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Healthy Universities: current activity and future directions – findings and reflections from a national-level qualitative research study

Mark Dooris¹ and Sharon Doherty²

Abstract: This qualitative study used questionnaires to scope and explore ‘healthy universities’ activity taking place within English higher education institutions (HEIs). The findings revealed a wealth of health-related activity and confirmed growing interest in the healthy universities approach – reflecting an increasing recognition that investment for health within the sector will contribute not only to health targets but also to mainstream agendas such as staff and student recruitment, experience and retention; and institutional and societal productivity and sustainability. However, they also suggested that, while there is growing understanding of the need for a comprehensive whole system approach to improving health within higher education settings, there are a number of very real challenges – including a lack of rigorous evaluation, the difficulty of integrating health into a ‘non-health’ sector and the complexity of securing sustainable cultural change. Noting that health and well-being remain largely marginal to the core mission and organization of higher education, the article goes on to reflect on the wider implications for future research and policy at national and international levels. Within England, whereas there are Healthy Schools and Healthy Further Education Programmes, there is as yet no government-endorsed programme for universities. Similarly, at an international level, there has been no systematic investment in higher education mirroring the comprehensive and multifaceted Health Promoting Schools Programme. Key issues highlighted are: securing funding for evaluative research within and across HEIs to enable the development of a more robust evidence base for the approach; advocating for an English National Healthy Higher Education Programme that can help to build consistency across the entire spectrum of education; and exploring with the World Health Organization (WHO) and the International Union for Health Promotion and Education (IUHPE) the feasibility of developing an international programme. (Global Health Promotion, 2010; 17(3): pp. 6–16)

Keywords: health promoting universities, healthy universities, higher education, settings, systems thinking, universities

Introduction

Background

This article reports the findings of a national-level qualitative study carried out during 2008 in order to investigate current ‘Healthy University’ activity taking place in England. It outlines the higher education context; introduces the healthy settings approach and policy-level considerations relating to Healthy Universities; details the study’s methodology; presents the findings; discusses key learning and strengths and weaknesses of the study; and, concludes with reflections and recommendations.

With its holistic and inclusive mission (1), the United Kingdom (UK) higher education sector – comprising 169 higher education institutions (HEIs)

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with more than 2.3m students and almost 365,000 staff (1) – offers obvious potential for the promotion of health and well-being.

Within the UK, most health-related interventions and other activities within higher education settings would seem to have focused on students, commonly targeting the ‘traditional’ 18–24 year old population – taking the opportunity to extend school-based and college-based programmes to a setting that is characterised by many young people as an important life transition stage (3,4). Similarly, most health-related reviews, guidance and policy documents relating to universities have been concerned with student well-being, many focused on specific concerns such as mental health and drugs and alcohol (5–11). However, public health policy developments (12) have resulted in a renewed focus on workplace health and well-being (13,14), recognizing that good health can enhance productivity (15–17). With regard to the higher education sector, it has been argued that there is a need for ‘well-managed, healthy universities with well-motivated healthy staff’ (18). It is also important to appreciate the relationship between HEIs and wider community well-being. In terms of employment, knowledge exchange, social development and the built environment, the impact of HEIs on their communities is widely recognized (19) and there is a growing awareness of the relationship between health and economic success and of the contribution of HEIs in terms of training, education and research (20). More recently, concern about the rapid increase in student numbers within cities and towns across the UK has prompted research and guidance about how HEIs and other stakeholders can respond to the trend of ‘studentification’, by managing and integrating students into neighbourhoods (21).

The healthy settings approach

The healthy settings approach emerged in the wake of the Ottawa Charter for Health Promotion which stated that, ‘health is created and lived by people within the settings of their everyday life; where they learn, work, play and love’ (22).

