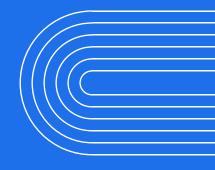
Concordats and agreements: their role in supporting effective research culture and working environments

March 2022



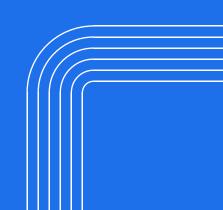


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Glossary

Name	Definition			
Concordats and Agreements Review Challenge Group	The Challenge Group included representatives from the project funders Universities UK (UUK), UK Research and Innovation (UKRI) and Wellcome) as well as representatives from 17 research organisations.			
Concordats and Agreements Review Project Board	The Project Board included representatives from the project funders.			
EDI	EDI is an acronym for equality, diversity and inclusion.			
GuildHE	GuildHE are an officially recognised representative body for UK Higher Education. There are 52 GuildHE members, who tend to be smaller and more specialist Higher Education Institutions and Higher Education Providers.			
Higher Education Institutions (HEIs) and Higher Education Providers (HEPs)	Higher Education Institutions are independent, self-governing bodies active in teaching, research and scholarship and established by Royal Charter or legislation. Under the Higher Education and Research Act (2017), the term is Higher Education Providers in England.			
Higher Education Statistics Agency (HESA)	The Higher Education Statistics Agency are the designated data body for England.			
Independent Research Organisations	In the context of this review, these are organisations that had applied to UKRI to become an independent research organisation, demonstrating the capability and skills to independently undertake and lead a research programme.			
Knowledge Exchange Framework (KEF)	The aim of the Knowledge Exchange Framework is to increase efficiency and effectiveness in the use of public funding for knowledge exchange and to further a culture of continuous improvement in HEPs in England.			
Public Sector Research Establishments (PSREs)	In the context of this review, Public Sector Research Establishments are those organisations with a research and development capacity sponsored directly by a government department or UKRI, and who are eligible for UKRI funding.			

Research culture	The multiple behaviours, values, expectations, attitudes and norms of research communities. This definition of research culture is taken from The Royal Society. ¹		
Research environment	The conditions in which research is undertaken, including the administrative context.		
Research Excellence Framework (REF)	The Research Excellence Framework is the system for assessing the quality of research in UK HEIs/HEPs.		
Research Institutes	In the context of this review, Research Institutes are organisations identified by UKRI as those with a long-term investment by the research councils and eligible to apply for UKRI funding opportunities.		
TRAC Peer Groups Clusters	TRAC peer groups provide a simple comparison between similar HEIs/HEPs based on research income and total income volumes and are used in this review to provide a more granular analysis of findings in HEIs/HEPs. See Table A2.2 in Appendix A2 for details of each group.		
UK Research and Innovation (UKRI)	UK Research and Innovation are a non-departmental public body sponsored by the Department for Business, Energy and Industrial Strategy. UKRI bring together the seven disciplinary research councils, Research England, which is responsible for supporting research and knowledge exchange at HEIs in England, and the UK's innovation agency, Innovate UK. UKRI are one of the three project funders for this research.		
Universities UK (UUK)	Universities UK are the membership body for 140 universities across the UK. They lead collaboration to ensure UK universities can maximise their positive impact. UUK are one of the three project funders for this research.		
Wellcome	Wellcome are a charitable foundation focused on health research. Wellcome are one of the three project funders for this research.		

1 Royal Society (2018). Research culture: changing expectations conference report. Available at: https://royalsociety.org/topics-policy/projects/research-culture/ changing-expectations/

Executive summary

Concordats and agreements are a significant part of the landscape of frameworks and good practices which shape research.

They cover a wide range of areas and have been developed in response to different challenges and opportunities in the researcher environment over the past two decades. Although concordats and agreements (hereafter 'initiatives') are intended to help the research community to achieve outcomes which contribute to 'research culture', among other things, their adoption is inconsistent and there has been no overall assessment of their collective impact on research conditions in the UK.

Universities UK (UUK), UK Research and Innovation (UKRI) and Wellcome commissioned Basis Social to gather insights on the adoption and impact of 12 initiatives currently in place in the research sector.²

- Athena Swan Charter
- Concordat for Engaging the Public with Research
- Concordat for the Advancement of Knowledge Exchange in Higher Education
- Concordat on Open Research Data
- Concordat on Openness on Animal Research
- Concordat to Support Research Integrity
- Concordat to Support the Career Development of Researchers
- Leiden Manifesto on Research Metrics
- Race Equality Charter
- San Francisco Declaration on Research Assessment (DORA)
- Technician Commitment
- UKCDR Guidance on Safeguarding in International Development Research

2 These 12 initiatives were selected as they require research organisations to implement a policy, report on compliance and/or develop an action plan. See Figure 1 for more details on each initiative.

The research process began with interviews with representatives involved in the development of each of the initiatives (the 'initiative owners') and a review of documentation related to these initiatives. This was supplemented by a survey of over 500 staff involved in overseeing or implementing the initiatives within research organisations, and qualitative deep-dive case studies within seven research organisations. The aim was to understand the perceived impact of these initiatives on the culture and environment in which UK research takes place.

Overall, survey respondents reported that there was a net positive impact from initiatives on research culture and the working environment, and their benefits were seen to outweigh their administrative burden.

The benefits of initiatives, as perceived by survey respondents and those interviewed in the case studies, were as follows.

- They focus the attention of senior leaders on significant issues of relevance to the research sector.
- They inform organisational strategy and policies to support high-quality research.
- They provide good practice and shared learning, helping to break down silos and encourage collaboration.
- They provide a mandate for action on important issues.

