**Medical Education, Workforce Inequalities, and Hierarchical Regionalism: The University of Lancaster and the Unrealised Medical School, 1964-68**

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**ABSTRACT**

Part of the justification for the Lancashire and South Cumbria New Hospitals Programme (NHP) is that a modern estate is necessary to attract high quality medical students as an international centre of excellence. Workforce proposals produced by Healthier Lancashire and South Cumbria (LSC) aligns this with plans for improved recruitment and retention of doctors. These also relate to efforts at reducing reliance on locums and improving patient access to modern specialist services. This interrelationship between the demands of medical education, workforce inequalities, and the organisation of services has a long history which precedes the current NHP proposals. Indeed, it has been a structural feature of the region’s National Health Service (NHS) since 1948. Using the attempt by the newly founded University of Lancaster to obtain a Medical School from 1964 to 1968, this paper demonstrates the compounding relationship between medical education, workforce inequalities and hierarchical regionalism as a process of ‘sedimented governance’ which shapes the limits of future horizons for current health services leaders and the NHP.

**INTRODUCTION**

Part of the justification for rationalising many hospitals into one at the heart of the Lancashire and South Cumbria New Hospitals Programme (NHP) is for a modern estate attractive to high quality medical students as an international centre of excellence. The NHP’s *Case for Change* notes that ‘[d]espite the strength of our reputation, the outdated condition of our estate and tired education and research facilities… are not an attractive proposition for trainees embarking on their career’.1 The *Case for Change* also identifies how it is ‘hugely challenging to recruit and retain enough skilled staff to operate our hospitals’, noting both unfilled vacancies and an ageing workforce.1 This is mirrored in the workforce proposals of Healthier Lancashire and South Cumbria (LSC) which seeks to increase the quantity and quality of clinicians by focusing on improving recruitment and retention.2 These workforce plans relate to a regional clinical strategy aiming to reduce reliance on locums and improve population outcomes through greater access to modern specialist services.3 Physical centralisation and organisational rationalisation are presented as being more economic, efficient and effective than preceding configurations.

This interrelationship between the demands of medical education, workforce inequalities, and the organisation of services within hierarchical regionalism has a long history preceding the current NHP. Whilst recognised at an aggregate level in the North West compared with England, compounding health and service inequalities at a local level in Lancashire and South Cumbria have been obscured by quantitative analysis.4 A qualitative analysis permits a more granular understanding of the nature of the interrelationship and its historical foundations and shows the enduring nature of inequalities as a structural feature of the region’s NHS (National Health Service) since its establishment in 1948.

This paper explores this historical interrelationship between medical education, workforce inequalities and hierarchical regionalism which inform the planning assumptions of the NHP. This is demonstrated through a case study of the failed attempt by the University of Lancaster to obtain a medical school from 1964 to 1968. Based on extensive archival sources, this paper shows that the interrelationship is a compounding one which reinforces a cycle of crises, delimiting the options available to health services leaders to shape future horizons. This historical process, whereby inherited decisions accumulate over time and shape the opportunities of local health services organisations, has been termed ‘sedimented governance’ by Lorelei Jones.5 Understanding these historical layers offer several important lessons for current health services leaders and the NHP.

**NATIONALISATION AND HIERARCHICAL REGIONALISM**

Hospital services in Lancashire and Westmorland – modern day South Cumbria – were not beneficiaries of the primacy given to medical education within newly nationalised health services. This was embedded in the organising principle of ‘hierarchical regionalism’, captured in the 1944 Goodenough Report which suggested that ‘[p]roperly planned and carefully conducted medical education is the foundation of a comprehensive health service’.6 . This ‘hierarchical regionalism’ hinged upon each provincial university medical school working with associated teaching hospitals, although the situation was different in London.7  Nationalising health services, then, relied upon modernising medical careers and increasing overall clinician and consultant numbers to make services more widely available. Although I have outlined the details of this process for Lancashire and Westmorland previously,8 I will reiterate its significance here. Despite the best efforts of local medical administrative leaders, the consultant class, and civic elites, Lancashire and Westmorland did not attain regional status or secure a regional advisory committee in 1948, leaving them subordinated to Manchester. Ambitions were thwarted by Manchester’s imperial interests, especially their their medical school much to the chagrin of Liverpool, leaving Lancashire and Westmorland as a distant hinterland, bereft of investment and attention within the region.

