



# PROTOCOL FOR THEMATIC SYNTHESIS OF DIFFERENTIAL ATTAINMENT IN THE MEDICAL PROFESSION - 'BRIDGING THE GAP' SERIES

ALLIANCE FOR EQUALITY IN HEALTHCARE PROFESSIONS

## Summary

Differential Attainment is a phenomenon, recognised globally, where certain cohorts of people tend to have poorer career outcomes based on factors other than capability, academic effort or motivation. Although by no means unique to or exclusive to, it is indeed well described and monitored in the health education/ training, and affects professionals throughout their entire career journey from admission to retirement. It is a marker of an unfair system and affects individuals as well as organisations adversely. It is the responsibility of all organisations, policy makers and regulators to urgently understand the causes, find solutions and support those that are disadvantaged as a result of this inequality. The British Association of Physicians of Indian Origin addressing its declared mission of achieving excellence through promoting equality and diversity, along with its collaborative partners and a panel of international experts has created an *Alliance for Equality in Health Professions*. This Alliance will spearhead a thematic analysis of the entire spectrum of differential attainment in medical professions. This paper describes the protocol for the thematic synthesis of evidence, the priority setting partnerships for undertaking a critical integrative analysis and the process for combining evidence from experts with lived experiences of grassroots professionals to produce meaningful solutions, actions and policy enablers. The output will be published as a series of papers in Sushruta and culminate in a seminal report in 2021, when BAPIO turns 25.

**Keywords;** Differential attainment, BAPIO, Alliance for Equality in Health Professions, Thematic synthesis

Indranil Chakravorty FRCP PhD, Sunil Daga MRCP PhD, Subarna Chakravorty FRCPATH FRCPCH PhD, JS Bamrah FRCPsych, Ramesh Mehta OBE MD FRCP FRCPCH FHEA

*BAPIO Institute for Health Research, Bedford, UK*

[chair.bihar@bapio.co.uk](mailto:chair.bihar@bapio.co.uk)

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## Article Information

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## Background

It is recognised that there is inherent inequality in many aspects of education, training, career progression or handling of human resource procedures/ protocols, and disparity in the experience of different people within the health professions, based on factors which are beyond an individual's ability, motivation or engagement. (1,2) Differential Attainment (DA) is defined as the

observed gap in the achievements of different cohorts of individuals based on factors beyond their individual ability. It exists globally, in both undergraduate and postgraduate contexts, across exam pass rates, recruitment and progression/ outcomes and can be an indicator that training and medical education may not be fair. These include differentials connected to age, gender, race,



ethnicity or other diverse characteristics and experiences. The UK General Medical Council and 'fair society' standards require training pathways, assessment and opportunities to progress, should be fair for everyone.(3)

Since 2014, when British Association of Physicians of Indian Origin (BAPIO) led a legal challenge against the Royal College of General Practitioners there has been a seismic shift in transparency and reporting of differential attainment data for many examinations and specialty progression reports.(2) Acting on the recommendations of the independent commission on DA, led by Professor Esmail, GMC, Association of Medical Royal Colleges (AoMRC), Medical Schools Council, Health Education England have undertaken a multi-pronged approach from reviewing of curricula, training of examiners/surrogates, and investing in enablers within different regions for bridging the DA gap. (4,5)

However, sequential data from 2015-2020 suggests that there is little progression achieved so far in bridging this gap. There are many areas of uncertainty and much more research is needed. There have been two major events in 2020, which have exposed the devastating impact of societal inequalities on both lives and livelihoods (#COVID-19) and the persistence of disparities in society as a whole (#BlackLivesMatter).(6,7) Five years on from the landmark ruling in 2014,(8) BAPIO working with its alliance partners is keen to pursue its mission to achieve equality through bridging the gap(9) **DA Change Lab** thematic synthesis. (10)

This project will start with focus on the medical professionals (doctors) and then we hope to expand our learning and solutions to encompass the full multiprofessional spectrum of healthcare professions. Through a series of roundtables and workshops, the '*Alliance for Equality in Health Professions*' (AEHP) chaired by BAPIO will engage in exploring the achievements and challenges in implementing equality in medical education and training. The output will be a seminal paper (*Bridging the Gap*)(11) to be presented in 2021 when BAPIO celebrates 25 years of contributions to healthcare. This will include a comprehensive,

systematic review of the evidence to date for causes and solutions and recommendations for further research, policy enablers and actions for individual organisations.