These benefits were also recognised by initiative owners.

While overall positive, the perceived impact of initiatives differed across research organisations. Notably, just under half of staff responding to the survey were either unsure of the impact or agreed the initiatives have had only a 'limited impact' on research culture and the working environment.

In part, this is because the impact of initiatives on the working environment is perceived as difficult to measure (noted by half of survey respondents). The documentary review also indicated no initiatives had Key Performance Indicators (KPIs) to measure change and impact on the research sector overall (due to their focus on policy and practice at an organisational level). Case study interviews identified that the translation of initiatives into wider organisational policies and practices, and the relative impact of other factors influencing culture, made measurement very challenging. In our survey, initiatives were viewed as influential on research culture and working environment, but less so than other factors including peers, leaders, organisational strategy and funders. In order of influence the following groups were seen as either very or quite influential in driving a positive research culture: the research community (91%), research team leaders (90%), other colleagues (86%), the initiatives (83%), the Vice Chancellor or other leaders (81%) and the REF (77%).

In terms of activities required by the initiatives, from our documentary review, organisations are asked to undertake at least one of the following actions to adopt and/or comply with an initiative: become a signatory; develop a policy or plan; write an annual report; provide administrative data; train staff; and engage in external communication and/or outreach.

There were extremely varied responses to these requirements by organisations, together with variations in the structures and processes through which initiatives were adopted. Therefore, the administrative burden can be seen as not only a function of what organisations have been asked to do to adopt and comply with an initiative, but also a factor of how organisations have responded.

Overall, research-intensive organisations were seen in the case study interviews to have greater existing resources and administrative infrastructure to support the implementation of initiatives. For smaller and less research-intensive organisations, implementation was more piecemeal and often involved focusing down on a smaller number of initiatives or actions.

In this context, there was seen to be the need to address two main issues to improve the impact of initiatives from the perspective of those interviewed in our case studies.

First, while there is no obvious overlap between initiatives in terms of their aims, they do have a range of administrative requirements which, collectively, can place significant burden on organisations.

Second, having greater clarity on what success looks like, and how to measure the outcomes and impacts resulting from initiatives – through common standards and benchmarks – could help promote practices that improve research culture.

There was a strong view, identified in the case study interviews, on the need to simplify and integrate initiatives at a collective level. Such a focus would help in reducing administrative burden by eliminating parallel processes and by providing a unified framework to aid adoption. Specifically, initiative owners in consultation with the sector should prioritise and provide greater standardisation on the most important issues to address and should support organisations to respond more flexibly to other aspects of research culture.