Although centred on provincial university medical schools, hierarchical regionalism was not organised around graduates working solely in the region they trained but as part of a sustained effort to increase numbers nationally, propelling the ‘unimpeded expansion of the consultant corps’ according to Charles Webster.9 This was not the case for Lancashire and Westmorland which suffered from Manchester’s neglect and the lack of a national policy for distribution of doctors after 1948. The annual report for Barrow and Furness HMC from 1957 alluded to inadequate casualty coverage and mooted the possibility of combining coverage with neighbouring Lancaster and Kendal.10 Similarly, the Medical Advisory Committee (MAC) – the consultants’ administrative forum – for Lancaster and Kendal HMC complained in 1959 that shortages could be ‘greatly eased if the teaching hospitals accepted, in fact as well as principle, the idea of rotating posts for registrars’.11 Hierarchical regionalism, then, also constituted inequitable hierarchies *within* regions rather than simply *of* regions within the NHS.

Lancashire and Westmorland were not the only localities struggling to modernise given entrenched inequalities during the early decades of the NHS. A major inquiry into the rising costs of the NHS launched in 1951 vindicated early successes when published in 1956, recommending that future stability rested upon limited political intervention and secure funding .12 This consensus worsened resource inequalities as it perpetuated arrangements based on pre-NHS hospital activities and costs. Nationally, this benefited London at the expense of the rest of the country. Regionally, this benefited Manchester and adjacent textile towns at the expense of the periphery. Such inequalities extended to the clinical workforce. A 1957 report determining future medical student numbers based on planned posts committed to a conservative reduction, especially in provincial medical schools, given earlier expansion in consultants.13 This reduction was also partially due to concerns about greater competition and a loss of earnings from doctors.14 Once again, Lancashire and Westmorland lost out as the shortfall in appointments, despite demand, intensified as a consequence of a national reduction in supply.

In short, from 1948 and the founding of the NHS with Manchester’s betrayal preventing Lancashire and Westmorland from obtaining regional recognition until the end of the 1950s, change was glacial. Although hospitals received more funding and attention than general practice and public health services, Manchester’s primacy pulled in disproportionate regional resources and clinician numbers. The national policy landscape of austere investment and professional protection provided a clear brake on the ambition of a nationalised health service.

**MEDICAL EDUCATION MODERNISATION**

Whilst the 1950s were a nadir, the 1960s provided a zenith through concurrent reforms to medical education, workforce inequalities and the shape of hierarchical regionalism. These interrelated changes served as a stimulus to modernisation and afforded both medical leaders and consultants within Lancashire and Westmorland the opportunity to finally advance longstanding ambitions. This began with a critique of the assumptions underpinning the 1957 report, although its author – former Conservative Minister of Health Henry Willink – deflected blame onto the BMA (British Medical Association).15 However, more concerning was the growing number of newly trained doctors who were emigrating overseas.16 This challenged the nationalistic planning assumptions on medical educational needs which were repeated in subsequent reports on the organisation of services in 1960 and 1963, along with criticism of outdated medical curricula and postgraduate training opportunities outside London.17 The outcome of these deliberations was yet another inquiry, the Royal Commission on Medical Education, chaired by Lord Alexander Todd in 1964 which examined the numbers of medical schools as part of its terms of reference.18

Alongside developments within medical education were those of higher education. Responding to a growing gulf between the demand for university places and provision, the 1963 Robbins Report recommended a radical expansion in student numbers and the creation of seven new universities: East Anglia, Essex, Kent, Sussex, Warwick, York and Lancaster.19 This occurred as more university colleges obtained university status including Nottingham in 1948, Southampton in 1952, Leicester in 1957, and Keele in 1962 among others.20-23 For medical education, this afforded an opportunity to challenge the provincial universities as the established nuclei of hierarchical regionalism on the cusp of the Royal Commission.