### Aim

The purpose of this review is to conduct a thematic synthesis to identify high-level messages and themes from an exploration of the current literature, data (published and unpublished) on DA, capture the lived experience from the grassroots, measure broad impacts on the individual, organisations and society, deliberate the evidence with subject experts and, finally seek solutions to recommend or implement at different levels including policy change.

Only a few broad research questions will be adopted at the outset, as the researchers will allow for the themes and messages to emerge organically as the review progresses, rather than setting highly specific research questions. There are six broad sections of the journey of medical professionals which will be explored through this exercise. (1) recruitment, (2) career progression, (3) assessment, (4) leadership roles, (5) research & academia, (6) professionalism and wellbeing.

### Governance

Each of the above six themes will have leads appointed by consensus. The section leads will create a priority setting partnership, direct and supervise the literature review, manage the thematic analysis, the data categorisation, writing of the scoping document and producing the draft recommendations. Overall coordination of the work of each team, compliance and adherence to the agreed protocol, timely delivery of documents and facilitation of the engagement (roundtables, workshops and focus groups) will be managed by dedicated coordinators.

The editorial team will be responsible for all documents including the coordination, editing and publication of all output in *Sushruta Journal of Health Policy*.

**Table 1: Broad based themes to be explored**

Themes	
<b>I</b>	<b>Recruitment</b> Undergraduate, Postgraduate, Specialty, Consultant
<b>II</b>	<b>Career Progression</b> Trainees, Specialty & Associate Specialty doctors, Clinical Fellows, Primary Care & Consultant
<b>III</b>	<b>Assessment (Formative &amp; Summative)</b> Undergraduate & Postgraduate, PLAB/ Medical Licensing, CESR-CCT
<b>IV</b>	<b>Leadership Roles &amp; Recognition</b> Clinical, Management, Educational & Clinical Excellence
<b>V</b>	<b>Research &amp; Academia</b> Appointments, Grants, Academic Promotions & Publications
<b>VI</b>	<b>Professionalism &amp; Wellbeing</b> Disciplinary Pathways & Process, Bullying & Undermining, Impact & support

### Priority Setting Partnerships

Similar to the process defined in the James Lind Alliance (JLA) model, a series of formal broad based, balanced and representative collaborations will be set up with members from the grassroots, organisational stakeholders and subject experts for

each of the six focus areas. It is a vital aspect of this work and will ensure the production of educationally-relevant research that is strategic and inter-disciplinary in its approach therefore delivering benefits to all medical professionals affected by DA, their peers and essentially for patients.

**Table 2: Grassroot Members of the Priority Setting Partnerships**

(Allied Health Professionals including Nursing & Midwifery)
Academic Lecturers/ Educational Fellows
Consultants, Tenured academics: professor/ /associate professor/assistant professors/ reader/senior lecturer/lecturers
International medical graduates
Locally employed doctors/ Locum doctors (or those between specialties or in a career break)
Out-of-Programme doctors
Physicians Associates
Postgraduate Doctors in Training
Primary Care (General Practitioners/ Partners/ Salaried; GP Registrars) including those in Public Health
Research Fellows/ Teaching fellows/ Clinical Lecturers/ Academic Fellows
Speciality & Associate Specialist doctors
Undergraduate (MBBS) students
Widening Participation students/ doctors



## **Process Map**

The following seven steps will be carried out (1) setting the research question, (2) searching the literature (3) sampling of quantitative and qualitative data (4) determination of potential impact (5) thematic synthesis, (6) developing a consensus and (7) producing the final paper via expert peer review including solutions. (figure 1)

## **Defining the Research Question**

Using JLA principles, subjects, stakeholders and researchers will work together to agree which, among the uncertainties, matter most and deserve priority attention. Research on the effects of interventions often overlooks the shared interests of people most affected by them. As a result, questions that they all consider important are not addressed and many areas of potentially important research are therefore neglected. Even when researchers address questions of importance to subjects and scientists, they often fail to provide answers that are useful in practice. Hence using the same principles, we will ensure that the research questions provide the evidence needed to develop impactful solutions which will address the persistent mismatch which exists between the performance of medical professionals irrespective of their academic potential, motivation or effort.