FIGURE 1: Overview of the initiatives' principles and requirements

	Research conduct and working practices Staff development					Assessment an			
	Concordat to Support Research Integrity	Open research data	Concordat for the Advancement of Knowledge Exchange in Higher Education	Engaging the Public with Research	Openness on animal research	Safeguarding in International Development Research	Career Development of Researchers	Technician Commitment	San Francisco Declaration on Research Assessment
Year established / date of any notable changes	2012 revised in 2019	2016	2020	2010	2014	2020	2008 revised in 2019	2017	2013
Aim of initiative	Good research conduct and its governance	To ensure data gathered by UK researchers is openly available for use by others	Supporting effective knowledge exchange between universities and other institutions	To strengthen the public engagement activities of research and higher education institutions	To promote greater transparency (and public dialogue) around the use of animals in research	To anticipate, mitigate and address potential and actual harms in international development research	To increase the appeal and sustainability of researcher careers in the UK	To promote recognition and career development of technicians working in higher education and research	To improve the ways in which researchers and academic research outputs are evaluated
Lead Partner	UUK	Research England, UKRI, UUK & Wellcome	UUK	UKRI and Research England	Understanding Animal Research	UK Collaborative on Development Research (UKCDR)	UUK & Vitae	Science Council and Gatsby Charitable Foundation	DORA
Number of UK organisations adopted to date, where known	-	-	-	89	126	-	138	95	223
Key Principles/ Commitments	 Upholding the highest standards of rigour and integrity in all aspects of research Ensuring that research is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards Supporting a research environment that is underpinned by a culture of integrity and based on good governance, best practice, and support for the development of researchers Using transparent, timely, robust and fair processes to deal with allegations of research misconduct should they arise Working together to strengthen the integrity of research and to review progress regularly and openly 	 Open access to research data is an enabler of high quality research, a facilitator of innovation and safeguards good research practice There are sound reasons why the openness of research data may need to be restricted but any restrictions must be justified and justifiable Open access to research data carries a significant cost, which should be respected by all parties The right of the creators of research data to reasonable first use is recognised Use of others' data should always conform to legal, ethical and regulatory frameworks including appropriate acknowledgement Good data management is fundamental to all stages of the research process and should be established at the outset Data curation is vital to make data useful for others and for long-term preservation of data Data supporting publications should be accessible by the publication data and should be in a citeable form Support for the development of appropriate data skills is recognised as a responsibility for all stakeholders Regular reviews of progress towards open research data should be undertaken 	 We have a clear understanding of the institutional role and the purpose of KE, including recognition of the needs and interests of potential and current partness and beneficiaries, ensuring a commitment to inclusivity and equality. Staff, students and external organisations need to understand the aims and priorities of the institution's senior leaders and governors in relation to the whole range of KE activities undertaken by the institution Where appropriate, we have clear policies on the types of KE that we undertake and work with staff, students, collaborators and beneficiaries so that the policies are understood and operationalised We build effective relationships by having clear routes to access information engagement mechanisms and policies developed to suit the needs of a wide range of beneficiaries and partners working with institution as publicly funded bodies We make sure that our partners and beneficiaries understand the ethical and charitable regulatory environments in which our institution agerutes, including a commitment to inclusivity and equality, and we take steps to maximise the benefit to them within that context We recognise and trained appropriately to understand and undertake their roles and responsibilities in the delivery of successful KE We recognise and reward the achievements of staff and students meets of staff and students who perform high quality KE activities We undertake regular institutional and collective monitoring and review of our strengthening KE performance using this concordat and through regional, national or international benchmarks to inform the development and execution of a programme of continuous improvement s othat KE becomes more effective 	 UK research organisations have a strategic commitment to public engagement Researchers are recognised and valued for their involvement with public engagement activities Researchers are enabled to participate in public engagement activities through appropriate training, support and opportunities The signatories and supporters of this Concordat will undertake regular reviews of their and the wider research sector's progress in fostering public engagement across the UK 	 We will be clear about when, how and why we use animals in research We will enhance our communications with the media and the public about our research using animals We will be proactive in providing opportunities for the public to find out about research using animals We will report on progress annually and share our experiences 	 The rights of actual and potential victims/survivors of safeguarding incidents should be central, and there should be meaningful and effective pathways for support and referes Involvement of all research partners at the research design and planning stage is necessary to ensure that research questions and methodologies are contextually appropriate and do not pose an unacceptable risk of harm to researchers, participants or communities. Responsibilities and rewards in the research process should also be clearly identified and fairly shared Transparent practice, policy and procedures for safeguarding form a touchstone characteristic of good practice. Transparency requires clear and public safeguarding commitments and policies, as well as openness about incidents or breaches and the measures taken to address them, while upholding confidentiality to avoid secondary trauma or harm Accountability is a significant feature of approaches to address and prevent harm and underpins good governance in the research process must also reflect the distribution of legal responsibility, power and resources, as well as recognition of realities on the ground in often challenging contexts 	 The RD Concordat only has three principles, as follows: 1. Excellent research requires a supportive and inclusive research culture Healthy working environments attract and develop a more diverse workforce, impact positively on individual and institutional performance, and enhance staff engagement. 2. Researchers are recruited, employed and managed under conditions that recognise and value their contributions. Provision of good employment conditions for researchers has positive impacts on researcher wellbeing, the attractiveness of research careers, and research excellence. 3. Professional and career development are integral to enabling researchers to develop their full potential. Researchers must be equipped and flexible in an increasingly diverse global research environment and employment market. 	 Ensure that all technicians within the organisation are identifiable and that the contribution of technicians is visible within and beyond the institution Support technicians to gain recognition through professional registration and external awards schemes Enable career progression opportunities for technicians through the provision of clear, documented career pathways Ensure the future sustainability of technical skills across the organisation and that technical expertise is fully utilised" 	 Do not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist's contributions, or in hiring, promotion, or funding decisions Be explicit about the criteria used to reach hiring, tenure, and promotion decisions, clearly highlighting, especially for early-stage linestigators, that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published. For the purposes of research assessment, consider the value and impact of all research outputs (including datasets and software) in addition to research publications, and consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice When involved in committees making decisions about funding, hiring, tenure, or promotion, make assessments based on scientific content tabe than publication metrics Merever appropriate, cite primary literature in which observations are first reported rather than reviews in order to give credit where credit is due Use a range of article metrics and indicators on personal/supporting statements, as evidence of the impact of individual published articles and other research outputs T/Challenge research assessment practice that focuses on the value and influence of specific research outputs
organisations	Support researchers to understand and act according to expected standards, values and behaviours Develop procedures to ensure that research is conducted in accordance with standards of best practice; systems to promote research integrity; and transparent, robust and fair processes to investigate alleged research misconduct. Develop clear policies on ethical review and approval that are available to all researchers Identify a named senior member of staff to oversee research integrity and ensure that this information is kept up to date and publicly available on the institution's website Provide a named point of contact or recognise an appropriate third party to act as confidential liaison for whistle- blowers Develop clear, well-articulated and confidential mechanisms for reporting allegations of research misconduct Produce a short annual statement to demonstrate that the institution has met the commitments of the concordat	 Provide appropriate access to infrastructure systems and services to enable their researchers to make research data open and usable Provide guidance to individual researchers on the correct and relevant data management and storage methodologies for that research field Support the development of Data Management Plans Provide training in research data management Undertake regular reviews that monitor progress and register issues to be addressed 	 Regular self-assessment against the concordat and development of an improvement plan covering: regular reporting on KE activity to the institution's governing body benchmarked evidence of scope and scale of services (for example using KEF metrics) third-party evidence of the value of interventions, such as that derived from customer satisfaction surveys how KE policies are being promoted and followed across the institution the quality of service delivery derived from meeting management benchmarks or targets 	 Self-assessment to provide evidence of embedding public engagement with research within strategic goals, funding, planning cycles, formal governance, recruitment/promotion criteria, academic workload planning or within the responsibilities of senior managers. Signing up to the National Coordinating Centre for Public Engagement's Manifest for Public Engagement's Manifest for Public Engagement or participating in their Watermark scheme. Evaluation of quality and impact of activities and policies to inform practice. Submission of public engagement with research activities within ResearchFish. Inclusion of public engagement within UKRI grant applications. 	 With one year of signing, make a policy statement about the use of animals in research available online. Provide annual report detailing how they have enhanced their animal research communications over the previous 12 months. 	 Recognise their safeguarding responsibilities and declare their commitment to taking all reasonable steps within their power to prevent harm to those involved with research Respond to a series of questions to anticipate, mitigate and address potential and actual harms in the funding, design, delivery and dissemination of research Develop procedures and policies to deal with safeguarding issues and/ or whistle-blowing Provide training on safeguarding 	 Identify a senior manager champion and associated group with relevant representation from across the organisation with responsibility for annual review and reporting on progress. Ensure researchers are formally represented in developing and monitoring organisational efforts to implement the Concordat Principles. Undertake a gap analysis to compare their policies and practice against the Concordat Principles. Draw up and publish an action plan within a year of signing the Concordat. Set up processes for systematically and regularly gathering the views of researchers they fund or employ, to inform and improve the organisation's approach to and progress on implementing body or equivalent authority, which includes their strategic objective measures of success, implementation plan and progress, which subsequently is publicly available. 		 Be explicit about the criteria used to reach hiring, tenure, and promotion decisions

