Summary

"The foundation for a strong and effective health workforce, able to respond to the 21st century priorities, requires matching effectively the supply and skills of health workers to population needs, now and in the future."

World Health Organization (313)

The development of a strong and effective public health workforce requires widespread availability and access to high quality appropriate public health education and training. The situation at present can be characterised by an "inverse care law" (4), with those countries in most need of international support in the development of their public health education and training systems receiving the least support (5, 6). Alternatively, in the developed areas of the globe many (unfortunately the majority of) public health professionals already in the public health workforce do not possess even a basic education in public health (9-13).

One approach, amongst many, to address this situation is the development of an accreditation scheme capable of providing stewardship in public health education ("public health education" refers to schools, programmes and courses of public health). Over the last decades a variety of different approaches have been suggested for accreditation to shape and steer the development, content and focus of schools, programmes and courses of public health (3, 5, 123, 313). All of these have had one honourable goal in mind: the production of a professional workforce focused on population health needs. However, there are problems. Over half of the countries around the world do not have coherent higher education accreditation systems (135) and where they do exist, many are used as a form of governmental control rather than for development (21, 29, 33, 34). The situation, especially for accreditation in the European Region, is one characterised at a national level through the use of generic education standards rather than standards focused on public health education and, as a result, these standards can be applied equally to a school of public health as they can to a school of aesthetics. The efficacy of these national accreditation systems in steering public health education towards preparing a competent public health workforce is therefore highly questionable.

This leads to the central research question:

Can accreditation be used for the development and improvement of public health education and, if so, how?
There are only two agencies in the world focused on the accreditation of public health education, The Council on Education for Public Health (CEPH) in the United States and the Agency for Public Health Education Accreditation (APHEA). APHEA began life in 2011 focused on the European region. In 2015 the agency adopted a global remit to answer calls from schools, programmes and courses wishing for accreditation but unable to undertake the American system due to its prescriptive nature based around a model of public health education seldom found outside of America. Apart from these two organisations there has been no other example found of an agency using standards or criteria focused on public health education.

This dissertation focuses on how accreditation may be used globally to embrace the desire from many quarters for accreditation schemes to help instigate, improve and attest quality in public health education and training. Such a scheme would need to be flexible enough to embrace the range of development from nascent schools, programmes and courses through to those who are "world leading." Furthermore, such a system would also require flexibility to be effective and practicable within the varying systems and societies of the planet.

The introductory chapter 1 of the dissertation provides a cross-cutting literature survey based around the main themes associated with public health education accreditation. The attempt is to analyse the literature and the disparate areas of accreditation, public health, public health education and the development and delivery of education within different societies. The research found that accreditation began in earnest in America during the mid 20th century as a response to a lack of standardisation engendered through a governmental and economic "laissez-faire" approach to education. Alternatively, the research identifies that the first systems in Europe began in the Central and Eastern region in the 1990s and were focused on control. The Western European region developed their accreditation systems some years later and these were a product of the changing relationship between the state and the education sector under the banner of accountability. These systems were also seen as a form of control based notably on "value for money" for funds received from government. Although cross national systems had been proposed the only tangible result was the establishment of membership organisations such as the European Association for Quality Assurance in Higher Education (ENQA) or the European Quality Assurance register (EQAR). These groups did not seek standardisation of processes or standards and the result is that each country of the European region continued to operate their own unique frameworks. Examples can be found from progressive systems designed to help develop internal quality systems through to systems focused solely on the control and check-listing of the minutiae.

The range in the approaches to accreditation and quality assurance is mirrored by different approaches and understanding of public health throughout the world. In the "developing" countries there continues to be a tendency to view public health as a medical specialisation which, although seen as out-dated, did provide some of the basic building blocks toward the modern approaches to public health. The accompanying education for public health in these countries therefore runs a risk of lacking some of the elements seen within modern systems such as cross / inter or multi - disciplinary approaches including, among many, health
promotion and the control of non-communicable disease. But even in the more developed countries studies continue to demonstrate that much of their public health workforces do not possess even a basic formal education in public health (10-13). This places even more focus on the value and role of continuous professional development or short training. Therefore the purpose of accreditation in public health education has to encompass a wider range of education as well as training within varying institutional environments. To incorporate this range of training, along with the huge variation found nationally at every social, economic, political, cultural level, accreditation will need to be flexible. This is one of the key terms adopted by C-E.A. Winslow when he devised the first ever accreditation criteria for public health education in 1940s America.

The development of public health accreditation sits within a context of developmental activity conducted by the third sector or NGO sector which has been and continues to be highly influential for the development of public health education. Chapter 2 examines the range of developmental activity associated with the third sector in the global development and improvement of public health education. The chapter then focuses specifically on the use of the precursor to European accreditation (Public health Education European Review or PEER review) in the development and improvement of schools and programmes of public health in the Central and Eastern European region by an European NGO4 at the turn of the 21st century. In 2011 the European accreditation agency APHEA, a NGO, was established based upon the foundations of the previous PEER Review whilst incorporating additional decision-making structures.

The American system of public health education accreditation (CEPH) began around 65 years prior to the European system (APHEA) and both can be seen as a result of collaboration and liberalisation in the education sector (Chapter 3). In the American system the collaboration was part of a growing federal system in which the state played a minor role. Problems arose when this governmental light touch (liberalisation) created a fertile ground for the growth in disreputable education which abhorred people like Abraham Flexner who, in 1910, called for the closure of 120 of America’s 155 medical schools (87). Flexner was prominent in the Rockefeller Foundation (a NGO) which from 1916 established the parameters for US based schools of public health still used today by CEPH, most notably through a separation of medical schools from schools of public health. This system is unique to the US and does not apply globally and therefore the CEPH accreditation remains prohibitive to the majority of the planet.