It had long been recognized that settings can enable health interventions to be targeted at a specific audience and that, alongside population groups and health topics, they form part of the traditional matrix used to organize health promotion programmes concerned with encouraging individual health-related behaviour change. However, what has become known as the healthy settings approach – characterized by well-established programmes such as Healthy Cities, Health Promoting Hospitals and Health Promoting Schools – moves beyond this view of carrying out of health promotion in a setting, appreciating that the contexts in which people spend their time are themselves important determinants of well-being (23) and that health is, simultaneously, an asset for and outcome of effective organizations, communities and partnerships (24–26). Dooris has drawn on the work of key theorists to propose a conceptual framework for healthy settings – suggesting that the approach is rooted in values such as participation, equity and partnership and characterized by (27):

- An ecological model of public health: understanding health as a holistic concept determined by a complex interaction of environmental, organizational, and personal factors, it is concerned to develop supportive contexts in the places that people live their lives.
- A systems perspective: acknowledging interconnectedness and synergy between different components and viewing settings as complex dynamic systems with inputs, throughputs and outputs, it shifts away from a reductionist focus on single issues, risk factors and linear causality.
- A whole system focus: using organization and community development to introduce and manage change within the setting in its entirety, it is concerned to ensure living, working and learning environments that promote greater health and productivity; integrate health and well-being within the culture and core business of settings; and promote wider community well-being.

Healthy Universities

The establishment of WHO-and government-initiated programmes such as Health Promoting Schools, Healthy Schools (www.healthyschools.gov.uk) and, more recently, Healthy Further Education (www.excellencegateway.org.uk/hfep) suggests an appreciation of the value of this healthy settings approach within the education sector. The experience of these programmes in developing whole school and whole college approaches (28,29) affirms the importance of applying the aforementioned conceptual
framework and suggests that effective programmes are likely to be complex, multifactorial and involve activity in more than one domain. It follows that Healthy Universities requires the adoption of a whole university approach. Through combining high visibility projects with long-term organization development and balancing high-level leadership with multi-stakeholder involvement, this approach aims to work across and connect between different components of the university system (e.g. formal curriculum, research, social support systems, leisure activities, management style, organizational culture, relationships with wider community) to develop an ethos and environment that helps to deliver mainstream goals and supports the health and well-being of the entire university community (30).

However, despite a rapid growth of interest in applying the healthy settings approach within the context of higher education (31–33) there has, as yet, been no parallel investment in universities. At an international level, WHO in 1998 published a working document that showcased early work in English universities and proposed the development of a European Network of Health Promoting Universities within the context of Healthy Cities (33) – but this initiative did not materialize. Nationally, although the Government included reference to further and higher education sectors in its 2004 public health strategy for England (12), with a commitment to ‘support the initiatives being taken locally by some colleges and universities to develop a strategy for health that integrates health into the organisation’s structure’ (p. 72), this has not to date resulted in the establishment of a Government-backed programme (although interest generated led to the establishment of an informal network of English HEIs).

Methodology

Introduction

This study (for which ethical approval was obtained from the relevant university ethics committee) aimed to scope and explore current ‘healthy universities’ activity taking place within English HEIs – and formed part of a larger national project that also examined the potential for a national programme to be developed. Following a literature review and informed by theory and practice within the field of healthy settings, we carried out a two-stage research process with English HEIs. The choice of methods and the approach to sampling were influenced by the limited resources available for the project and by a desire to combine consultative research with a stakeholder engagement process.

Stage 1 of the study

With guidance from the Project Advisory Group, we designed a brief first stage web-based scoping questionnaire using the online Survey Monkey tool (www.surveymonkey.com), in order to audit current activity and identify a second stage purposive sample of universities interested and engaged in the Healthy University process. For pragmatic reasons, we decided to contact HEIs via the nine regional ‘teaching public health networks’, which had been established a few years previously and which include as one of their aims ‘to create health promoting universities and colleges’ (www.phru.nhs.uk/Pages/PHD/TPHN.html). Each regional lead was asked to provide confirmation of having sent out the invitation and to provide a list of HEIs on their distribution list. In response to omissions identified through this feedback, the research team arranged to distribute a number of invitations by alternative routes – and in addition, reminder emails were sent directly to non-respondents. A total of 117 HEIs received invitation emails and 64 completed the survey, representing 55% of the sample. The data was summarized using the Survey Monkey capabilities and thematic analysis undertaken.

Stage 2 of the study

Informed by these responses, second stage research was conducted with a purposive sample comprising those HEIs that reported having a Healthy University initiative. Two email questionnaires were designed to explore current activity in greater depth – the first gathering overview information, the second gathering detailed data and wider reflections on structure, processes, resourcing, opportunities and challenges in order to enable the production of case studies on Healthy Universities. The first of these was sent to the full sample of institutions with a Healthy University initiative in place (28 HEIs) and the second was sent to a sub-sample of 12 HEIs – selected to ensure representation from different regions of the country, categories of institution (e.g. ‘old’ and ‘new’ HEIs) and
types of leadership (e.g. academic department, student services, human resources). Data from the first questionnaire were tabulated and key themes identified; data from the second questionnaire were used to generate institutional case studies, which formed an appendix to the final report. In addition, an interactive consultative workshop was held with members of the English National Healthy Universities Network with the aims of presenting findings, validating data, informing the action planning process and securing further buy-in.