The balance of provincial centres was further altered with a major programme of investment and rationalisation in NHS capital: the 1962 Hospital Plan.24 Following nearly fifteen years of a parsimonious hospital planning, the Ministry embarked upon a radical transformation of acute services run by RHBs and their HMCs, and consolidated teaching hospitals run by BoGs. The Ministry relied upon proposals from RHBs and BoGs within centrally determined financial limits, bed estimates for the local population, and building guidance.25 These plans were a wish list, and the Ministry asked regions to rank projects by priority. This meant that HMCs became de facto territories for planning purposes with central guidance inferring that each should have *one* general hospital providing a full suite of diagnostic and treatment services for the population of around 250,000. This principle of the district general hospital was later affirmed by the 1969 Bonham Carter Report which revised but upheld the model.26

The early 1960s opened a new chapter for the NHS. Investment in hospital capital, increases in medical student numbers to work in them, and a re-examination of the configuration of hierarchical regionalism meant that the prospects for Lancashire and Westmorland by 1964 looked much brighter. Once again, local leaders sought to shrug off the yoke of Manchester and benefit from the modernisation of health services with a new proposal: a medical school at the University of Lancaster.

**PROPOSING LANCASTRIAN REGIONALISM**

The 1964 proposal for a medical school at the University of Lancaster is interwoven with its foundation as the last of the ‘plateglass’ universities created by the Robbins Report and named because of their modernist architecture and campus locations.27 Offers to host a new university when first circulated by Lancashire County Council in January 1961 came from towns across the county and reflected historic civic rivalries. After a period of wrangling only Blackpool and Lancaster remained viable candidates, with the latter convincingly winning a vote from among regional stakeholders in May 1961; only Blackpool dissented.28 Lancaster received national approval in November 1961, having defeated competition from the rest of England.28-30 Following rapid academic planning and development, the nucleus of the new University of Lancaster admitted its first students – in temporary accommodation – in October 1964 under the leadership of its first Vice Chancellor, Charles Frederick Carter.

The region’s medical administrators and consultant class who struggled against the Ministry and Manchester in 1948 kept abreast of this, and gathered support for a medical school for the new university. By April 1964 a formal case was presented to the Lancaster and Kendal HMC MAC highlighting both national and regional shortages of doctors, the isolation of Lancaster relative to other provincial medical centres, and the underused facilities available across Lancashire’s hospitals for teaching. However, they also offered a critique of existing medical education: ‘Very large schools are far from ideal for the teaching of medicine; after expansion beyond a certain point they become too large, teaching is difficult and students lose their identity’.31  By December 1964 backing was forthcoming from the MACs for Barrow and Furness, Preston and Chorley, and Blackpool and Fylde HMCs. They too backed criticism of medical education, with the revised proposal advocating for a shortened undergraduate curriculum and a lengthened pre-registration period to increase the recruitment pool for the region. Encompassing a population of 1,283,000 by extending into Blackburn and Burnley, the proposal had virtually unanimous backing within the region, including the Local Medical Committee.31, 32

The case was first heard by the Vice Chancellor in May 1964. However, Carter reported to the Shadow Senate that ‘it would be difficult to sustain a claim for [a new medical school] to be established in Lancaster, if only because the necessary hospital resources were not available in the area at the present time’.33 Despite these misgivings, he offered a memorandum before the University Senate in January 1965 with support from Dr Patrick Byrne, an influential and progressive local GP.34  The Ministry had already conceded that ‘there is a strong case for siting [a new medical school] in the north-west’ during private discussions with Carter, although the memorandum commented that the UGC (Universities Grants Committee) favoured ‘places where there is a single large hospital, or complex of hospitals, close to the university’. Carter was also convinced about ‘new ideas about medical education’ being central to the case.35 On the one hand, this circumvented Manchester RHB’s policy of concentrating specialist services at Preston and on the other, this mirrored similar claims made by Keele University. Backing was also forthcoming from the University of Lancaster, particularly among allied scientific subjects, as well as Wigan and Preston HMCs.35, 36

The final proposal submitted to the Royal Commission showed none of these uncertainties. ‘North Lancashire urgently requires a medical school’, it opened, suggesting that ‘the benefit lies in the improvement of the standard of the hospital, general practitioner and public health services in the area’. However, mindful of the neglected condition of Lancaster’s hospitals, the proposal outlined that teaching would occur at Lancaster, Blackpool, and Preston which would provide more than 2,400 acute medical beds for teaching. Anticipating the UGC’s criticisms, the proposal argued that the ‘use of several hospitals is not only *possible* but positively *desirable*’, and of benefit to services across Lancashire. Highlighting the radical medical curriculum, the proposal noted that:

Medicine is both an art and a science, and both strands must be interwoven throughout the course. Happily the outlook of the science departments at Lancaster is friendly to the mixing of rigorous scientific training with the development of a common-sense approach to practical problems which have to be solved without delay.