nd evaluation

Leiden Manifesto

2015

To guide the use of metrics in research evaluations

Diana Hicks, Professor in the School of Public Policy, Georgia Institute of Technology; Paul Wouters, Director of CWTS, Leiden University

1. Ouantitative evaluation should support qualitative, expert assessment

-

2. Measure performance against the research missions of the institution, group or researcher

3. Protect excellence in locally relevant research

4. Keep data collection and analytical processes open transparent and simple

5. Allow those evaluated to verify data and analysis

6. Account for variation by field in publication and citation practices

7. Base assessment of individual researchers on a qualitative judgement of their portfolio

8. Avoid misplaced concreteness and false precision

9. Recognize the systemic effects of assessment and indicators

10. Scrutinize indicators regularly and update them

Athena Swan

Charter

2005 revised in 2015 and 2021

To support and transform gender equality within higher education and research

AdvanceHE

2016

To improve the representation, progression and success of minority ethnic staff and students within higher education

AdvanceHE

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- We acknowledge that academia cannot reach its full potential unless it can benefit from the talents of all
- We commit to advancing gender equality in academia, in particular, addressing the loss of women across the career pipeline and the absence of women from senior academic, professional and support roles
- We commit to addressing unequal gender representation across academic disciplines and professional and support functions
- 4. We commit to tackling the gender pay gap
- We commit to removing the obstacles faced by women, in particular, at major points of career development and progression including the transition from PhD into a sustainable academic career
- We commit to addressing the negative 6. consequences of using short-term contracts for the retention and progression of staff in academia, particularly women
- 7. We commit to tackling the discriminatory treatment often experienced by trans people
- 8. We acknowledge that advancing gender equality demands commitment and action from all levels of the organisation and in particular active leadership from those in senior roles
- 9. We commit to making and mainstreaming sustainable structural and cultural changes to advance gender equality, recognising that initiatives and actions that support individuals alone will not sufficiently advance equality
- All individuals have identities shaped by several different factors. We commit to considering the intersection of gender and other factors wherever possible

Institutions need to be a charter member to apply for an Athena Swan award (Bronze, Silver and Gold level awards - which are awarded at both Institutional and departmental/faculty level).

Mandatory data requirements include providing:

- Numbers of academic staff by grade, contract type (fixed-term, open-ended zero-hours) and gender. At institution level, for PTO posts too.
- 2. Applications and appointments made in recruitment to academic and research posts, by grade and gender.
- Applications and success rates for academic and research staff promotion, by grade and gender.

A range of other information is collected as part of the application process, differing via level of award

Institutions are required to re-apply or upgrade the award every five years (from 2021).

*Does not include individual Department adoption rate

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- 1. Racial inequalities are a significant issue within higher education, Racial inequalities are not necessarily overt, isolated incidents, Racism is an everyday facet of UK society and racial inequalities manifest themselves in everyday situations, processes and behaviours
- 2. UK higher education cannot reach its full potential unless it can benefit from the talents of the whole population and until individuals from all ethnic backgrounds can benefit equally from the opportunities it affords
- 3. In developing solutions to racial inequalities, it is important that they are aimed at achieving long-term institutional culture change, avoiding a deficit model where solutions are aimed at changing the individual
- 4. Black, Asian and Minority Ethnic staff and students are not a homogenous group. People from different ethnic backgrounds have different experiences of and outcomes from/within higher education, and that complexity needs to be considered in analysing data and developing actions
- 5. All individuals have multiple identities, and the intersection of those different identities should be considered wherever possible
- REC currently has Bronze and 1 Silver level awards. Institutions start with a Bronze application before moving on to a Silver. The application form and process is the same for all levels, but the expectations are different Examples of requirements for a Bronze level award include establishing a Self-Assessment Team, surveying and consulting with ethnic minority staff and students, and including the results of engagement in the REC application form.

Institutions are required to re-apply for the award every three years with additional renewal requirements. Awards conferred (from February 2022) will be valid for five -years from the award submission deadline

None specified

Equality, diversity and inclusion

Race

Equality

Charter

Section 1

Background to this research

1.1 Policy and research context

Over the past two decades, various concordats and agreements – referred to as 'initiatives' in this report – have been developed to influence the culture and practice of research in the UK. These initiatives cover a wide range of topics from diversity, research integrity, data and knowledge exchange, to public engagement. They have grown organically, vary in scope and date of establishment, and have different approaches to adoption, compliance and oversight. No work has previously been done to understand the collective impact of these initiatives on research culture and the research environment, and this project represents a first step in this direction.

This research complements the UK Government's wider review of research bureaucracy,³ which seeks to identify opportunities to reduce unnecessary bureaucratic tasks in government and the wider sector, supporting our researchers to focus on research and related activities that contribute to a healthy research base.

