

EDUCATION AND TRAINING Evaluation of ‘Asked to see patient’: a regional near-peer teaching programme

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ABSTRACT

‘Asked to see patient’ (ATSP) is a near-peer teaching programme that aims to address the anxiety experienced during the transition from medical student to newly qualified foundation year 1 (FY1) doctor. It is delivered annually in the North West of England Foundation School just prior to the August changeover date when new doctors may feel the most stressed. Each spring, a ‘Teach the teachers’ training day is advertised to existing FY1 doctors; the training equips them with the knowledge to become certified ATSP teachers. Teachers subsequently deliver ATSP to incoming FY1 doctors at their trusts. Feedback on ATSP is collected from new FY1 doctors via an electronic survey. Results show that ATSP is well received, with 77% of newly qualified doctors engaging with the programme in 2016. ‘Asked to see patient’ is a Health Education England-endorsed teaching programme that develops clinicians who are structured and confident in their approach, and cultivates the clinical teacher in existing doctors.

KEYWORDS: Near-peer teaching, clinical teacher, induction

Introduction

Final year medical students experience a rapid learning curve when transitioning to the role of a foundation doctor. The General Medical Council (GMC) recently published *Promoting excellence: standards for medical education and training*, which emphasises that to promote patient safety, it is essential to deliver appropriate education and training to medical students and doctors to develop professional values, knowledge and skills.¹ An opportune time to deliver this teaching is during the August induction period, immediately prior to new doctors commencing their first clinical posts.

Despite acquiring much of the necessary clinical knowledge at medical school, one of the challenges that new foundation year 1 (FY1) doctors face is the application of ‘textbook’ knowledge to real-life clinical situations. One of the most anxiety-provoking aspects of the transition is the prospect of working out of hours (outside of the hours of Monday to Friday 9am–5pm), where acutely unwell patients are frequently encountered, often with

reduced immediate senior support. During such shifts, FY1 doctors must promptly learn to function confidently as independent clinicians. It has also been demonstrated that the development of non-technical skills (NTS) leads to greater situational awareness, less human error and improved leadership and delegation when managing a team in acute, stressful scenarios.²

‘Asked to see patient’ (ATSP) is a near-peer teaching (NPT) programme which aims to facilitate the transition from medical student to newly qualified FY1 doctor and assist in the development of NTS. It centres on the management of core clinical scenarios that the new FY1 doctor is likely to be called to see during out-of-hours shifts. Some of the scenarios discussed include managing a patient with abdominal pain, a patient with blood in their catheter bag, and the dying patient. A structured clinical approach is suggested for each of the scenarios, focusing on clinical assessment, investigation and management, as will have been taught at medical school. As well as reinforcing this systematic approach, advice is given on practical skills, such as answering bleeps, prioritisation of tasks and documentation, which may not have been covered during undergraduate training. The intention is to produce methodical and calm FY1 doctors who have the confidence to initiate the first steps of clinical treatment in an acute situation, prior to seeking senior advice.

The value of NPT is becoming increasingly recognised in medical education and provides benefit both to the near-peer tutor and the learner.^{3–5} NPT nurtures the concept of continued professional development (CPD) and provides the opportunity for the tutor to develop their teaching skills. For the learner, it can create a non-threatening learning environment, with information carefully targeted to their educational needs. NPT also provides an opportunity for near-peer tutors and learners to develop continuing mentor–mentee relationships.⁶

During the ATSP teaching, new FY1 doctors are taught by near-peers – doctors approaching the end of their FY1 post – in their new workplace. This creates the opportunity to discuss practical hints and tips, specific to the environment in which they will be working, such as access to local policies and guidelines. The near-peer teachers are actively encouraged to consider their own first out-of-hours shifts and impart any essential information that they themselves wish they had known.

Programme delivery

The ATSP programme is delivered to newly qualified FY1 doctors during their trust induction prior to the August changeover period.