It concluded by alluding to earlier efforts at regionalisation, suggesting that the necessary ‘clinical material’ and medical facilities were available and underused.37

Medical education, workforce inequalities and hierarchical regionalism which shaped Lancashire and Westmorland’s nationalised health services since 1948 were at the centre of the proposal by the University of Lancaster, reflecting near unanimous backing among Lancashire’s consultant corps, civic support, and financial commitment. The proposal offered a set of concrete proposals which addressed the specific organisational and geographical circumstances prevailing in the region and in step with national policy changes. Yet it was rejected almost out of hand. Why?

**REJECTING RADICALISM**

Carter reflected ruefully on the rejection by the 1968 Todd Report in a memorandum to the Senate in May: ‘I have always doubted whether it is possible to make much headway against strongly held views of the medical “establishment”’. The report’s recommendations ‘contain no surprises, and follow exactly the principles outlined to me by senior medical men three years ago’. These were of the necessity for *one* teaching hospital of 1,000 beds; that the terms of reference did not encompass the distribution of doctors; and that there was no evidence that graduates practiced where they were educated, undermining a tailored medical curriculum.18, 38 In effect, the rejection was a defence of the status quo. Carter wrote portentously that ‘their proposals will greatly increase the concentration of medical education in England in the southern half of the country’.39

Lancaster was not the only disappointed candidate. Keele was rejected because of inadequate preclinical facilities,23 with the Todd Report commenting upon the ‘outstandingly suitable hospital facilities in Stoke-on-Trent, which ought in the national interest to be used fully for medical education’.18 The University of East Anglia (UEA) was also rejected despite similar claims of unused regional teaching facilities because Todd, the Master of Christ’s College at nearby Cambridge University, preferred an expanded undergraduate curriculum there in preference to costly investments in facilities.17, 18, 39 The only consolation for Lancaster was the establishment of a postgraduate medical education centre at the Lancaster Royal Infirmary in 1966 through the diligence of Byrne who was rewarded with a term on the University of Lancaster Court.

 Three new medical schools were created by the Todd Report. Nottingham and Leicester obtained approval just before and after the Royal Commission deliberated.20, 22 Both were within Sheffield RHB’s territory, the most persistently under-resourced and under-doctored in the NHS.17, 40 These claims were visible in evidence from Sheffield RHB to the Willink Report which complained of domestic shortages increasing reliance on overseas doctors, primarily from India and Pakistan.41 A similar claim was made by the North Lancashire and Westmorland BMA branch in 1967, noting that ‘probably 50% of the junior hospital staff are foreign graduates’. Whilst both were laden with racist prejudice, their grievance spoke to the associated workforce inequalities which rendered the area undesirable for newly qualified doctors and the ‘worst hit area for medical manpower’ in the entire NHS.42 This was confirmed through the Todd Report’s own research.18 Conversely, Southampton obtained approval for a medical school in 1967 as the nucleus of a newly minted region, Wessex, created in 1959. Wessex emerged from a regional advisory committee of one of the most amply resourced, populous and staffed RHBs: South West Metropolitan.17, 21 The sense of injustice to Lancaster having been denied an advisory committee in 1948 combined with enduring workforce inequalities, would have been palpable following the rejection of the medical school proposal.

 The key reason for Lancaster’s rejection was the diffusion of hospital services. Lancaster’s original 1964 case suggested that the city would soon possess a ‘new District General Hospital’ with ‘600 beds covering all specialties’ although ‘if the requirements of a teaching unit indicate a larger hospital than at presently planned, there is adequate space for this’.31 This was a far cry from the proposed increase capacity to 400 in the 1962 Hospital Plan.24 Part of the reason for this discrepancy was the organisation of Lancaster and Kendal HMC, being bifurcated between the ‘southern group’ at Lancaster, and the ‘northern group’ clustered around Kendal. Consultants in the ‘northern group’, along with local GPs and Medical Officers of Health (MOsH) fought fiercely against the HMC and Manchester RHB to retain hospital services and prevent rationalisation on Lancaster at their expense.43, 44 This created a cloud of uncertainty over hospital modernisation, rationalisation, and centralisation for the HMC at the exact moment when the medical school proposal was considered by the Royal Commission. It was to be the final nail in the coffin for Lancaster’s hopes.