## **Literature Review**

Preferred reporting items for systematic review and meta-analysis protocol (PRISMA P) guidelines (12) will inform the protocol for the current review with divergences from the guidelines implemented to meet the specific needs of the review. The main focus of the review will be qualitative, however, quantitative data may emerge during data extraction and will be incorporated. Such data may include demographics and sample sizes from the studies and a tabulation of the frequency of products from the studies, which will be included in the synthesis. Our approach will synthesise both qualitative and quantitative data, as a critical interpretive synthesis (13), utilising purposive sampling rather than the traditional inclusion criteria to determine higher-order messages rather than produce an integrative review (14) of research in DA.

A purposive structured search will be carried out in an exhaustive manner to ensure that all relevant materials are collected. In the context of the current review, materials include conference presentations, study protocols, published peer-reviewed papers/abstracts, unpublished manuscripts, internal symposia, tweets/LinkedIn/ResearchGate/Facebook information, workshops/masterclasses, documents related to archived datasets, newsletters and feedback to participants.

An infographic would be designed by the research team as a means to launch each theme of the project to all the relevant stakeholders, international expert community and invited theme leaders from each section of the project to send the authors their dissemination materials.

The most recent annual reports for organisations will be screened as a means to gather citations of all reported dissemination activities including published and in preparation peer-reviewed papers and abstracts. Any posters or oral presentations presented at national and international conferences, workshops or seminars that are referred to in the annual report will be recorded and sought from the researchers.

Traditional literature search methodology using differential attainment, outcomes and names of all researchers will be used as the search terms using ScienceDirect, PsycInfo, CINAHL and PubMed. The researchers in the Alliance will also be contacted to provide unpublished manuscripts, abstracts, and theses (where applicable) that arose from aligned projects. The Twitter pages, ResearchGate and LinkedIn profiles of all the researchers will be collected and recorded and their accounts searched for any discussion or comments related to the DA projects. Where necessary, freedom of information (FOI) requests will be made to all educational, regulatory or academic organisations responsible for designing, implementing careers, delivering assessments, managing curricula, and employers relevant to the journey of medical professionals.

A database of all dissemination materials and products will be created once all items have been gathered. Materials collected during sampling will be recorded using a Microsoft Excel database.



### *Sampling*

No eligibility criteria for the studies will be applied since all data production is considered relevant. Given the exclusive nature of the search to DA projects, quality appraisal techniques (15) will be applied to the materials to ensure rigour in the selection of materials and products collected in the search stage.

### *Determination of Impact*

All documents and data generated through the search will be categorised on two levels (e.g., high or low) with greater weight assigned to those materials identified as high. The features of this categorisation will include for instance the level of detail of content contained in the product in relation to DA or the type of content included in the materials (e.g., results of a study). Decisions regarding categorisation will be dependent on the content of the materials collected and will be made as the appraisal process is on-going and will be discussed by the authors with the thematic leads and the relevant members of the expert panel throughout the review process. Materials may be eliminated from the review during this stage if they are deemed to not be relevant to the review.

### *Thematic synthesis*

The data that emerge from data extraction will be subjected to thematic synthesis. (16) Similar to analysis of primary qualitative datasets, thematic synthesis involves the systematic coding of data and generating of descriptive and analytical themes. It is an inductive approach which is critical given the aim to generate higher-order themes and key messages from the projects. It is a three stage process (17) which begins with line-by-line coding of text where findings from the materials collected will be entered word-for-word into the database and each line of text will be coded according to its meaning and content. Following this step is the development of descriptive themes which involves translating the concepts from one study to another and a hierarchical structure will be created by grouping the codes based on similarities and differences between the codes. Finally, the generation of analytical themes that go beyond the

content of the original articles is a critical stage where descriptive themes are used to determine the key messages. Themes and messages will be reviewed independently to consider implications and then discussed as a group to allow for the emergence of more abstract messages and themes that go beyond the content in the original materials.