Research culture is complex and differs within and between organisations and disciplines. It may be defined as the behaviours, values, expectations, attitudes and norms of research communities.⁴ The UK Government R&D People and Culture Strategy published in July 2021 highlights the importance of co-creating a vision of the culture for the research sector, together with a series of measures aimed to attract, retain and develop the best research talent across the UK research base.⁵ As part of this, it highlights the need to ensure changes to systems and processes to encourage a positive research culture and make the UK a great place for research and innovation.

³ https://www.gov.uk/government/publications/review-of-research-bureaucracy/review-of-research-bureaucracy-terms-of-reference

⁴ Royal Society (2018). Research culture: changing expectations conference report. Available at: https://royalsociety.org/topics-policy/projects/research-culture/changing-expectations/

 ⁵ BEIS (2021). R&D People and culture strategy: people at the heart of R&D. Available at: https://assets.publishing.

service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004685/r_d-people-culture-strategy.

While it is beyond the scope of this review to examine the wide body of literature that seeks to understand the various influences on research culture, several reports^{6,7,8,9,10,11} have highlighted the following factors:

- · levels of competition and individualism
- diversity in the funding system
- processes for research assessment
- job security and the need to develop a diversity of career pathways for researchers
- · career progression of technicians
- · valuing the contribution of allied academic staff

Overall, the initiatives explored in this review operate in a complex and fast-moving environment, and the factors above should be borne in mind as having the potential to shape how initiatives are perceived and their impact.

Furthermore, while COVID-19 was not a focus, it should be noted that the research took place during the pandemic. We anticipate this will have had a substantial influence on both research culture and the working environment over the past 18 months.

⁶ Vitae (2020). Research integrity: a landscape study. Available at: https://www.vitae.ac.uk/vitae-publications/ reports/research-integrity-a-landscape-study

⁷ Nuffield Council on Bioethics (2014). The culture of scientific research in the UK. Available at: https://www.nuffieldbioethics.org/publications/the-culture-of-scientific-research

⁸ Wellcome (2020). What researchers think about the culture they work in. Available at: https://wellcome.org/ reports/what-researchers-think-about-research-culture

⁹ Russell Group (2021). Realising our potential: backing talent and strengthening UK research culture and environment. Available at: https://russellgroup.ac.uk/media/5925/realising-our-potential-report_4-compressed. pdf?=section1

¹⁰ Wellcome (2021). The contribution made by the technical workforce to research culture. Available at: https:// cms.wellcome.org/sites/default/files/2021-06/contribution-of-technical-workforce-research-culture.pdf 11 The ARMA survey on research culture 2020. Available at: https://arma.ac.uk/wp-content/uploads/2021/03/ ARMA-Research-Culture-Survey-2020.pdf

1.2 Aims and objectives of this research

This review explored the perceived impact of a range of initiatives implemented within research organisations on the culture and environment in which UK research takes place. Insights from this research will be used to inform actions that funders, research organisations or others might wish to take to improve the future role and scope of these initiatives.

Specific objectives were to:

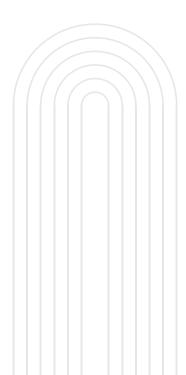
- Review the values, commitments, guidance, principles and statements used in the initiatives, including commitments and reporting requirements
- Assess the current take-up and trends in adopting the initiatives, in policies and practice
- Assess the perceived and experienced impact of the initiatives (individually and collectively) on research culture and the working environment, including any interdependencies on researchers
- Provide insight to support future decision making on the role and scope of such initiatives within Higher Education Institutions (HEIs) and Higher Education Providers (HEPs), Public Sector Research Establishments (PSREs) and other Independent Research Organisations

Importantly, the review did not aim to evaluate the initiatives themselves (that is to assess them against their stated objectives), but rather focus on the extent to which they influence a broader set of factors affecting research culture and the working environment – including talent, openness, reward, collaboration, diversity, resources and leadership, as well as understanding any administrative burden.

The 12 initiatives in scope for this review were selected based on those that require research organisations to implement a policy, report on compliance and/or develop an action plan.

They are:

- 1. Athena Swan Charter
- 2. Concordat for Engaging the Public with Research
- 3. Concordat for the Advancement of Knowledge Exchange in Higher Education
- 4. Concordat on Open Research Data
- 5. Concordat on Openness on Animal Research
- 6. Concordat to Support Research Integrity
- 7. Concordat to Support the Career Development of Researchers
- 8. Leiden Manifesto on Research Metrics
- 9. Race Equality Charter
- 10. San Francisco Declaration on Research Assessment (DORA)
- 11. Technician Commitment
- **12.** UKCDR Guidance on Safeguarding in International Development Research



1.3 Overview of approach

This review was conducted in three stages as detailed below. Our approach to each of these stages was informed by a short scoping phase where we worked with the Project Board to agree the definitions, comparative contexts and implications for the review design. As the review project progressed, a Challenge Group¹² provided constructive feedback on the research design, analysis and interpretation. Further detail on the research methodology is provided in Appendix A.

- Stage 1 Interviews with representatives involved in the development of each of the initiatives (the 'initiative owners') in addition to analysis of documentation related to initiatives and provided by initiative owners, to identify the values, principles, commitments and requirements of each of the agreed initiatives. The interviews also explored the perception of the initiatives' impact on research organisations.
- Stage 2 A survey of those in 'strategic influencer' and 'operational delivery' roles, defined as individuals involved in the oversight or implementation of initiatives in HEIs/HEPs and eligible Research Institutes.¹³ The decision was to focus on these roles specifically to maximise the depth of insight on initiatives while minimising the burden placed on participating organisations. Senior leaders (for example Pro Vice Chancellors) in organisations were asked to nominate staff to receive the survey.