Results

The results of the research are presented below, with illustrative quotes from questionnaire respondents. The first section deals with the data emerging from the Stage 1 audit survey and the Stage 2 overview questionnaire. The second section focuses on the in-depth data provided by universities invited to provide further case study information and emerging from the data validation workshop.

Overview data

Of the 117 HEIs receiving invitation emails to participate in the Stage 1 research, 64 completed the short web-based audit survey, representing 55% of the sample. The response rate varied between 19% and 100% across the 9 different regions. Of the 64 HEIs, 28 (44%) stated that they have an established Healthy University initiative. Interpretation of the Healthy University concept is very variable: some respondents listed relatively narrow aims (e.g. ‘to hold a health week each year to promote healthy lifestyles to students and staff’); some indicated that their focus is on a particular sub-group of the university population (e.g. ‘to promote a healthy and safe lifestyle among students’ or ‘to promote health and well-being in the workplace’); and others articulated a more holistic or ‘whole system’ understanding – such as ‘to be a healthy, ethical, environmentally-friendly and sustainable community which values well-being’ or ‘to raise the profile of health, well-being and sustainability within the culture, structures and processes of the university.’ The data also showed that Healthy University initiatives are led from a wide range of different services and departments – most commonly human resources/occupational health, academic departments, student services and sport (see Figure 1).

Of those responding, 96% said that they would be interested in a national programme on Healthy Universities, many seeing this as an opportunity and incentive to coordinate, integrate and build on ad hoc activity:

This would assist us in identifying key ways in which we could promote health matters within the University in a more structured way than at present.

A national programme would help to pull together and lift the profile of the piecemeal activity currently going on.
There is already much good work in progress which could be further supported and extended by participation in the National Healthy Universities programme.

As indicated in Table 1, all 28 HEIs identified as having an established Healthy University initiative were asked to provide additional overview information by means of an email questionnaire. Of the 28, 15 responded, representing 54% of the sample. One reported having no formalized initiative, one had established its initiative in 1995 and the other 13 had established their initiatives between 2005 and 2008 — reflecting the relatively recent increase in interest in the concept and practice of Healthy Universities. HEIs brand their work in a variety of ways (e.g. ‘Healthy University’, ‘Healthy Campus’, ‘Health Promoting University’, ‘Healthy U’), with six having websites. The data confirmed the variation in interpretation and emphasis — with specified aims suggesting that eight HEIs focus on students, staff and the wider community; three focus jointly on students and staff; two mainly on staff; and, two mainly on students. The findings also confirmed that initiatives are led from the range of bases identified in Figure 1 and suggested that they prioritize a range of work areas (e.g. mental well-being, physical activity, healthy eating, alcohol, sexual health, tobacco, drugs, sustainability and transport).

Reflecting on the establishment of their initiatives, respondents highlighted three main types of catalyst:

- **Needs Assessment**: responding to research into student or staff needs – an example being the Leeds PCT-led student health needs assessment (32).
- **Bottom-Up**: stimulated by the interest and motivation of individual staff members, often drawing on experience from other HEIs, sectors or countries.
- **Top-Down**: prompted by changing contexts and agendas, either externally driven (e.g. through the teaching public health network establishing a regional initiative in Yorkshire and Humberside) or internally driven (e.g. following restructuring or in response to strategic priorities).

### In-depth data

As explained above, the Stage 2 research also involved a purposive sub-sample of 12 diverse HEIs being asked to provide more detailed information in order to provide a richer picture of Healthy University activity and enable the production of case studies. Of these, six completed the questionnaire, representing 50% of the sub-sample. A number of themes emerged from this case study data and from the data validation workshop held with members of the English National Healthy Universities Network.