### *Scoping Document*

The result of the literature review, categorisation and determination of potential impact will result in a scoping document which will provide both a broad overview of the current state of art, sampling of relevant evidence (quantitative and qualitative) and extent of impact to stakeholders. The authors working with section leaders will then generate a draft list of potential solutions, recommendations or a gap analysis. This scoping document will then be presented to all stakeholders (grassroots to organisations) for deliberation.

### *Developing a Consensus*

The next stage will be a process of deliberation through a series of invited roundtables, thematic workshops and focus groups where the evidence presented in the scoping document and the draft recommendations/ solutions will be subjected to a defined process of rigour by independent facilitation and a consensus document produced.

Before each roundtable or workshop discussion, the section leads will present a defined set of issues to discuss based on thematic synthesis to the participants prior to the session. At the session, there will be a predefined amount of discussion time allocated for each of the agreed themes.

The discussions will be solution focussed and the outcome will be expected in the format of (a) well defined action, (b) recommendation, (c) policy or (d) area for further research/ evidence gathering/ pilot project.

All discussion and deliberations for each of the roundtable, workshops or focus groups will be transcribed, thematically analysed, synthesised and incorporated into the pre-final document.

### **Peer review**

The final stage of the process will involve a peer review of the pre-final document by our invited expert panel, and comments integrated to produce the final consensus paper.