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Originally established in the North Western Foundation School in 2010, it has continued annually. In 2015, the North Western Foundation School and Mersey Foundation School were integrated to form the North West of England Foundation School (NWoEFS). ATSP has been successfully rolled out to all trusts within the newly formed foundation school, with support from Health Education England (HEE).

The ATSP committee

Initially formed in 2010 by two trainees, the ATSP committee has evolved into a group of several trainees – all with an interest in medical education and leadership. Recruitment for and replenishment of the committee occurs on an annual or biannual basis depending upon existing committee members' capacity to continue their commitment. Each year, prior to phase 1, the ATSP committee review the ATSP material to ensure it is updated with any new clinical guidance.

Phase 1: The ATSP 'Teach the teachers' training day

Each year, a group of current FY1 doctors approaching the end of their first training year are invited to attend a regional ATSP 'Teach the teachers' training day, in order to become ATSP 'teachers'. The event is hosted by the ATSP committee at a central location within the foundation school and educates prospective teachers about the ATSP ethos and the practicalities of running a local ATSP teaching session.

During the training day, various teaching methods are discussed such as role play, simulation, small group work and didactic teaching. Delegates are split into groups with other delegates from their hospital and are given the opportunity to plan and organise their upcoming local ATSP session together. Each group is given the opportunity to present their lesson plan to rest of the audience, which allows the delegates to share ideas and teaching styles. By the end of the training day, teachers should have acquired the knowledge and teaching techniques necessary to return to the hospital at which they work and deliver a local ATSP teaching session (Fig 1).

Printed copies of the ATSP booklet (discussed below) are distributed to each group, to take back to their local hospital, one for each new incoming FY1 doctor. Details of the mobile phone

application (herewith referred to as the 'app') are also provided as well as an email contact for the ATSP committee for any queries.

Following the 'Teach the teachers' training day, the ATSP committee email the attendees with the following:

- > an electronic PDF copy of the ATSP booklet
- > a PowerPoint presentation for use at the local ATSP teaching session
- > example case scripts to be used in role play at the local ATSP teaching session (see supplementary file S1 for an example).

Phase 2: The local ATSP teaching session

At the local ATSP teaching session, incoming FY1 doctors are taught by the trained ATSP teacher. Each hospital trust (within the North West of England Foundation School) is mandated to provide a teaching slot during the induction period. This gives each new FY1 doctor the opportunity to attend a local ATSP session prior to commencing their first shift.

The local ATSP teaching sessions are run with the help of Foundation Programme Administrators (FPAs) at each hospital site, who ensure that a room is booked for the teaching and that all new FY1 doctors are allocated to a session. The teaching runs in a variety of ways, depending on the individual teaching styles the ATSP teachers wish to utilise, following the 'Teach the teachers' training day. These local ATSP teaching sessions range from small to large group sessions, dependent on the number of FY1 doctors within each trust. Teaching methods vary, according to tutor preference. However, all sessions are based on a common framework, focusing on the core clinical scenarios with the promotion of: a structured clinical assessment, structured management plan, workload prioritisation, and appropriate senior input.

Following the ATSP induction session, ATSP teachers are provided with a certificate to acknowledge their contribution to the teaching programme. Doctors who receive the local ATSP teaching are invited to participate as ATSP teachers a year later; this ensures that the ATSP programme can be sustained on an annual basis.

The ATSP guidance booklet and Android mobile phone application

The face-to-face teaching is complemented by a printed booklet, which can be carried on the wards as an aide-memoire. Guidance on the management of the aforementioned scenarios is provided in this booklet (examples in Figs 2–4). Additional guidance on prescribing, documentation and verifying death is also included. The booklet is also provided in an electronic PDF format, which can be downloaded onto smartphones and tablets. In 2015, an ATSP app containing the same information was developed for the Android platform.