A total of 510 respondents took part in the survey across 81 organisations between 5th July and 1st August 2021.

Stage 3 Case study interviews were held involving 27 members of staff across seven organisations, complemented by analysis of organisational documentation relating to the culture and practice of research, to review initiative impact upon culture and the research environment in more detail. The sample included six HEIs/HEPs (including two GuildHE members) and one Independent Research Organisation. Within each organisation, interviews were undertaken with three to five staff representing a mixture of strategic, managerial, administrative and researcher roles. Staff were selected through consultation with senior leaders at the organisations (for example the Head of Research Services). Case study interviews were undertaken between 22nd July and 27th September 2021.

¹² These included representatives from the project funders as well as representatives from 17 research organisations performing a range of roles in research and innovation.

¹³ Eligible Research Institutes included: (a) Independent Research Organisations; (b) Public Sector Research Establishments; and (c) Research Institutes as defined for UKRI eligibility for research and innovation funding: https://www.ukri.org/apply-for-funding/before-you-apply/check-if-you-are-eligible-for-research-and-innovation-funding/who-can-apply-for-funding/#contents-list. Further detail can be found in the Glossary.

1.4 Limitations of this review

This review aimed to understand, but not to evaluate, the impact of 12 initiatives on research culture and the working environment in the UK. There are several limitations of the review which are detailed below and should be understood in interpreting the results of this research.

The review was undertaken during a period when the COVID-19 pandemic had significantly impacted the working environment of research organisations. This may have influenced both people's willingness or capacity to participate in the review as well as their responses to questions on culture and the working environment.

The review only included individuals who were involved in the oversight or implementation of initiatives in HEIs/HEPs and other eligible Research Institutes. These individuals were identified and nominated by senior leaders within their organisations because they held significant implementation roles. The survey results are therefore not representative of different perspectives among any organisation's research workforce.

Case study interviews were undertaken with individuals who had either completed our survey and agreed to further contact or been nominated by a senior leader. Therefore, the case study interviews also did not involve a sample which was fully reflective of any organisation's research workforce. This lack of generalisability and the need to maintain anonymity at an individual level meant that we developed anonymised vignettes rather than attributed case studies. Additionally, within the fieldwork timescales we were unable to confirm the inclusion of a PSRE within the case study sample.

Different ways of implementing the initiatives or measuring the impact, together with the variable levels of staff awareness within organisations, also limited our ability to assess their full contribution to research culture and the research environment.

Nonetheless, this review does present a range of insights on the benefits, challenges and opportunities for stakeholders of the initiatives that we hope provide a foundation for future discussion in the sector.



