The Acute Care Assessment Tool: ‘Pharmacy ACAT’

**Barry Jubraj**, Joint Pharmacy Foundation School, King’s College & University College London, UK

**Sheena Patel**, Chelsea & Westminster Hospital, London, UK

**Iram Naseem**, Epsom & St Helier University Hospitals, UK

**Samantha Copp**, Chelsea & Westminster Hospital, London, UK

**Dimitrios Karagkounis**, Croydon University Hospital, UK

Correspondence to: Barry Jubraj: barry.jubraj@kcl.ac.uk

**Abstract**

**Background:** The Acute Care Assessment Tool (ACAT) was developed as a workplace-based assessment (WPBA) for trainee performance whilst working in acute medicine. Here, we discuss the multi-professional potential of ACAT through a pilot with foundation and senior hospital pharmacists.

**Context:** The pharmacy profession is engaging meaningfully with foundation training for pharmacists akin to doctor foundation training, and has launched a post-foundation Faculty as a route to advanced generalist or specialist practice. Foundation training has included the adoption of familiar WPBA such as mini-clinical evaluation exercise (mini-CEX) and Case-based Discussion (CbD). However, mini-CEX and CbD are ‘snapshot’ assessments, and we identified a need for assessment of practice over a short period of time. A local director of medical education suggested ACAT.

**Innovation:** Permission was gained from the Joint Royal Colleges of Physicians to adapt the ACAT to form the ‘Pharmacy ACAT.’ Adaptations were based on the two current Royal
Pharmaceutical Society competency frameworks used for foundation and post-foundation practice. ‘Pharmacy ACAT’ was piloted across three acute hospitals (known as ‘Trusts’) in London for foundation trainees, and was found to be broadly acceptable in terms of time and of value for feedback, particularly for foundation pharmacy trainees. Senior pharmacists at the single pilot site were more sceptical.

**Implications:** We believe that ‘Pharmacy ACAT’ should be considered for routine use in pharmacy foundation training in hospital and community practice as it ‘plugs a gap’ in the current scheme of WPBA, by allowing assessment of a short period of practice as opposed to a snapshot. It also has potential for use at undergraduate level.

**Background**

The Acute Care Assessment Tool (ACAT) was developed by an experienced group of UK doctors as a workplace-based assessment (WPBA).¹ It is used to assess the performance of a medical trainee following a period of working in acute medicine, and a pilot demonstrated its merit as a formative assessment. The purpose of this article is to describe the development of ‘Pharmacy ACAT’ and a subsequent pilot in the hospital pharmacy setting.

In the 1960s, the concept of ‘ward (or clinical) pharmacy’ emerged² and has become embedded in the National Health Service (NHS) to bring pharmacists and their medicines expertise closer to patients and other members of the healthcare team. Over the years, the increasing complexity of medicines use has led to the concept of medicines optimisation, which is recognised as central to patient quality and safety.³ Whilst hospital pharmacists have traditionally undertaken postgraduate diplomas to
help meet this need, little use was made of the principles of work-based learning (WBL) and WPBA that was competency-based or performance-driven. Therefore, a collaborative between nine university schools of pharmacy and the NHS in south-east England began in the 2000s, leading to a competency-based programme embedding the principles of WBL and WPBA. This aligned with a recommendation for ‘foundation training’ by the ‘Modernising Pharmacy Careers Programme’, with the Royal Pharmaceutical Society (RPS) describing the foundation period as the first 1000 days of post-registration practice. In 2015, the University College and King’s College London (UCL/KCL) Joint Pharmacy Foundation School was one of the first three British pharmacy foundation schools accredited by the Royal Pharmaceutical Society.

WPBAs used within the UCL/KCL pharmacy foundation programme include those familiar to medical educators (see ‘wagon wheel’ illustration of pharmacy WPBA and summative assessments in figure 1). Introducing WPBA to pharmacy raised similar controversies to those described in the medical education literature. For example WPBA is sometimes perceived as a time-consuming process, a tick box exercise with little value, unnecessary paperwork, variable in the quality of feedback; and not reflecting competence. We have tackled these challenges and perceptions through training, resource developments and publications, although challenges remain.