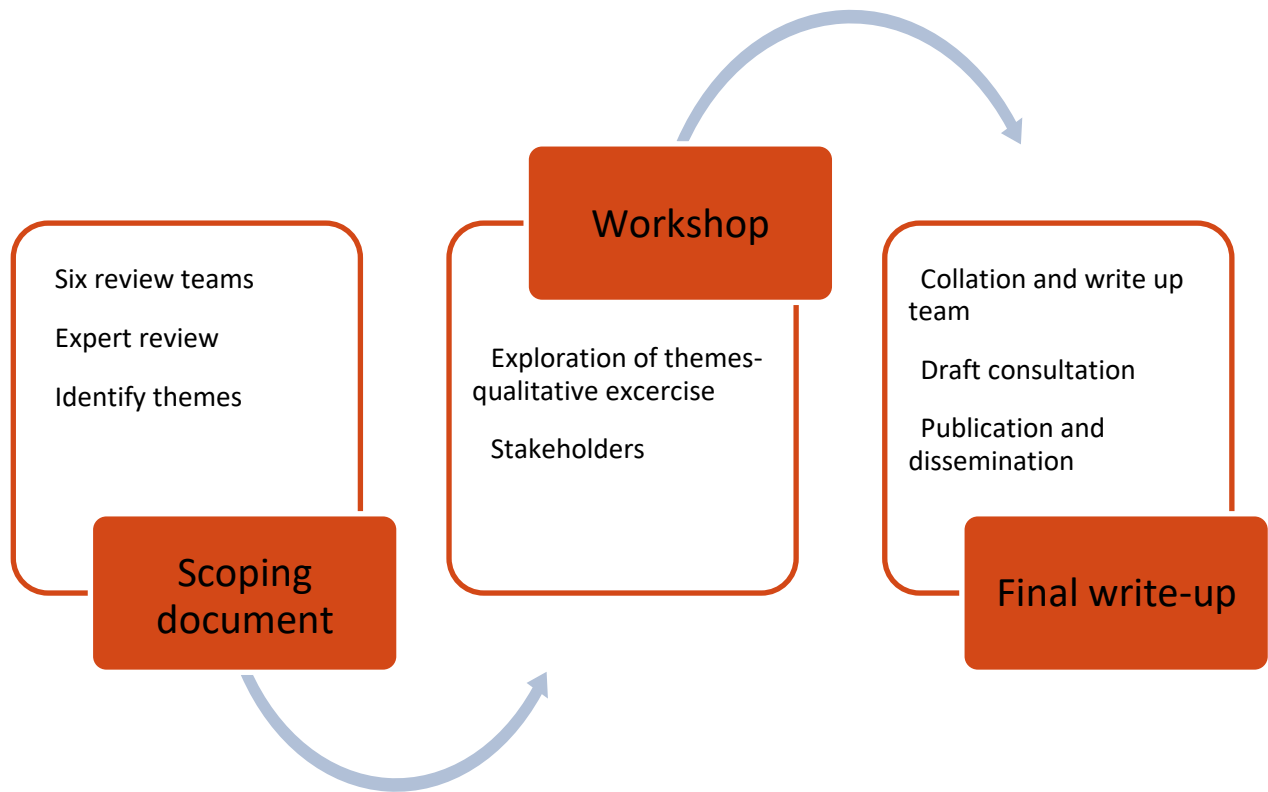


**Table 3: Potential factors affecting differential attainment**

I	Educational	Learning styles (problem based/ taught/ self-directed) Access to resources, guidance or tutoring Schooling (independent or state) Impact of economic status on educational opportunity Parental/ family (influence of parental education, support, expectation or motivation) Assessment (multiple choice, viva, observed clinical assessments) Impact of unrecognised dyslexia or dyspraxia
II	Cultural	Linguistics (IELTS) Previous life experiences Conflict/ refugees Societal norms/ expectations (introvert vs extrovert) Influence of reverence of those more senior or in authority Segregation (wilful or forced)
III	Bias	Racial, ethnicity, gender, disability Impact of illness or health impairment
IV	Support	Family, friends Formal supervision Mentorship Networking
V	Economic	Deprivation Access to bursaries Cost of examinations/ preparation Family responsibilities
VI	Others	Health (physical/ mental) Immigration related stresses Wellbeing, Stress and Burnout Caring responsibilities

