

The world turned upside down^[1]:

The case for thinking differently about undergraduate education

In 1985 Julian Tudor Hart observed “*our medical schools teach and our students learn better than ever before,*”^[1] yet he also noted that there was a ‘crisis of structure’ at that time. In response to that crisis he went on to make a case for ‘turning the world upside down,’ arguing for a reversal in undergraduate medical education to see the preponderance of teaching time spent in the community rather than in hospital. The change his paper advocated did not occur, however the discipline of academic general practice was recognised as playing a key role in the medical school curriculum and the education of medical students.

Fast forward thirty years.

While general practice has become embedded in the medical school curriculum, most teaching continues to remain hospital-centred and hospital-focused. The ‘crisis of structure’ observed in 1985 is arguably being felt more sharply now; not only in terms of recruitment and retention, but also rippling through increasing workload, complexity and uncertainty. The pressures on general practice arising from the reduction in full-time partnerships, an increasing number of early retirements, and the ongoing absolute reduction in whole-time equivalent working have been recognised for some time.^[2] Yet the educational response to this persisting workforce drain has remained superficial, save for increasing the number of students entering medical school. Strategies generally seek to improve attitudes towards general practice through increased and more frequent exposure, and initiatives to ‘champion’ the specialty; see for example the recent research by Alberti *et al.*^[3] Yet the current waxing unpopularity of general practice as a career, as demonstrated in a recent study by Merrett *et al.*,^[4] has rendered even the increase in medical school student numbers ineffective as a workforce strategy: it is often quoted that some 50% or more of medical students need to go into a career in GP to maintain the workforce; but recent evidence shows as few as 7% of students from some medical schools select GP and no more than 30% from others – averaging a mere 17%.^[5]

In 1985 Tudor Hart argued:

“it is clearly intolerable that as a nation we should continue at huge expense to train all doctors to be nascent specialists, and then retrain about half of them to be community generalists.”^[1]

We echo this argument. The rhetoric of research and ‘thought’ pieces to date has been about levelling up and ‘extending’ primary care experience in the undergraduate years. Yet the expected outcome of more graduates choosing general practice as a career has not been realised. Our proposal suggests moving away from the traditional model of undergraduate training. Indeed, the need for changing focus in medical curricula has long been recognised by Iliffe in 1992,^[6] Bligh in 1998^[7] and Jones *et al* in 2001,^[8] and points to fundamental issues with the way undergraduate education is structured and delivered.

We propose that entry to medicine be reconceptualised in two ways: first to see an entry point at postgraduate level, and second to locate learning within a primary care environment. Moving the entry point for a course from undergraduate to postgraduate opens up an under-used level of learning. Graduate entry programmes have paved the way for this and demonstrate a workable shortened pathway of studies, although the content of the curriculum is still typically modelled on undergraduate programmes. To develop competence and academic engagement at level 7 (masters) over three years, curriculum areas would be presented in a differentiated form. Students of this curriculum would previously have studied a biomedical science degree, and this would provide the knowledge grounding and thinking approach to build upon. Second, as well as shifting the location of training to primary care, the proposed curriculum would also be informed by the current GPST curriculum for the areas of focus, learning and approach to assessment, but with certain aspects substituted to meet the GMC requirements of *Promoting Excellence*.^[9] This might mean that curricular topics linked to specific general practice management would be exchanged for other more generic professional skills linked to becoming a doctor. The majority of learning would take place in primary care within the existing training practice network and model the well-established supervision structures already in place. Specialty attachments would still exist, but with the principle of returning to their primary care base for continuity and a sense of belonging. Small group learning facilitated by experienced educators would ground the approach to learning, built around real cases encountered by the students. Thus the patient and the skills needed for an effective consultation would be at the heart of learning. All three cohort years would learn together, allowing second years

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to revise systems by teaching first years, and third years to facilitate groups under supervision. Such 'vertical' learning is rarely used but can be a powerful way to embed several skills simultaneously, and improve cost effectiveness. Additional experience could be provided by Integrated Training-type post attachments^[10,11] and see the involvement of the specialties in contributing to training in a primary-care centred way. Assessments would model those already used with GPSTs, but reconfigured to take account of broader knowledge and skills development. The final exit assessment would be framed by current practice in graduate entry programmes and the proposed single national medical licensing assessment (MLA). Graduates of this course would move into the foundation programme alongside their peers.