Methods

Each year, 1 month following the local ATSP teaching sessions, the new FY1 doctors are requested to complete a mandatory online survey via their foundation e-portfolio system (Horus) to assess the utilisation and efficacy of ATSP. Trainees have up to 3 months to complete the online survey and are sent pop-up reminders every time they log onto their e-portfolio. The aim is to assess how useful the incoming FY1 doctors found the course, how frequently they

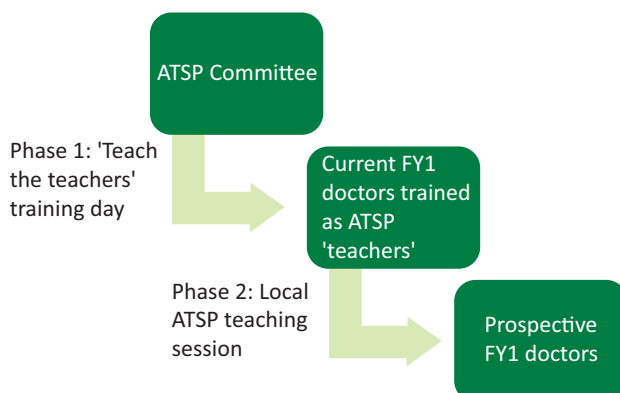


Fig 1. Annual order of events required to implement the ATSP programme. ATSP = 'Asked to see patient'; FY1 = foundation year 1.

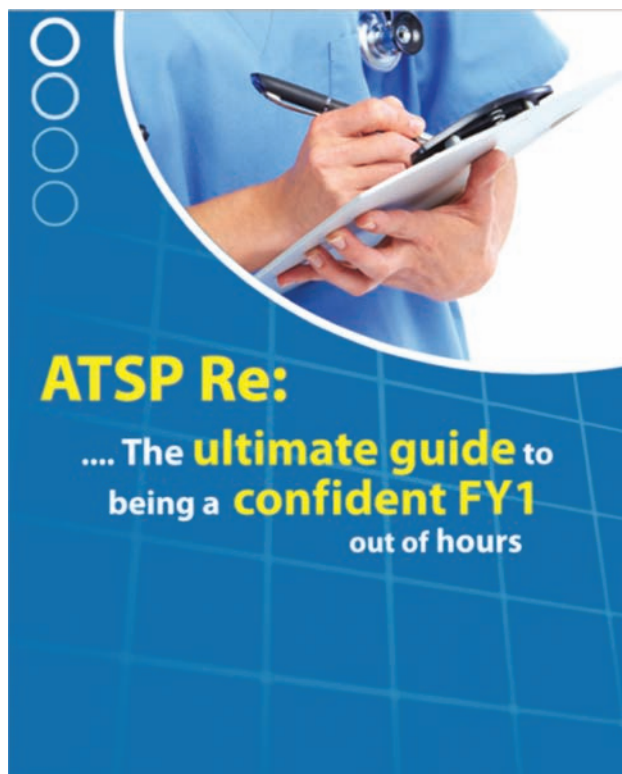


Fig 2. 'Asked to see patient' booklet – cover.

referred to the accompanying material and whether they felt that the ATSP programme influenced their management of acutely unwell patients during out-of-hours shifts. In 2016, the survey comprised of a series of questions with Likert scale responses (supplementary file S2) and free text comments.

The raw data was analysed using simple percentage analysis and tabulated using Excel spreadsheets. Engagement with the Android ATSP app was also retrieved through raw usage data.

Results

In total, 870 responses to the survey were obtained (100% completion rate) from the 2016 FY1 doctor cohort in the NWoEFS.

Despite ATSP being mandated (by HEE) in all 23 trusts within NWoEFS, only 77% of all respondents reported attending a session. This presumably relates to lack of awareness or an inability to attend due to other commitments. Attendance within each trust varied from 50–100%.

Of the FY1 doctors who attended a local ATSP session, 67% made use of the supplementary ATSP material. Within each trust, reported use of the ATSP written material varied from less than a half to over 90%.

'Asked to see patient' attendance was associated with greater usage of the ATSP material (correlation coefficient of 0.65) in the form of the ATSP booklet or app.

When used, most trainees would refer to the materials a handful of times during a shift, though a minority used it extensively (Fig 5).