Foundation pharmacists have typically been well-supervised and assessed in pharmacy-specific areas such as technical services, dispensaries and medicines information. However the level and type of supervision and assessment on the wards is sometimes perceived as patchy and has never been standardised in terms of method or frequency. Traditional examples of ward assessment included use of ‘ward visit
checklists’ containing tick box criteria such as communication with nursing and medical staff, correct endorsements on medication charts and identification of pharmaceutical problems. Although the use of WPBA such as mini-clinical evaluation exercise (mini-CEX) and case based discussion (CbD) as part of a ward visit have been successful, we felt that these provide a snapshot view of individual patient encounters. No WPBA tool exists in pharmacy to observe a period of practice at ward level or within pharmacy departments. An informal discussion with a local director of medical education led to the suggestion of seeking permission to adapt ACAT for pharmacists.

**Method**

With permission, the Joint Royal Colleges of Physicians ACAT tool\(^1\) was adapted to become the ‘Pharmacy ACAT’. This gave us the first pharmacy WPBA tool to review a period of working at ward level or in the pharmacy; but the key imperative was to develop a WPBA that ‘plugs the gap’ around ward supervision for foundation pharmacists, over and above observing individual patient encounters. Two versions were produced, one using the language and competency cluster statements from the Royal Pharmaceutical Society Foundation Pharmacy Framework\(^9\) and the other from the RPS Advanced Pharmacy Framework.\(^10\) The latter was known as the ‘post-foundation’ version in our pilot.

Pharmacy ACAT was circulated around pharmacy foundation training leads in London for consideration. Many expressed fears over ‘yet another WPBA’ and the lack of detail in Pharmacy ACAT compared with traditional checklists. There was agreement for an informal and small-scale multi-site pilot to gain feedback on the use of
Pharmacy ACAT. Three acute NHS hospitals (known in the UK as ‘Trusts’) in London agreed to pilot Pharmacy ACAT for willing foundation trainees in late-2014, namely the Chelsea & Westminster Hospital NHS Foundation Trust (CWFT), Croydon University Hospital (CUH), and Epsom & St Helier Hospital NHS Trust (ESH). Only CWFT participated in the post-foundation pilot. Both were informal, primarily qualitative pilots and use of Pharmacy ACAT was opportunistic depending on availability of volunteer supervisors and trainees. Orientation to the tool took place at the start of each visit and a feedback form was included for supervisors and trainees to complete jointly following assessment. As well as demographic information, free-text comments were invited on the usefulness of the tool and relevance to practice. It was made clear to trainees that use of Pharmacy ACAT was a pilot and very much a ‘low stakes’ process, and responses would be collated. Participant feedback data, including feedback comments, were tabulated and the ‘yes/no’ responses analysed using descriptive statistics to present percentage of respondents in returning a ‘yes’ response.

**Results**

**Foundation Trainees**

Pharmacy ACATs were completed for 22 foundation trainees across the three sites during the pilot in late 2014. Assessments ranged from 25 – 75 minutes in length (mean: 45 minutes). All Pharmacy ACAT assessments were conducted at ward level, with typical foundation pharmacist activities being common to all pilot sites, including prescription monitoring and screening, pharmaceutical care interventions, medication
supply and medicines information provision. The results were only analysed in early summer 2015 due to workload and staffing pressures, at which point the decision was taken to seek publication. Due to staff turnover, we were unable to obtain consent to include the results for publication from 12 foundation trainees. This left 10 foundation Pharmacy ACATs for inclusion.

Table 1 presents the responses to six key questions around the utility and appropriateness of Pharmacy ACAT:

<table>
<thead>
<tr>
<th>Statement</th>
<th>% ‘Yes’ response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the tool useful for assessment of junior (foundation) pharmacists?</td>
<td></td>
</tr>
<tr>
<td>Does Pharmacy ACAT assess areas that correspond to pharmacists’ activity?</td>
<td></td>
</tr>
<tr>
<td>Is it possible to undertake an assessment as part of the typical workload?</td>
<td>100%</td>
</tr>
<tr>
<td>Does the assessment lead to reflection on performance and/or the identification of development needs?</td>
<td></td>
</tr>
<tr>
<td>Does an assessment allow trainees to demonstrate competence based on the Foundation Pharmacy Framework?</td>
<td>100%</td>
</tr>
<tr>
<td>Should Pharmacy ACAT be added to the WPBA tools used for foundation training?</td>
<td>100%</td>
</tr>
</tbody>
</table>

All foundation trainees found Pharmacy ACAT to be a useful assessment for clinical and non-clinical skills with an overview of their work as opposed to a specific individual patient case. One trainee indicated that the process provided a useful insight into the ‘bigger picture’ and approach to dealing with pharmaceutical care issues. Pharmacy ACAT also highlighted current areas of good performance. All foundation trainees
could apply the feedback from Pharmacy ACAT to daily pharmacy practice, for example prioritisation of patient discharges in an organised and timely manner.