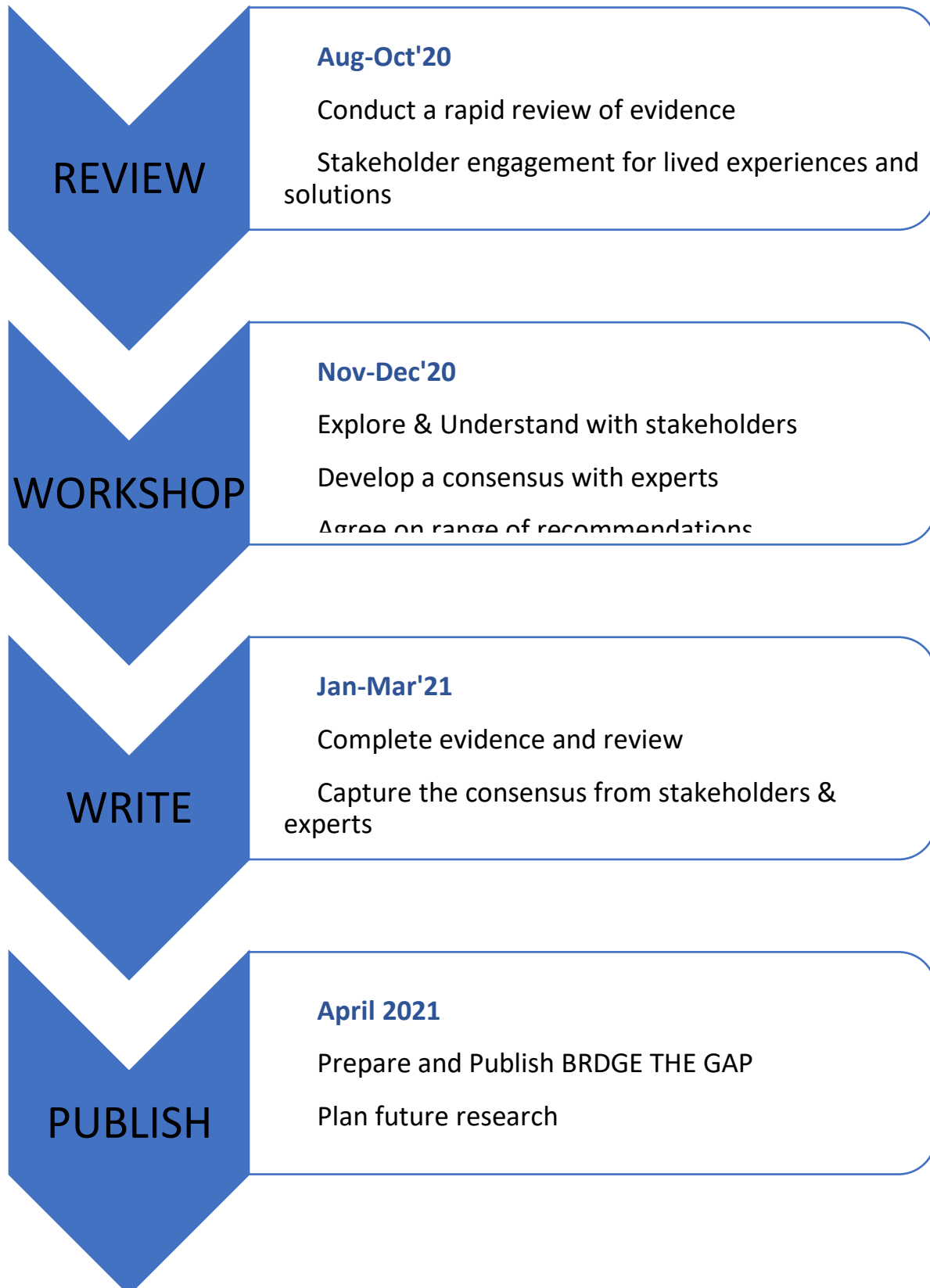


PROCESS MAP





TIMELINE







## Discussion/ Limitations

This thematic review is designed to be the first comprehensive synthesis of the broad spectrum of differential attainment in the medical profession for more than a generation. Although the concept of differential attainment has been recognised for over three decades now, there has been little if any tangible progress, as highlighted in the Ottawa consensus statement in 2018. (18)

This review is ambitious in its scope and remit but also realistic in recognising that the need of the hour is to be solution focussed and to prioritise areas for quick interventions that is important to the stakeholders (those that are personally impacted by DA and organisations that are responsible to provide equality and diversity in their processes).

Ultimately, this desire to offer a 'level playing field' is critical for a fair society, supportive professional excellence and sustainable, and safe healthcare delivery to our patients. (19) Based on the ideals of our priority setting partnerships, this review will pick and explore areas in depth as determined by our collaborators and to provide the maximum impact to the profession.

Hence, it is not designed and neither aspires to be an exhaustive systematic analysis nor aim to cover every minutest aspect of differential attainment that may exist on a theoretical framework. This review will cover every aspect as deemed important from our exhaustive engagement with stakeholders and as categorised by our international expert panel. Hence, it is highly unlikely that this review will miss any aspect of DA that may have an impact.

We propose that to provide practical guidance, moving beyond single-site, single method analyses and acknowledging that DA is a complex, multi-level, dynamic phenomenon. Accordingly, we must

expand our methodological approaches acknowledging the interaction between selection methods, progression and the philosophy as well as policy-making in relation to medical education and training. Solutions that emerge from our consensus process should use sophisticated evaluation approaches and theoretical frameworks to better inform those involved in education, training and medical careers regarding how to best deal with issues such as the weighting and sequencing as well as addressing diversity and workforce shortages. (18)

This responsibility of ensuring that medical education, training, or careers offer equality, celebrate diversity and combine professionalism with nurture, rests with the regulators whose duties are enshrined in law and enacted through parliament. Hence, from the outset the review team are engaged in working closely with our regulators both in the UK and internationally to support them in delivering their legal responsibility to the public. And, through them we will aim to inform and engage with the lawmakers, where policy changes/enablers may be required.

## Dissemination plan

One means for researchers to effectively target specific knowledge users is with clear and concise messages aimed at a specific audience delivered in a way that the recipients want and that are supported by a credible body. The results of the current review will be targeted at a range of stakeholders and knowledge users such as researchers, health and social care professionals as well as users. A dissemination plan based upon the model developed by will be implemented and involve messages and themes identified transmitted in a series of short videos, podcasts, policy briefs and newsletters with specialist input from key stakeholders such as researchers, practitioners, policy makers and users and carers of palliative care services.

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