Among all 870 trainees, the app was used less frequently than the clinical booklet (4% vs 55%), with 9% referring to both

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Fig 3. 'Asked to see patient' booklet – content.

resources. In the first 3 months of working as qualified FY1 doctors, analysis of the app data showed maximal app interaction during September with a total of 2423 views (where one view constitutes accessing a single screen within the app). Within a working week, the weekend period represents a large proportion of the out-of-hours cover by junior doctors. Between August and October 2016, we recognised a pattern of the weekly usage of the ATSP app peaking midweek and on Fridays, with a maximal number of views of the app in one day being as high as 187 (see supplementary file S3 for app usage August–October 2016).

There was an overall increase in perceived confidence in clinical management of patients but in particular for the following domains: answering bleeps during on call shifts, clinical prioritisation, patient safety and structuring clinical care following attendance at an ATSP teaching session (Fig 6).

The free-text comments from FY1 doctors indicate that ATSP is also successful in developing non-technical skills involved with the aforementioned clinical domains. Respondents commented that answering bleeps, prioritisation of tasks and asking for advice were best taught via role play, while they reported that the ATSP guidance materials were useful in supporting documentation. The majority of NTS development programmes do so via simulation scenarios. However, simulation teaching is expensive and requires significant resources. ATSP overcomes some the costs of teaching NTS, by providing near-peer teaching with the use of existing resources at each trust.

ATSP Re: **ABDOMINAL PAIN**

Initial Assessment

A V P U
ABCDE
Is this patient acutely unwell?
Are they post-op?

If ACUTE ABDO (i.e. perforation or bleed)

- BP + feel the pulse
- IV Access & bloods
- Erect CXR+AXR
- Senior HELP

Examination

- ABDO EXAM
- **PR EXAM** if appropriate (i.e. if there is history of haematemesis/meleana, if you suspect obstruction, or if you think the patient may be faecally loaded)
- **VASCULAR EXAM** – feel the pulses!

History

1. **SOCRATES - CHECK BOWELS**
Associated symptoms should include urinary and gynae
2. **PMHx** including
 - alcohol consumption
 - constipation/diarrhoea
 - Previous abdo/pelvic surgery
 - BPH
3. **REASON FOR ADMISSION**
and most recent procedures/operations

For a non-acute situation think about **common causes** for in-hospital abdominal pain

- **Constipation** - remember this may present as overflow incontinence
- **Urinary retention**
- **Pre-existing pathology** e.g partial obstruction, Cholecystitis, Pancreatitis, Gastritis (ulcer, GORD, infective causes,)
- **UTI** (catheterised?)
- **Infection** e.g C.diff

Investigations

Consider:

- Bloods - FBC, U&E inc Ca2+, LFT, amylase, coag, **X-match** if signs of bleed
- AXR/ erect CXR
- ECG
- Dipstick urine, MSU or CSU
- Stool sample (C.diff if on abx)

Discuss need for abdo USS/CT abdo/pelvis with senior

Medication Review

Unless this is an **ACUTE** situation you should focus on symptom control when out of hours.

Consider holding:

- NSAIDS if suspect gastritis/GOR
- OPIATES if constipated

Consider starting:

- OMEPRAZOLE/PRN GAVISCON
- Analgesia – Pain ladder (not NSAIDS!) Try BUSCOPAN (see BNF) for any cramp like colicky sounding pain
- Laxatives or enema if constipated. Only use an **enema** if patient is **faecally loaded**.
- Antibiotics if suspect UTI- check previous MSUs

Plan

Depends on working diagnosis/impression

- Keep NBM until diagnosis made
- IV access +/- FLUIDS
- Analgesia
- Monitor BP & urine O/P ?Catheterise
- Consider NGT if vomiting
- Keep details and check on them later

Hint

Most in-hospital abdo pain is not an emergency and this plan will be a bit excessive for the majority of cases. Constipation and/or pre-existing chronic pathology is the leading cause of abdo pain in this group of patients unless they are post-op. Symptomatic treatment is most often sufficient.