We think our ideas challenge the status quo, which has dominated early years' medical training to date. We are not advocating for training that would only produce GPs, and indeed in a recent editorial in this Journal Wass and Gregory^[11] view this as flawed. Instead we are asking for breadth and diversity in approaches to training. We invite readers' thoughts on the following questions:

- Could becoming a doctor be achieved through a three year, postgraduate, masters level degree, using a clinical apprenticeship model which builds on a three year biomedical science degree?
- Is the primary care training environment rich enough to offer generic clinical skills training in an apprenticeship style approach?
- Would a three year course for graduates be attractive and offer recruitment /retention benefits to students and primary care, especially if set in communities where recruitment is a struggle?
- Does primary care offer a wide enough patient base on which to learn across a wide selection of clinical areas?
- Can theoretical and practical learning about areas such as management and teaching be embedded in placements, and can more senior students take on teaching and facilitation roles for junior students effectively?

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- Could a flexible model be developed with the potential to be rolled out across the country (or even abroad where community medicine provides the bedrock of health care)?
- Would training doctors in an environment where clinical skills are dominant over expensive diagnostic tests reduce longer term costs for the health economy?

Our position is that the answers to each of these questions is ‘yes’ and therefore at a time of crisis in primary care, it is the responsibility of those charged with training and developing the health workforce to look outside the existing training structures in order to pilot a course that has been developed to address wider problems, as well as to look for ways in which medical education can evolve and become less specialist focussed.

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REFERENCES

1. Hart JT. George Swift lecture. The world turned upside down: proposals for community-based undergraduate medical education. *JR Coll Gen Pract* 1985; **35(271)**: 63-68 [quotes from pages 63, 67]
2. Scallan S, Smith F. National workforce demographics: the challenge for educational planning and deaneries. *Education for Primary Care* 2006; **17(6)**: 535-540
3. Alberti H, Randles HL, Harding A, McKinley RK. Exposure of undergraduates to authentic GP teaching and subsequent entry to GP training: a quantitative study of UK medical schools. *Br J Gen Pract* 2017; **67(657)**: e248-e252
4. Merrett A, Jones D, Sein K, Green T, Macleod U. Attitudes of newly qualified doctors towards a career in general practice: a qualitative focus group study. *Br J Gen Pract* 2017; **67(657)**: e253-e259
5. Wass V, Gregory S, Petty-Saphon K. *By choice — not by chance: supporting medical students towards future careers in general practice*. London: Medical Schools Council and Health Education England, 2016
6. Iliffe S. All that is solid melts into air — the implications of community based undergraduate medical education. *Br J Gen Pract* 1992; **42(362)**: 390-393
7. Bligh JG. Trends in medical education. *European Journal of Dental Education* 1998; **2(1)**: 2-7
8. Jones R, Higgs R, De Angelis C, Prideaux D. Changing face of medical curricula. *The Lancet* 2001; **357(9257)**: 699-703

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9. GMC. Promoting excellence: standards for medical education and training. GMC.
http://www.gmc-uk.org/Promoting_excellence_standards_for_medical_education_and_training_0715.pdf_61939165.pdf [Accessed 7 June 2017]
10. McKenna M. *The GP's Apprentice*. RCGP: GP Frontline, 2017
11. Lyon-Maris J, Scallan S. Do integrated training programmes provide a different model of training for general practice compared to traditional vocational training schemes? *Education for Primary Care* 2007; **18(6)**: 685-696
12. Wass V, Gregory S. Not 'just' a GP: a call for action *Br J Gen Pract* 2017; **67(657)**: 148-9