Section 2

Overview of the initiatives

18

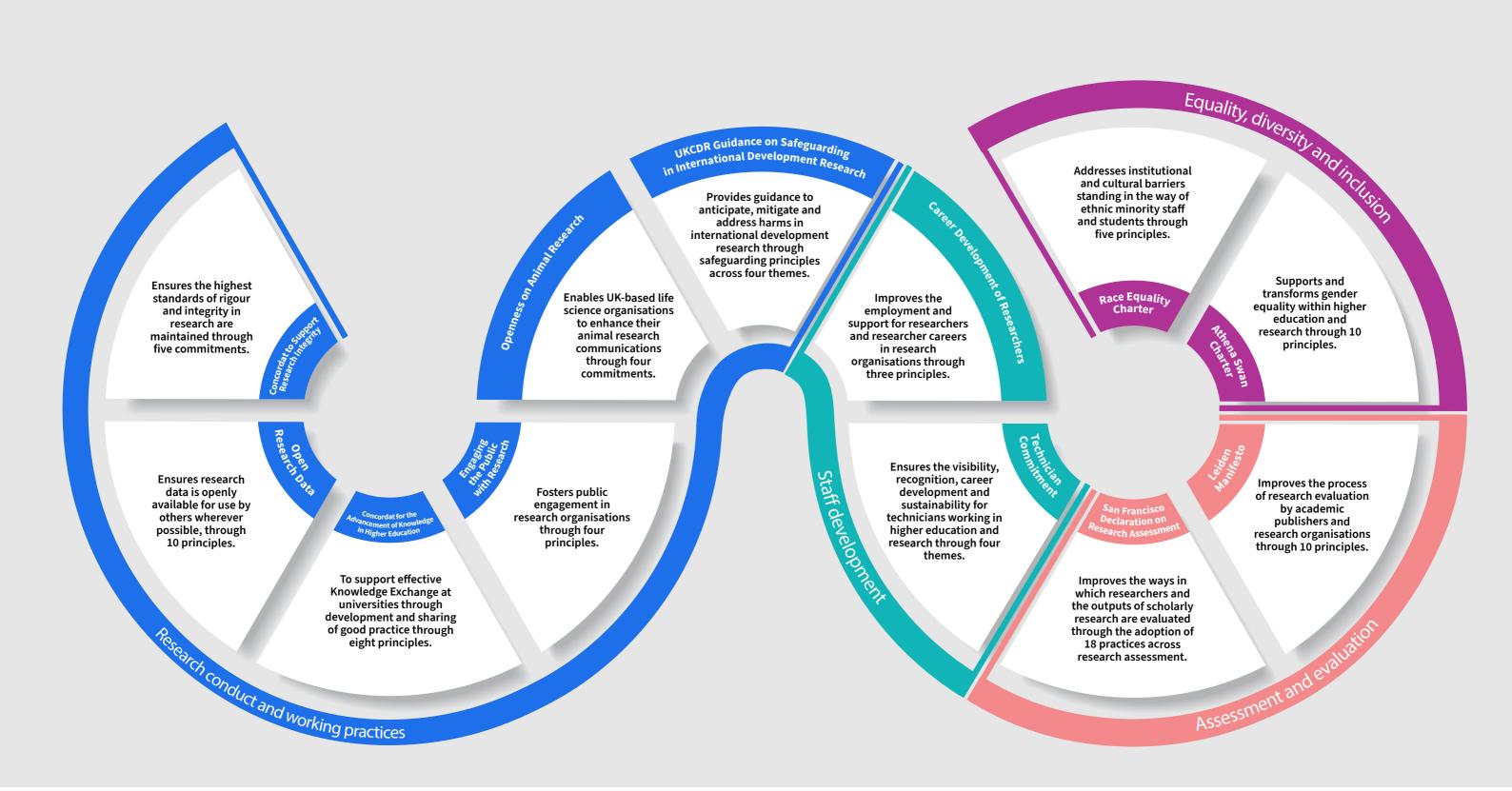


Based on the documentary review, the key features of the initiatives, individually and collectively, may be summarised as follows.

The initiatives cover a wide range of topics, have grown organically and vary in scope. Many apply across the research landscape, but one is limited to a specific area (research involving animals) and another to research in a specific context (international development). Despite their breadth and non-equivalence, initiatives can be seen to influence four domains:

- research conduct and working practices
- staff development
- research assessment and evaluation
- equality, diversity and inclusion (EDI)

Figure 2 summarises the scope of the initiatives, highlighting their primary goals, the number of principles, commitments or practices that support each goal, and their respective domain of influence. Further detail on each initiative, summarising the key principles and requirements, is provided in Figure 1 (see page 10).

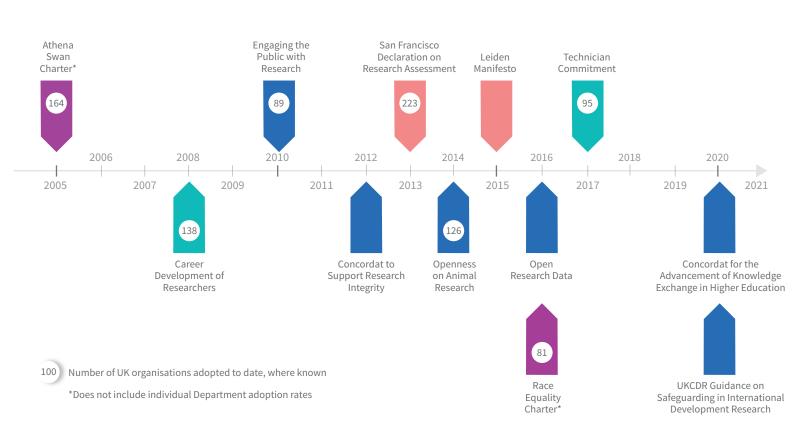


The documentary review identified that six of the initiatives focus on research conduct and practice, of which three focus more on the process of research and three on outreach and safeguarding with various audiences. The remaining six initiatives relate to staff development, assessment and evaluation, and EDI.

Through the documentary review, there can be seen to be a good spread of initiatives focusing across both the 'performance-orientated' aspects of research culture (for instance, addressing the cultural impact of research metrics) as well as people, and the skills and ways of working needed for productive research cultures to flourish (such as collaboration, inclusion, diversity and integrity).

The initiatives also have different levels of maturity. Figure 3 shows a timeline for the establishment of the initiatives, together with the number of organisations that have adopted them since their inception as identified in the documentary review. Several of the initiatives within the scope of this project are guidance and therefore do not involve the monitoring or collection of data on adoption.

FIGURE 3: Concordats and agreements timeline



In terms of administration, the initiatives have different approaches to adoption, compliance and oversight as identified in the documentary review. Broadly, initiatives ask organisations to undertake at least one of the following actions for adoption and compliance purposes:

- become a signatory
- develop a **policy or plan** to help implement the initiative within the organisation
- write an **annual report** to demonstrate adoption or compliance
- provide administrative data for benchmarks and to measure outcomes
- provide training to staff
- engage in communication or outreach with external audiences

Figure 4 summarises these requirements for each initiative.

FIGURE 4: Requirements of the initiatives

	Concordat to Support Research Integrity		(=				.
Research conduct and working practices	Open Research Data		(III)				.
	Concordat for the Advancement of Knowledge Exchange in Higher Education		(III)		2		.
onduct and	Engaging the Public with Research				2		.
ƙesearch co	Openness on Animal Research		(III)				9
Ľ	UKCDR Guidance on Safeguarding in International Development Research		(III)				
aff pment	Career Development of Researchers		(III)		2		
Staff development	Technician Commitment				2		
Assessment and evaluation	San Francisco Declaration on Research Assessment		(III)				
Assessm evalu	Leiden Manifesto		(III)				
Equality, diversity and inclusion	Athena Swan Charter		(III)		2	M	9
	Race Equality Charter		(E	¥II	2		9
		Signatory	Policy and / or plan	Annual Report	Administrative data	Training	Public and / or stakeholder information or outreach

It should be noted that, through the documentary review, the **level of detail required to adopt or comply with each initiative can be seen to vary significantly** for each of the actions above. For example, integration into plans or policies ranges from light touch (as for the Leiden Manifesto on Research Metrics) to relatively substantial (for the Concordat to Support Research Integrity).

The documentary review also indicates no initiatives had KPIs to measure change and impact on the research sector overall. This could be attributed to two factors; their focus on policy and practice at an organisational (sometimes unit) level, and the complexity in measuring culture change more broadly. Moreover, and as will be explored later, there were extremely varied responses to these requirements by organisations, together with structures and processes through which initiatives were adopted.