Box 1. Comments from foundation trainees and supervisors about Pharmacy ACAT

“Excellent tool to assess generic skills such as communication, leadership, teamwork, reliability etc, across the domains of good pharmaceutical practice.” ESH supervisor

“….the tool is a great way of assessing the whole visit on the ward. The mini-CEX focuses on single interactions and…. the practitioner may choose a patient with whom they are familiar. This can lead to the assessor/tutor not getting a rounded picture of how the practitioner is doing at ward level.” CWFT supervisor

“Use monthly. Useful to give feedback on knowledge gaps/how to prioritise ward work” CUH trainee

“… ACAT tool looks at a range of aspects including how the pharmacist approaches ward duties and communication skills in a wider context - how they make their presence known on the ward. It also assesses how they deal with more stressful situations …. and …. prioritisation of urgent requests ….” CWFT supervisor

“Found areas to improve that hadn't occurred to me before…. Reminds you of things you do well/your skills….Reassuring/inspires me to keep up hard work...” ESH trainee

Post-foundation Pharmacists

Ten post-foundation pharmacists from CWFT were assessed using the second version of Pharmacy ACAT, six of whom consented to their results being used for analysis. Time taken was not recorded. All agreed that Pharmacy ACAT covered an overview of pharmacy activities and that assessment could be part of daily activities/workload and allows for reflection and further development. However, a number of comments were made questioning the need for assessment or the applicability of the tool to their practice.
Box 2 highlights some comments from post-foundation pharmacists at CWFT who were assessed using ACAT:

“Senior pharmacists should already be performing at a senior level and assessment should not be required at this stage of practice…” Mid-grade medicine pharmacist

“I feel that it is important to continuously monitor practice – keeps us on our toes and [we] can always learn from others’ feedback” Mid-grade surgical pharmacist 1

“Maybe not appropriate for all pharmacists, might be difficult for senior pharmacists in particular to be assessed e.g. paediatrics, HDU etc.” Mid-grade surgical pharmacist 2

Discussion

We believe this to be the first recorded use of ACAT in pharmacy. The pilot aimed to explore the usefulness, application to practice and acceptability to foundation and post-foundation pharmacists; and foundation supervisors. Foundation pharmacists felt that Pharmacy ACAT allowed continual review of performance with formative feedback, reflection and the need for further support. However, some senior pharmacists did not welcome an assessment as felt they were performing at a level appropriate to their career stage and thought the ACAT should be aimed at newly qualified/junior pharmacists. We agree more with the second comment in box 2 and believe that Pharmacy ACAT may be a useful tool as part of Continuing Fitness to Practice principles that are being established for the profession.

The mean time for foundation Pharmacy ACATs (45 minutes) was more than expected and is not likely to be realistic at a time when there is pressure on time for training and assessment in the workplace. We postulate that more time was taken because this was
a pilot and included time for explanation of and orientation to the tool. We suggest that 15-20 minutes of practice be observed for Pharmacy ACAT, assuming that trainees and supervisors are appropriately trained in its purpose and use.

Limitations of this pilot study included the small sample size and a delay in obtaining participant consent, reducing the results available for analysis. The post-foundation pilot took place at just one hospital and only one practice setting (the ward environment). It would have been ideal to pilot Pharmacy ACAT in other hospital pharmacy settings such as technical services, medicines information and the dispensary. It would also be helpful to pilot in a community pharmacy setting.

Implications for practice

We recommend that Pharmacy ACAT be considered for routine use by Royal Pharmaceutical Society foundation trainees across Great Britain, both in hospital and community practice. We agree that ‘the ACAT form could be modified for use in many different clinical settings, and in different health care systems,’¹ and believe that Pharmacy ACAT may potentially be useful for undergraduate pharmacy students undertaking work-based placements.

Acknowledgements:

We wish to acknowledge Winnie Wade at the Royal College of Physicians, London, and supervisors and pharmacists who participated in this pilot.
References


