, two toes single side PNA, two toes double side PNA, single toe TNA with phenolisation, single toe TNA without phenolisation.

Nail surgery patient subsets: addition of non-diabetic, low-risk, moderate-risk, high-risk profiles to nail surgery domain to demonstrate surgical outcomes for these subsets of patients.

A five-year forward plan for nail surgery

The launch of The CoP Strategic Plan 2018-2022 and NHS England’s Allied Health Professionals into Action 2016/17-2020/21 provides a five-year window of opportunity for departments to align with P-10 and implement change so they are able to obtain data that better reflects the true volume and quality of nail surgery being performed by podiatrists at the end of this cycle.

It is essential that NHS podiatry teams commissioned by NHS England produce nail surgery data. The nail surgery activity for the last data cycle (2017) was contributed by 52 centres (of 245) registered on P-10.

The percentage of podiatrists/podiatric surgeons contributing to nail surgery activity is not known (Personal communication. Maher, 2018). It may be that podiatric surgeons remain the dominant contributors. At the time of writing the HCPC indicates there

<table>
<thead>
<tr>
<th>NHS Impact</th>
<th>College of Podiatry Impact</th>
<th>Private Practice Impact</th>
<th>Patient Impact</th>
<th>Podiatrist CPD Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operationally</td>
<td>Development of local intelligence tool for CCG /commissioners to support commissioning decisions Infographics</td>
<td>Development of regional/ national nail surgery intelligence tool for the CoP</td>
<td>Patient-facing data on websites</td>
<td>Supports shared decision making</td>
</tr>
<tr>
<td>Support the development of informed/evidence-based referral pathways with CCGs</td>
<td>Every CCG in the UK should be supplied with a locally produced nail surgery intervention Primary Care Intelligence pack Profiling of the profession for lobbying</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real-time data for patient-facing websites Surgical site infection rates Health benefit from procedure (MOXFQ) Sequelae associated with procedure</td>
<td>Simple statements to support the recognition of podiatry in relation to public health. Support campaigns similar to: Podiatry: Driving value, improving outcomes 2018-23. I see the difference campaign <a href="http://www.iseethedifference.co.uk">www.iseethedifference.co.uk</a> Demonstrating the volume of work to encourage uptake of podiatry as a career</td>
<td>Data to support private insurance referrals BUPA network, etc.</td>
<td>Assist in addressing underuse, overuse and appropriate use of podiatry appointments</td>
<td>Evidence of practice for HCPC audit</td>
</tr>
<tr>
<td>Supports the commissioning and maintenance of workforce</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrate nail surgery provided in the community as alternative to medical teams/outpatient appointments</td>
<td>Standardises the collation of data relating to nail surgery longitudinally from multiple units</td>
<td></td>
<td>Supports improvement in referral to treatment time</td>
<td>Data to use as defensive practice in case of a patient /litigation complaint regarding nail surgery procedures performed by a clinician</td>
</tr>
</tbody>
</table>
are 12,949 registered podiatrists, 3,901 of which are employed in the NHS. The private sector has an, as yet unquantified, contribution to make to these data. The discussions regarding how data could be captured and managed, for example via regional P-10 centres which individual practices feed into, is a discussion for others. Another point is that, despite numerous articles advocating the uptake and use of P-10, the counterpoint arguments have not been made and published formally.

If the membership is central to drive the CoPs five-year strategic plan with the vision that podiatry will be recognised by the public, by fellow healthcare professionals, by policy makers and commissioners of healthcare as being synonymous with foot health, we need to support the collection of nail surgery data at the point of care. Nail surgery has high impact. The choices are clear.

Post script: The authors appreciate that time constraints and service delivery models will vary greatly between departments and will affect local approach to integration of P-10.

ACKNOWLEDGEMENTS

The authors would like to thank Anthony Maher for assistance with this article.

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RESOURCES

1. P10 – How to Pin P-10 to your Desktop tool bar. PowerPoint guide: PASCOM-10 resource Centre.
2. Editable Nail Surgery Infographic document: PASCOM-10 resource Centre.

Both available from: https://www.pascom-10.com/information-resources

<table>
<thead>
<tr>
<th>Stage</th>
<th>2018-2022</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projection on current national levels of nail surgery activity reported by P-10</td>
<td>995 per year</td>
<td>4,975</td>
</tr>
<tr>
<td>Activity levels across the 211 CCGs</td>
<td>5 nail surgeries per year per CCG</td>
<td>–</td>
</tr>
<tr>
<td>10% of 285 IAP activity</td>
<td>6,013 per year</td>
<td>30,065</td>
</tr>
<tr>
<td>28 nail surgeries per year per CCG</td>
<td>–</td>
<td>30,067</td>
</tr>
<tr>
<td>25% of 285 IAP activity</td>
<td>15,033 per year</td>
<td>75,165</td>
</tr>
<tr>
<td>100 nail surgeries per year per CCG</td>
<td>–</td>
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</tr>
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<td>50 % of 285 IAP activity</td>
<td>30,067</td>
<td>150,335</td>
</tr>
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<td>142 nail surgeries per year per CCG</td>
<td>–</td>
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<td>100% of 285 IAP activity</td>
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<td>300,675</td>
</tr>
<tr>
<td>285 nail surgeries per year per CCG</td>
<td>–</td>
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</table>