**Leadership, coordination and implementation**

The case study data indicated that all six HEIs have established senior-level steering groups along with a variety of working groups reflecting their priorities, and that all have developed or are in the process of developing an action plan. In terms of resourcing, five of the six HEIs reported having a dedicated coordinator/manager — four also having a dedicated non-staffing budget — and all six reported that their initiative has opened up opportunities to access additional funding. All reported links to external agencies, describing a wide range of partnership working at both local and regional levels. In some cases, partners such as Primary Care Trusts, local authorities, specialist services and taskforces are represented on steering groups and working groups. There were many examples of projects being mainstreamed and all respondents highlighted the significance of securing system-level change — through means of policy, curriculum, service development, introduction of new schemes and inputting to training and tendering processes.

**Evaluation**

Although all six case study HEIs recognized the importance of evaluation, it was clear that evaluation to date has been limited in scope and depth (at least partly due to resource constraints). The types of evaluative activity most commonly mentioned were:

- monitoring engagement in specific events, programmes and campaigns
- utilizing student, staff and partner feedback (qualitative and quantitative) to ensure quality of services and resources and inform future planning
- monitoring performance against annual targets in action plans
- conducting staff and student surveys
using impact assessment methodology to evaluate the effectiveness of policies
• using standardised questionnaires to evaluate the introduction of new services.

Whole university approach: characteristics, advantages and barriers

All six case study HEIs felt that they were working to apply a whole university approach, understanding this to be characterized by embedding health within the university at the policy/planning level, working to promote the health of all stakeholders and engaging the full range of university services and academic departments:

We have been able to work across very different settings within the university such as libraries, halls of residence, academic schools, course content, sport and lifestyle. The advantages are that we are reaching diverse groups of students in different settings with differing aims. We have found that offering staff training around supporting students is also health promoting for the staff as they feel more supported and informed. We have found that going for a whole university approach to healthy eating ... has been very beneficial to staff as well as students.

When action plans have been developed, an issue or health topic is considered in its widest sense. A range of activities are considered that aim to change systems, promote information, sometimes develop training/services and generate research if required. We link to existing areas of work to maximise capacity where possible. Over the years, the Health Promoting University has developed an internal partnership way of working, always inviting a range of people to be involved, to bring issues and discuss sometimes difficult and contradictory views in a supportive and positive way – looking for practical solutions and ways forward.

Some additionally provided tangible examples of how their work on priority themes such as alcohol and drugs, healthy eating, mental health and sexual health reflected a whole university perspective, in the sense of connecting parts of the university system, working across different domains of activity and engaging different stakeholder groups (see Table 1).

Advantages to such an approach were understood to include: a strong strategic direction; increasing visibility; securing understanding of the connections between health topics and university systems; strengthening links with external partners; and building long-term sustainability. Key barriers identified were: limited resources; size of institution; lack of senior and/or middle management support; difficulty of securing widespread buy-in; absence of a national steer to legitimate the work; and the changing nature of the students’ union executive. The challenge of cultural change was highlighted, with respondents recognising that even when whole university involvement has been secured, the initiative may continue to be viewed as being owned by the service or department within which it is based.

The elements to a healthy university are all there but there is still a way to go to make the links – it needs to be recognised that what we are doing is changing the culture of a large organisation and change can be quite slow.

Key challenges identified at the English National Healthy Universities Network workshop included demonstrating and evidencing success; securing widespread ownership and participation – including that of senior-level decision makers and students; and enabling long-term sustainability within the context of continuing financial pressures.

Drivers, linkages and benefits

The six case study HEIs identified a range of perceived drivers and linkages to other agendas. In relation to students, there was a strong sense that the Healthy University approach has the potential to impact positively on recruitment, experience and retention – and to contribute to widening participation. Likewise, the imperative of staff recruitment and retention was highlighted, alongside a recognition that the approach can not only help to reduce sickness absence, but also improve overall staff experience, thereby improving performance and productivity and making a positive economic contribution. A few HEIs also highlighted the value of the Healthy University approach in terms of its contribution to community engagement and community relations and its links with sustainability and corporate social responsibility agendas. More specifically, external drivers such as
National Health Service targets and the Health and Safety Executive audit on stress management were also identified as important facilitators and motivators. The workshop validated the majority of these themes, particularly emphasizing the importance of mental health, of aligning with core business goals and of enhancing market position. There was also an appreciation that drivers may vary for different types of HEI and for different services and departments within them. Likewise, it revealed an understanding that key benefits are closely linked to these drivers – helping HEIs deliver their core business more effectively, compete in the higher education ‘marketplace’, fulfil externally-defined responsibilities and improve student and staff health. In relation to this latter point, there was recognition that by investing in student health, there would be knock-on effects for workplace and wider societal health, through progression of students into work. A further point highlighted was the importance of dialogue and collaboration with other initiatives using different terminology but with overlapping aims.