In Chapter 3 we found that the Rockefeller Foundation, acting on the Welch-Rose report (85), adopted a model based on a combination of German and British practices. However, collaboration in 20th Century Europe (particularly between these two countries) did not progress as smoothly as it did in America. From the mid to late 19th century education in Europe became a central element for defining and legitimising the nation state which would become grounds for separation rather than collaboration. Post second world war European progress provided a catalyst for greater inter-nation collaboration which had, as a consequence, sowed the seeds of the European regional accreditation system. However, the

4 The Association of Schools of Public Health in the European Region (ASPHER)
notion of the "nation state" continues to play a divisive and protectionist role through national accreditation agencies. European accreditation is defined by each individual national state having their own particular accreditation system and as a result there are a myriad (sometimes referred to as a "jungle") of differing accreditation systems. It is unclear if the primary responsibility of these systems is to protect academic quality or to protect the individual nation state's education system against competitive threats associated with economic liberalisation (21, 158). In either case, the vast majority of established accreditation systems in Europe focus on the control of education in a generic form and are not focused on individual sectors such as public health education. Thus the ability to improve public health education (as with other academic sectors) along with a potentially vested interest in protecting a country's education system in face of global competition is brought into question.

As with the introduction of accreditation systems, the development of public health education has taken place at different times and different places throughout the European region (chapter 1). In chapters 4 and 5 we examined whether this differing development over the region had led to a variation in compliance to the European regional public health accreditation criteria and the ensuing implications for the sector and accreditation. We investigated the level of compliance to the European public health education (programme) accreditation criteria and examined, first of all, the areas of least compliance or divergence (chapter 4) and, secondly, the areas of greatest compliance or convergence (chapter 5).

Chapter 4 indicates that between programmes there are variations in the compliance to criteria but these were significantly related to the programmes' geographical location rather than being dependent on other variables such as date of establishment. The two least compliant criteria were found to be internal quality management systems and exchange of students and faculty. These particular criteria stress the importance of programmes and schools of public health to learn from within and outside of their national systems with the aim of improving the competences of their respective public health workforces. As an independent commission commented in 2011, "competences should be adapted to local contexts and be determined by national stakeholders, while harnessing global knowledge and experiences" (3).

The results regarding exchange from chapter 4 also bring into question the role of national governments and their accreditation agencies in the monitoring and implementation of the Bologna process of which exchange is a central feature. This result complements the findings from chapter 1 which found that many national accreditation agencies did not monitor European transferable credits which is another central tenet of the Bologna process which European governments have signed. Together, these findings substantiate the claim that countries integrate "individualised versions" of Bologna for self or nationally defined purposes (28).

Turning the tables, in chapter 5, we examined the areas of highest compliance to the accreditation criteria. Here we found that the teaching and implementation of multidisciplinary curricula content had near universal compliance across the region. There
were only three programmes not complying fully to multidisciplinary public health education and these came from three of the four countries where the setting of curricula content was determined by government dictates (114). As mentioned throughout the dissertation and most notably in chapter 1, national accreditation agencies in the European region do not contain systematic criteria for the review of public health curricula. This raises wider questions over who is the best judge of quality in particular academic and professional sectors.

Chapter 6 highlighted research aimed at incorporating the formative approach of the previous PEER Review and an investigation as to whether the accreditation process workload could be lightened by reducing the number of criteria and replacing the self-evaluation through a series of directed interviews. Three programmes in varying degrees of development in different areas of the European region formed the test sample. The findings reinforced the findings of the previous chapters in terms of programmes displaying a mixture of homogenous and heterogeneous attributes. The conclusions drawn from this chapter were that if accreditation is to be used for improvement it would need to be more flexible to incorporate the spectrum of development found within programmes. Furthermore, the chapter reinforces the need to include self-evaluation as an integral process within the accreditation process. This is to provide both schools and programmes with an alternative framework for introspection (200). The self-evaluation process also provides a sufficiently detailed view of the programme or school as part of the site review and decision-making process. As such the self-evaluation provides "the hinge linking the external and internal quality assessment" (17).

Chapter 7 concludes that historical accreditation processes which, for the majority of schemes are geographically locked, are based around control (summative approach) using varying pass / fail decision-making thresholds. These systems are designed to ensure accountability (most notably financial) in which a binary threshold is perhaps inevitable. Development or improvement can be viewed only as an add-on or side effect of these processes. Even with international accreditation the tendency has been to either to operate as some form of gate-keeping to a selective club or the facilitation of government funds. In these cases the accreditation processes once again operate on a pass/fail summative variant.

The conclusions are that to include improvement in its remit, accreditation will need to operate formatively across the developmental spectrum from steering and stewarding nascent education through to the attestation of quality in advanced education. To achieve this it needs to be flexible and inclusive. At national levels it is prohibited in this approach due to its links with state funds which necessitate it to be summative. This linkage is one of the foundations of accountability which provides nation-based accreditation systems with their legitimacy. However, accountability can be viewed outside of financial accountability. The chapter concludes that for the production of a competent and effective public health workforce, accreditation needs to reconsider accountability based around the impact made toward the needs of stakeholders, the sector of public health education and the health priorities of the societies and populations they serve.
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The research question answered in short by this dissertation:
The problem with public health and its education is that it is still emerging and developing in many parts of the world whereas in other parts there are highly developed systems in place. Therefore if accreditation is to help education systems develop and improve all these different levels of development would need to be included in the accreditation processes. In order to achieve this accreditation will need to be more flexible, based on a formative approach to quality and focused on improving the health, knowledge and skills of the populations that public health education serves and are accountable to.