 As in 1948, Manchester sought to thwart Lancaster’s ambitions. Manchester’s medical school was not without its own difficulties, but skilfully used pressure on teaching capacity in BoG hospitals to expand its work into peripheral hospitals in the city and conurbation run by the RHB. 45, 46 It further expanded academic general practice, poaching Byrne in the process.47 Whilst Manchester’s submission to the Royal Commission focused on research and expanding postgraduate medical education, appended correspondence showed how they outflanked Lancaster’s proposal through an agreement with the University of St Andrews. The agreement allowed medical students from St Andrews to undertake clinical placements in Lancashire hospitals run by Manchester RHB upon completion of preclinical studies.48 This also served the needs of St Andrews having lost clinical places with the University of Dundee, and its medical school, obtaining university status in 1967. This also served the needs of many of its own medical students who came disproportionately from Lancashire.34 Although less devious than 1948, Manchester’s role was the same: to quash medical independence within its territory.

The story continues beyond the publication of the Todd Report as the University of Liverpool, trying in vain not to be outmanoeuvred by their rival again as in 1948, sought to establish a similar agreement with universities possessing preclinical facilities to increase their own student numbers in 1970. Keele was mentioned but Lancaster was singled out as a willing partner. The UGC were unconvinced, insisting that they should focus upon the ‘present deficiencies of the [medical] school and the poor state of its relations with the [Liverpool] hospital authorities’ before mobilising imperial ambitions.49 It was to be this arrangement in a revised form 36 years later which brought medical education to Lancaster University.

**CONCLUSION**

The Lancashire and South Cumbria NHP is not trapped by the past, but should learn from its history. This excavation of the ‘sedimented governance’ of the region’s NHS points to enduring issues visible today. These concern relationship between medical education and hospital services; workforce inequalities within hospitals and the health economy; and the tensions inherent in hierarchical regionalism.

 In medical education, the University of Lancaster embraced a radical vision from 1964 to 1968 which aimed to create flexible clinicians transcending the two cultures of art and science, able to service the specific needs of an under-doctored area through intimate teaching experiences. This was not decided upon alone, but in conjunction with other consultants and hospitals across the area experiencing comparable difficulties which remained unanswered nationally and regionally. These dilemmas are evident in the NHP. Instead of critiquing them as happened in 1964, they are being adopted as a model for the Healthier LSC jurisdiction to establish its own hierarchical region. The question remains whether aping the orthodoxies of the medical establishment in an area historically marginalised from and by them will bring the desired results.

 The case for the medical school during the 1960s hinged upon the relationship between medical education and workforce inequalities. Clinical, university, and civic leaders were of the same voice, advocating for plans which improved higher and medical education to train and retain a clinical workforce. This reflected regional experiences of clinicians across settings and specialisms working during the early years of the NHS. It was dismissed without a second thought by the Todd Report.18 Research has since shown the limitations of this view.50, 51 The tension for the NHP lies in proposing a new hospital which offers teaching, research, and careers greater than the sum of the existing constituent hospital parts. These are also divided across medical schools including Lancaster, Manchester, the University of Central Lancashire, St Andrews, and the proposed partnership between Imperial College London and Cumbria University. The dilemma for the NHP is how to handle this and realise the teaching benefits offered by concentration.

 The ghost of the 1962 Hospital Plan continue to haunt Morecambe Bay in the current organisation of acute hospital services and their relationship to medical education. Its spectre is evident in major scandals and reports into the management of services over decades. The division of services and training across hospital sites continues to pose organisational difficulties, coupled with problems around the mobility of medical students across clinical placements and foundation and specialty training. Whilst concentration, rationalisation and centralisation offer economies of scale, comparable dilemmas with the ‘Westmorland question’ of local access remain unanswered. It was this same question which stymied unification fifty years ago and was crucial in preventing the proposed medical school from being realised. This tension continues to limit the visible horizons for the architects of the NHP. Current health leaders would do well to bear these histories of ‘sedimented governance’ in mind given that these are the foundations upon which they are building.