Reflections on the national network

The six HEIs that provided in-depth case study data are all members of the English National Healthy Universities Network. They see this as invaluable in terms of providing insight into wider Healthy Universities work, offering peer support and preventing isolation, sharing ideas, practice and resources, and increasing visibility and creating a critical mass:

[It’s given us] an understanding of the scope of Healthy University work nationally.

<table>
<thead>
<tr>
<th>HEI</th>
<th>Theme</th>
<th>Action</th>
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| A   | Alcohol and smoking | • Expand access to local stop smoking service  
• Develop peer-led smoking cessation interventions in university and college settings, in line with NICE guidance  
• Reduce alcohol and drug related harm in the student population  
• Continue to develop and expand the 14–21 campaign  
• Work with students’ union bars to encourage the adoption of a ‘sensible drinking programme’ and to train staff to serve alcohol responsibly  
• Develop drug use/harm reduction campaigns that draw upon the expertise of students’ unions and agencies and groups working in the field |
| B   | Healthy eating | • Move towards a healthier and more sustainable food supply chain  
• Increase provision of affordable healthier food for the diverse university community  
• Improve consumer information through provision of clear and consistent food labelling  
• Raise awareness of and promote the benefits of eating healthier and sustainable food  
• Improve students’ skills relevant to healthier eating  
• Increase understanding and knowledge about food, health and sustainability through research and teaching |
| C   | Mental health | • Audit university and external support systems related to mental health  
• Conduct literature reviews  
• Expand research with staff and students on mental health  
• Develop, test and evaluate work to form content for good practice guide  
• Map pathway of care for students and work towards internal and external strategic developments  
• Disseminate information and training to staff to improve confidence around dealing with mental health issues and referrals |
| D   | Sexual health | • Establish baseline data on sexual health  
• Develop a strategic vision and partnership working  
• Improve access to information on sexual health for students  
• Improve access to sexual health services |
It has been invaluable in terms of peer support and sharing ideas and resources. Also, it has been helpful to visit other institutions and see the different approaches.

The opportunities to share best practice are very helpful and it is also an advantage to be part of, and contribute to the development of such an important initiative in these early stages.

They would also like to see the Network develop further, establishing a website, offering training workshops, playing a strengthened role in advocating and informing national strategy, providing wider opportunities for joint projects, expanding to other parts of the UK and setting up a regional structure.

Discussion

Key learning

This study confirmed that there is, among English HEIs, increasing interest in moving beyond merely targeting health promotion interventions at students and staff to embrace the wider concept and practice of Healthy Universities. The findings revealed a richness of experience alongside a breadth of understandings and interpretations, possibly reflecting the relatively early stage of development of the Healthy Universities movement and the absence of a formal national or international programme. The research pointed to widespread understanding of the need for initiatives to relate their work to government targets for young people’s well-being and workplace health, to core drivers within higher education and to parallel agendas such as sustainable development – and emphasized the challenge of introducing and integrating health and well-being within a sector that does not have this as its central aim, is experiencing resource constraints and has competing agendas. However, echoing Naaldenberg et al. (35) and Dooris (27), it also demonstrated a growing appreciation of the need for a comprehensive whole system approach that can map and understand interrelationships, interactions and synergies within higher education settings – with regard to different groups of the population, different components of the system and different health issues. Within this context, the Stage 2 findings highlighted that the HEIs with a Healthy University initiative in place were at different stages in developing and implementing a whole university approach – with only some focusing on the university community in its totality and many acknowledging the challenges involved in achieving and embedding the wide-ranging cultural change necessary to translate vision into reality. Furthermore, they also suggested that there has been a relative paucity of rigorous evaluation at this whole system level, with studies being limited to component projects and interventions. In part, this again reflects the informal status and early stage of development of Healthy Universities within England. However, it is also symptomatic of the challenges involved in generating robust evidence of effectiveness for complex, multidisciplinary whole system programmes (23). More broadly, it was clear that participants greatly valued the English National Healthy Universities Network and were eager to see it strengthened, possibly within the context of a national programme.