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Fig 4. 'Asked to see patient' booklet – example scenario.

Discussion

'Asked to see patient' teaching impact

The study aimed to ascertain how useful new FY1 doctors found the local ATSP session and accompanying materials. The study also investigated whether the session affected their clinical practice in the out-of-hours environment. The results were overwhelmingly positive, with the majority of trainees stating that the ATSP teaching course had a positive impact on their confidence (both when answering bleeps and reviewing patients),

their structured approach and their ability to prioritise. Positive attitudes towards the programme were also noted in the free-text comments within the survey.

Attendance

The results showed slightly disappointing attendance to what is supposed to be a mandatory teaching programme for all new FY1 doctors, with 23% of respondents reporting that they did not attend. There are several possible causes for this, including poor

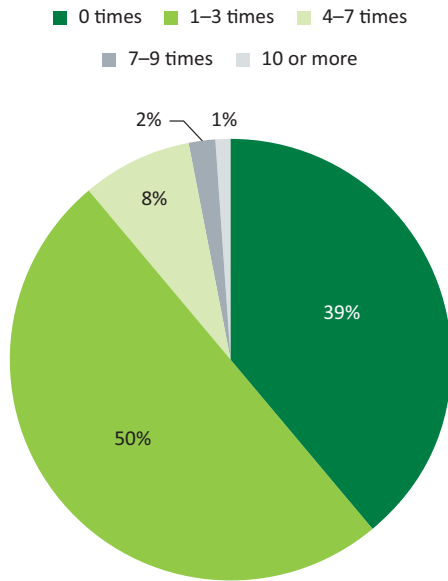


Fig 5. Usage of 'Asked to see patient' material during each out-of-hours shift.

engagement or lack of advertising by trusts, poor engagement by the trainees and poor timing of the teaching delivery.

Despite ATSP being mandatory in the north west (and endorsed by HEE) as part of the induction process for the foundation training programme there needs to be clearer buy-in from the trusts involved, in order to facilitate attendance at an ATSP teaching session. Trusts need to ensure that new FY1 doctors are made aware of the session with regular dissemination of emails and strict monitoring of attendance. At the outset, the foundation school advised that the deliverance of the ATSP teaching session should be hosted during the local induction programme. The aim of this strategic scheduling of ATSP was to ensure it is delivered to the newly qualified doctors prior to them encountering the out-of-hours clinical environment, so that the FY1 doctor can utilise the skills learnt

during the ATSP teaching session in their new clinical posts to aid this transition. Some trusts, however, chose to host the ATSP teaching after the August start date. Decreased attendance at these particular sessions is not surprising as, once new FY1 doctors have started their first post, clinical commitments – including out-of-hours activity and daytime service provision – may prevent them from attending.⁷

One way of overcoming this is to run more than one session so there is greater opportunity to capture all those trainees in the event that they could not attend the first session due to sickness or absence. Such an approach, however, would need collective agreement from HEE and the local education providers (LEPs).

'Asked to see patient' app

Engagement with the app was somewhat limited and this may be due in part to the availability of hospital Wi-Fi, which is necessary to utilise the app.⁸ The app is also only available on the Android operating system at present; therefore, its use is restricted to certain smartphones. Due to the non-physical nature of the app (unlike the printed booklet), awareness of it depends on attendance to the ATSP teaching session. For the non-attenders, it is likely that they were unaware of the app's existence.

The repeated spikes in app viewings in September and October suggest that, of the trainees who utilised the app, many continued to find it useful well into their first 4-month rotation. This could of course represent a large number of novel viewings, but given the limited reported engagement from the NWoEFS FY1 doctors and the relatively niche content, this seems unlikely.