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**REFERENCES**

1. Lancashire and South Cumbria New Hospitals Programme. Case for change. Leyland: Lancashire and South Cumbria New Hospitals Programme; 2021. Available from: <https://newhospitals.info/wp-content/uploads/2021/07/210720-LSCNHP-Case-for-Change-Report-long-version-final-approved.pdf> [Accessed 26 July 2021].
2. Healthier Lancashire and South Cumbria. Our people plan. Available from: <https://www.healthierlsc.co.uk/application/files/6616/2677/8335/LSC_People_Plan.pdf> [Accessed 18 October 2021].
3. Lancashire and South Cumbria Health and Care Partnership. Lancashire and South Cumbria Clinical Strategy: Creating a healthy population. Available from: <https://www.healthierlsc.co.uk/application/files/6116/2193/4706/LSC_Clinical_Strategy_v_2.3_final.pdf> [Accessed 18 October 2021].
4. Inquiry Panel on Health Equity for the North of England. Due North: The report of the inquiry on health equity for the North. Liverpool: University of Liverpool and Centre for Local Economic Strategies; 2014. Available from: <https://cles.org.uk/wp-content/uploads/2016/11/Due-North-Report-of-the-Inquiry-on-Health-Equity-in-the-North-final.pdf> [Accessed 20 August 2017].
5. Jones L. Sedimented governance in the English National Health Service. In: Bevir M, Waring J. (eds.) Decentring health policy: Learning from British experiences in healthcare governance. London: Routledge; 2018: 17-33.
6. Goodenough W. Report of the Inter-Departmental Committee on Medical Schools. London: HMSO; 1944.
7. Rivett G. The development of the London hospital system, 1823-1982. London: King Edward’s Hospital Fund for London; 1986.
8. Lambert M. Lancashire and South Cumbria New Hospitals Programme: Once in a generation or generation gap?. Morecambe Bay Medical Journal. 2021;8(10): 284-287. Available from: <https://doi.org/10.48037/mbmj.v8i10.1313>.
9. Webster C. The health services since the war. Volume I: Problems of health care. The National Health Service before 1957. London: HMSO; 1988.
10. Cumbria Archive Service Barrow. Barrow and Furness Hospital Management Committee, Ninth Annual Report, 1956-57. BTHOS/5/3/1.
11. Royal College of General Practitioners Archive. Lancaster and Kendal Hospital Management Committee Medical Advisory Committee Minutes, 12 November 1959. B BYR D1/1(i).
12. Guillebaud CW. Report of the Committee of Enquiry into the cost of the National Health Service. London: HMSO; 1956.
13. Willink H. Report of the committee to consider the future numbers of medical practitioners and the appropriate intake of medical students. London: HMSO; 1957.
14. Rivett G. From cradle to grave? Fifty years of the NHS. London: King’s Fund; 1998.
15. Churchill Archive Centre. Sir Henry Willink, Unpublished autobiography, 1968. WILL 9
16. Abel-Smith B, Gales K. British doctors at home and abroad. Welwyn: Codicote Press; 1964.
17. Webster C. The health services since the war. Volume II: Government and health care. The National Health Service, 1958-1979. London: HMSO; 1996.
18. Todd AR. Royal Commission on Medical Education, 1965-68: report. London: HMSO; 1968.
19. Robbins L. Higher education: Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins 1961-63. London: HMSO; 1963.
20. Beckett J. Nottingham: A history of Britain’s global university. Woodbridge: Boydell Press; 2016.
21. Nash S, Sherwood M. The University of Southampton: An illustrated history. London: James & James; 2002.
22. Burch B. The University of Leicester: A history, 1921-1996. Leicester: University of Leicester; 1996.
23. Mountford JF. Keele: An historical critique. London: Routledge & Kegan Paul; 1972.
24. Ministry of Health. A hospital plan for England and Wales. London: HMSO; 1962.
25. Allen DE. Hospital planning: The development of the 1962 hospital plan – a case study in decision-making. London: Pitman Medical; 1979.
26. Bonham Carter D. The functions of the district general hospital: Report of the Committee. London: Central Health Services Council; 1969.
27. Beloff M. The plateglass universities. London: Secker & Warburg; 1968.
