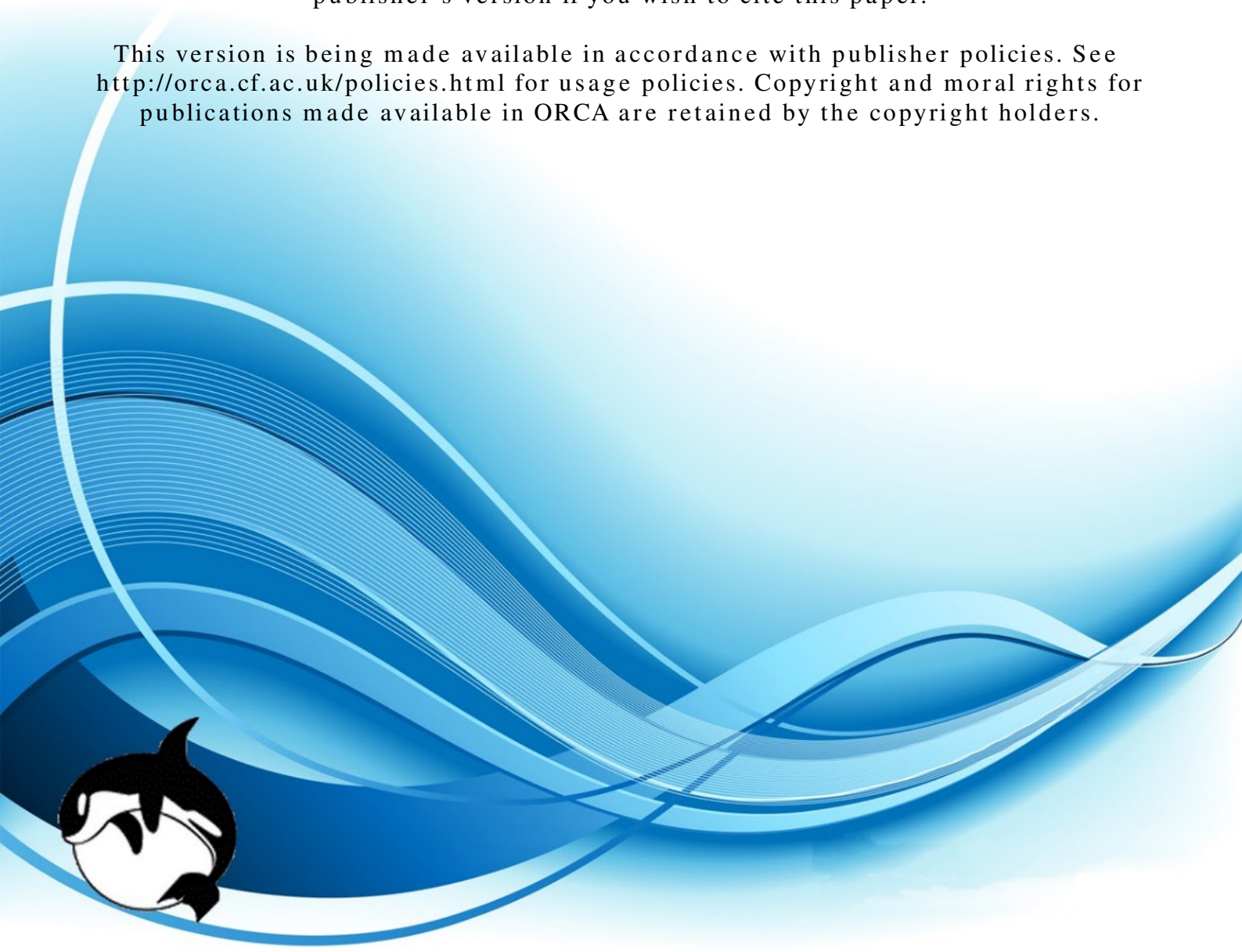

Medical apprenticeships: Using Longitudinal Integrated Clerkships to address concerns of education and training

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Lynn's article clarifies what is known about the development of Medical Apprenticeships.[1] The article argues powerfully that alternative routes into medicine are required to address the workforce crisis. Everington sees the upside that traditional programmes can "up their game."[1] Medical education leaders must ensure high standards of education and training and that education meets the demands and expectations of peers and the public. At present little is known about the specific educational approach, balance, and oversight of Medical Apprenticeships within host practices or partner institutions.

To meet calls for transformation and successful outcomes, we should employ modern, evidence-based, effective solutions. Longitudinal integrated clerkships (LICs) are a well-established method of health professions education that address current educational and workforce mandates. LICs overcome boundaries (geography, disciplines), provide leaners' meaningful clinical roles, and address limitations of traditional block placements.[2] The LIC structure centres educational continuity[3] and relationships (students, patients, healthcare team) and offers a well demonstrated, evidence-based route for clinical placements for Medical Apprenticeship programmes.[2,4]

LICs were established in 1971 by the University of Minnesota. LIC models have grown greatly given their educational benefits and because they address primary-care doctor shortages, recruit for rural and remote areas and urban workforce needs, recruit doctors to care for marginalized communities,[5] provide superior training for future specialists/subspecialists, and succeed in community and large tertiary medical centres.[2,6] LIC-like models also feature in post-registration training in the US and UK. Around 15 UK medicals schools currently deliver or are preparing LICs.[7]

LICs have three key characteristics. Medical students:

1. Participate in the comprehensive care of patients over time.
2. Have continuing learning relationships with these patients' clinicians.
3. Meet the majority of the academic year's core clinical competencies across multiple disciplines simultaneously through these experiences. [2,4]

Bowater[1] raises concerns that students studying via the apprenticeship route may be studying at night, providing service to the trust during the day. Our experience overseeing clinical placements in LICs is that learning and practice are not partitioned. LIC students become part of the clinical team, tap into the network of expertise, and move from novice after an initial few months to provide an important service valued by their patients and clinical supervisors.[8] However, LIC placements are unpaid.

Longitudinal placements foster professional identity formation and development of elite core skills and behaviours essential to navigate and manage real-world challenges of the clinical environment. Learning from and with the community, drives social accountability and a patient-centred approach with the capacity to positively impact socioeconomic inequalities.[2]

Educational continuity,[3] the fundamental principle of LICs,[2] elevates professional relationships among students and supervisors, patients, and the healthcare system. Fundamental to learning and to care delivery, educational continuity appears perfectly suited to support Medical Apprenticeship programmes. Relatedly, the principle of "situated cognition" and Cognitive Apprenticeship Theory, posit that learning arises *in context*, where implicit processes of undertaking complex skills become visible: 'students can observe, enact and practice them with help from the teacher' (p.4).[9] Clinicians initially support students' progress closely, first through robust modelling of skills and behaviours. Clinicians coach, scaffold, and gradually withdrawing support when possible if (only if) students prove competency. Students increase independence through articulation and reflection, moving, when able and appropriate, toward autonomy. This oversight with progressive independence, aligns and advances learning and service.[10]

LICs animate educational continuity[3] and the core educational science that underpins it. This principled, proven approach can address some concerns raised about the Medical Apprenticeship programmes. The longitudinal basis of educational supervision and workplace activity could support students' development of their professional identities, facilitate acquisition of knowledge and skills, provide important service, and benefit patients, clinicians, and society at large.[2,10]

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