Recommendations

In order to uphold continued success of the ATSP teaching programme in the future it is suggested that:

- > the training is adequately advertised to new FY1 doctors
- > trusts host the ATSP teaching programme in the induction period (prior to the August changeover) to ensure that all new FY1 doctors have the opportunity to attend

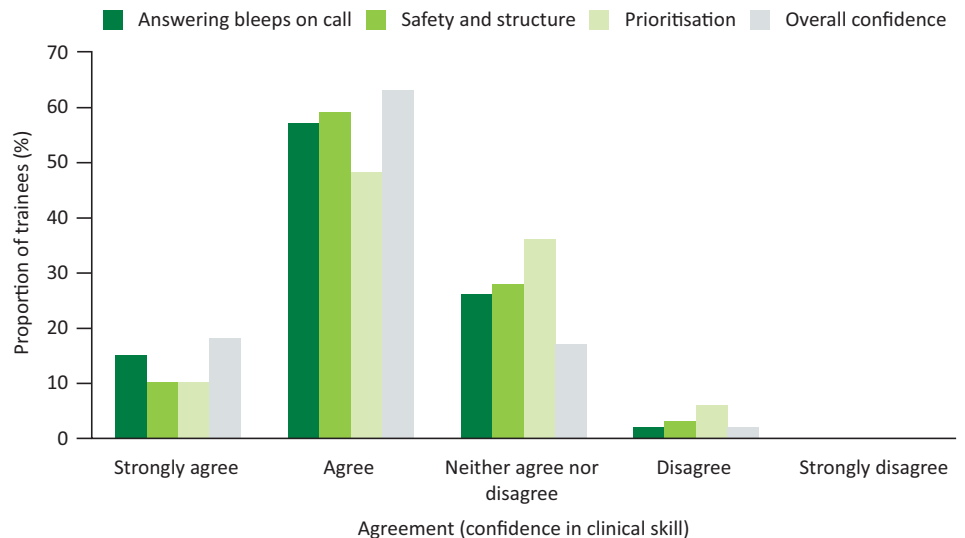


Fig 6. Perceived confidence in various clinical skills following the 'Asked to see patient' teaching session.

- > an app is developed that is compatible with all smartphone operating systems, preferably with the full content viewable offline.

Conclusion

ATSP is an HEE-endorsed near-peer teaching programme that aims to reduce some of the anxieties associated with the transition from medical student to newly qualified FY1 doctor, developing clinicians who are structured and confident in their approach.

The results of an electronic survey in 2016 within the NWoEFS show that the ATSP programme is well received by newly qualified doctors.

The ATSP model has been self-sustained within the north west of England for 6 years. Achieving this nationally requires a greater organisational network; with endorsement from HEE, a network is being developed with trainees and HEE staff within several other foundation schools. In 2016, the ATSP programme was piloted in four other foundation schools: East of England, East Midlands, North Central Thames and South Thames. Three of these have chosen to continue the ATSP programme in 2017 while North Central Thames have chosen not to run ATSP this year in favour of a similar, locally managed teaching programme.

Nonetheless, within most trusts in the north west of England, the ATSP programme appears to successfully bridge the gap between medical student and newly practising doctor during the annual 'changeover' period. Reasons for its success include the following.

- > It is designed and run by trainees (ie not by seniors, but by those who actually do the job).
- > It provides training for existing FY1 doctors (who are keen to develop their teaching portfolio).
- > Teaching materials are updated on a yearly basis by ATSP committee members (several foundation and specialty trainees who ensure that the material remains relevant, as well as up to date).
- > A small booklet, mobile phone application and phone friendly PDF are provided to new FY1 doctors free of charge (for reference at anytime, anywhere).
- > It provides demonstrable development of non-technical skills and increased perceived confidence in newly qualified doctors.
- > It is self-sustainable on an annual basis with minimal postgraduate staff support.
- > It is cost-effective to deliver.
- > The committee provide an email helpline and Twitter account (for networking and feedback).

Sufficient advertisement to new doctors and engagement by trusts will further the success of the ATSP teaching programme in the future. The development of an app compatible with all operating systems will ensure that the accompanying materials also remain future-proof. ■

Supplementary material

Additional supplementary material may be found in the online version of this article at <http://futurehospital.rcpjournals.org>:

- S1 – Example case script
- S2 – Survey questions
- S3 – App usage August–October 2016

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