28. McClintock ME. The University of Lancaster: quest for innovation: a history of the first ten years, 1964-1974. Lancaster: University of Lancaster; 1974.
29. McClintock ME. Shaping the future: A history of the University of Lancaster, 1961-2011. Lancaster: University of Lancaster; 2011.
30. McClintock ME. Innovation and evolution: Lancaster learning, 1964-74’. In: Pellew J, Taylor M. (eds.) Utopian universities: a global history of the new campuses of the 1960s. London: Bloomsbury; 2021: 175-189.
31. Royal College of General Practitioners Archive. A case for the establishment of a medical school at the University of Lancaster, April 1964. B BYR D1/1(ii).
32. Lancashire Archives. Lancashire County Local Medical Committee Reports, 1961-65. DDX 1450.
33. Lancaster University Archives. University of Lancaster; minutes of the meeting of Shadow Senate, 9 May 1964. UA/1/16/2/1.
34. Lambert M. Fortunate men or penny collectivists? General practice in Lancashire and Westmorland during the “Classic” NHS. Morecambe Bay Medical Journal. 2021; 8(11): 301-305. Available from: <https://doi.org/10.48037/mbmj.v8i11.1326>
35. Lancaster University Archives. University of Lancaster; minutes of the meeting of Senate, 7 January 1965. UA 1/16/2/2.
36. Lancaster University Archives. University of Lancaster; minutes of the meeting of Senate, 5 January 1966. UA 1/16/2/4.
37. National Archives. Royal Commission on Medical Education (Todd Commission); written and oral evidence. University of Lancaster, 1966. ED 129/52.
38. Lancaster University Archives. University of Lancaster; minutes of the meeting of Senate, 15 May 1968. UA 1/16/2/13.
39. Sanderson M. The history of the University of East Anglia, Norwich. London: Hambledon; 2002.
40. Welshman J. Hospital provision, resource allocation and the early National Health Service: the Sheffield Regional Hospital Board, 1947-1974. In: Pelling M, Mandlebrote S. (eds.) The practice of reform in health, medicine and science, 1500-2000: essays for Charles Webster. Aldershot: Ashgate; 2005: 279-301.
41. National Archives. Ministry of Health: Committee on number of medical practitioners and medical students; evidence submitted: English and Welsh Regional Hospital Boards, 1955-1956. MH 135/211.
42. National Archives. Royal Commission on Medical Education (Todd Commission); written and oral evidence: BMA North Lancashire and Westmorland Branch, 1967. ED 129/197.
43. Cumbria Archive Service Kendal. Westmorland County Hospital; file relating to review of hospital services under Westmorland Development Plan, 1960-1971. WTHOS 1/Unlisted/5.
44. Cumbria Archive Service Carlisle. Westmorland County Public Health Department; hospital services in South Westmorland, 1967-68. WC/H/A1816/Box 5/3.
45. Valier HK, Pickstone JV. Community, professions, and business: A history of the Central Manchester Teaching Hospitals and the National Health Service. Manchester: Central Manchester and Manchester Children’s University Hospital NHS Trust; 2008.
46. Valier HK. The Manchester Royal Infirmary, 1945-97: A microcosm of the National Health Service. Bulletin of the John Rylands Library. 2005;87(1): 167-192. Available from: <https://doi.org/10.7227/BJRL.87.1.10> [accessed 14 February 2022].
47. Perry M. Academic General Practice in Manchester under the early National Health Service: A failed experiment in social medicine. Social History of Medicine. 2000;13(1): 111-129. Available from: <https://doi.org/10.1093/shm/13.1.111> [accessed 14 February 2022].
48. National Archives. Royal Commission on Medical Education (Todd Commission); written and oral evidence. University of Manchester Faculty of Medicine, 1966. ED 129/152.
49. The National Archives. University Grants Committee: Development of medical education: Liverpool University, 1968-1986. UGC 7/1083.
50. Gravelle H, Sutton M. Inequality in the geographical distribution of General Practitioners in England and Wales, 1974-1995. Journal of Health Services Research & Policy. 2001;6(1): 6-13. Available from: <https://doi.org/10.1258/1355819011927143> [accessed 4 January 2022].
51. General Medical Council. The state of medical education and practice in the UK: The Workforce Report 2019. London: General Medical Council; 2019.