Strengths and weaknesses of the study

By focusing on a field of work that is relatively underdeveloped and little researched, one of the study’s main strengths lay in breaking new ground. While there is abundant research literature on Healthy Schools, this was the first national-level study to scope and explore Healthy University activity.

The main research methods chosen – web-based and email questionnaires with HEIs – were influenced not only by the aims of the project, but also by the relatively small amount of funding available to carry out the work. When contacting HEIs regarding the Stage 1 web-based scoping questionnaire, the main challenge was to direct emails and questionnaires to the most appropriate individuals within large and complex organizations – and our decision to use the regional teaching public health network leads as the main contact route represented a pragmatic compromise in methodological terms. However, acknowledging this, the 55% response rate was felt to be satisfactory, possibly reflecting the general growth of interest in Healthy Universities – with the variation across regions reflecting the different priorities among the nine teaching public health networks. The response rates of 54% and 50% to the follow-up Stage 2 research (see Table 1) were similarly satisfactory, although slightly disappointing given that the sample and sub-sample were
purposive, comprising those HEIs stating that they had an initiative in place. It also proved difficult to generate consistently in-depth case study data through means of a questionnaire – and in retrospect, richer data may have emerged if resources had been sufficient to carry out individual and small group interviews with the relevant HEIs. The workshop held with members of the English National Healthy Universities Network worked well as a means of validating data, informing action planning and securing further engagement.

Conclusion

Having reported findings from the study and discussed key learning and strengths and weaknesses of the research, it is important to draw conclusions and distil key issues for future research and policy.

Higher education offers enormous potential to impact positively on the health and well-being of students, staff and the wider community through education, research, knowledge exchange and institutional practice. There is also a growing appreciation that investment for health within the sector will contribute to core agendas such as staff and student recruitment, experience and retention; and, institutional and societal productivity and sustainability. Despite this, health and well-being remain largely marginal to the mission and organization of higher education.

Steuer and Marc (36), reflecting on developments within the higher education sector since the publication of the influential Dearing Report (2), have argued that there has been an overriding focus on serving the economy and fuelling individual competitiveness within it. They go on to advocate a transformative approach to quality that moves beyond the narrow focus on learners as future workers, calling for a broader higher education mandate that serves the dual purpose of enhancing both personal and collective well-being.

This study has revealed the rich diversity of health-related activity taking place within HEIs and points to a burgeoning interest in the whole system Healthy University approach (see Figure 2) – and to the enormous potential for this approach to enhance health and well-being. While an informal English National Healthy Universities Network has been established by the University of Central Lancashire in response to demand, this has until recently had no dedicated funding to enable development or research. Furthermore, despite widespread recognition of the need for a multi-sectoral partnership approach to health improvement (37, 38) and an explicit appreciation of the role of higher education within this (12), there is as yet no formal programme endorsed by government or stakeholder organizations that builds on the success of the Healthy Schools and Healthy Further Education programmes. Similarly, while...

**Figure 2.** The Healthy University: principles and aims

*Source:* Adapted from Dooris and Doherty (30)
there have – since the publication of the WHO book in 1998 (33) – been international conferences and developments focused on Healthy/Health Promoting Universities (e.g. www.healthyuniversities.net; http://ihome.cuhk.edu.hk/~b113406/Form/Invitation-AsiaPacificNetwork.pdf; www.fundacion.unavarra.es/universidadesaludable/eng_index.htm), these have not clearly carried the legitimacy or authority that comes with a programme or network sponsored by WHO or another global agency.

The authors would therefore highlight the following key issues for future research and policy:

- National and international funding for evaluative research within and across HEIs should be sought, in order to build upon the findings of this study and enable the development of a more robust evidence base for the effectiveness of the Healthy University approach in improving health, well-being and sustainable development and contributing to core business agendas.
- High-level endorsement should be sought within England for a National Healthy Higher Education Programme that builds on the momentum and dynamism of the English National Healthy Universities Network, thereby adding value within the higher education sector and helping to build consistency of approach across the entire spectrum of education.
- The feasibility of developing an international programme in support of Healthy Universities should be explored with organizations such as WHO and the International Union for Health Promotion and Education (IUHPE).

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