Through the documentary review, **the administrative burden can be seen as not only a function of what organisations have been asked to do to adopt and comply with an initiative, but also a factor in how organisations have responded.** The exemplar of this is the role of champions. There is no formal requirement across the vast majority of initiatives for a champion to be in place, yet (as noted in our qualitative case study interviews) champions are routinely engaged to help drive the adoption of initiatives within organisations.

The varied 'compliance' and requirements across the initiatives to help organisations measure change could in part be influenced by the different levels of initiative maturity and scope identified in the documentary review. Together with the diverse ways organisations respond to these initiatives, the administrative burden on organisations varies significantly.



Section 3

Research culture and the working environment

As noted earlier, all individuals invited to respond to our survey had been identified by senior leaders within organisations based on their having direct involvement supporting research culture and the implementation of the initiatives. The views expressed by survey respondents are therefore a representation of the views of relatively senior strategic staff and those in operational roles rather than those of the wider research community. To better understand the perceived impact of the initiatives on research culture and the working environment, the survey first explored how staff working within research organisations felt about their research culture and working environments. Detailed findings on the wider perceptions of research culture by survey respondents are given in Appendix C.

Key findings are as follows.

Views toward research culture

- · Survey respondents saw themselves as working within a collaborative culture (83%) and an organisation that inspires, educates and builds public trust and confidence in research (80%).
- The culture around research was seen to incentivise the 'right behaviours' by three in five survey respondents (60%), while just over half felt it supported the delivery of good research (54%) and the working environment promoted a good work–life balance (52%). One-third of survey respondents highlighted a challenge in attracting and retaining the best research talent (34%).
- Four in five survey respondents (78%) indicated that there had been a focus on improving research culture and/or the environment in the past two years;¹⁴ and half felt that both research culture and the working environment had improved during this period (50%). Of these, one in five felt that only research culture had improved (22%), while one in twenty felt that only the working environment had improved (6%).
- Four in five survey respondents agreed that rigour of results is considered an important research outcome by their organisation (80%), and one-third agreed that their organisation placed more value on metrics than research guality (68%).

Perceived influences on research culture

- Two in five survey respondents felt the level of administration in their organisation's research environment stifled the focus on high-quality research (38%).
- Survey respondents felt that people are the key influence on driving a positive research culture and working environment, with the following groups seen as either very or guite influential: the research community (91%), research team leaders (90%), other colleagues (86%) and the Vice Chancellor or other leaders (81%). Other key influences included organisational strategy (86%), funders (86%) and the REF (77%). Half of respondents felt the REF was very influential (50%), the second highest score after research team leaders (51%).
- 83% of survey respondents felt the initiatives were either very influential (28%) or quite influential (55%). HEIs/HEPs were more likely to report both the initiatives and the REF as being influential than non-HEIs/HEPs.¹⁵

¹⁴ A two-year period was agreed with the Project Board reflecting a balance between an individual's time in role, policy changes and time taken for potential cultural impact.

^{15 28%} of non-HEIs/HEPs reported that the REF was either 'very influential' (6%) or 'slightly influential' (22%).

In our survey, exploratory statistical analysis shows a strong correlation between a positive research culture¹⁶ and several statements including 'the research culture and the working environment supports my ability to do good-quality research', 'the working environment promotes a collaborative culture' and 'my organisation inspires, educates and builds public trust and confidence in research'.¹⁷

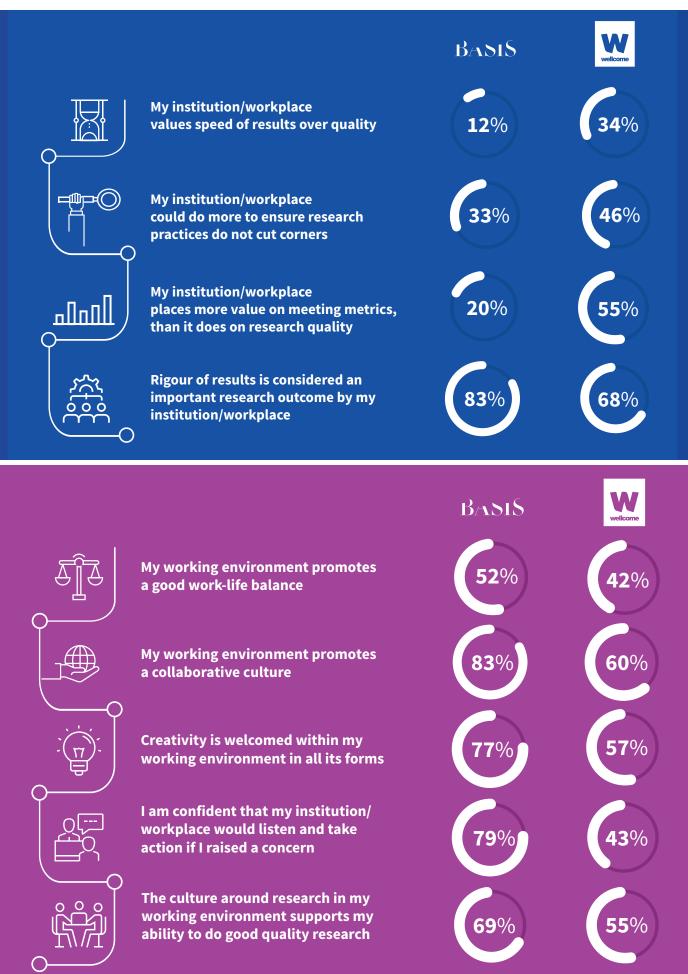
When comparing our survey results with the Wellcome survey, which involved self-selecting researchers¹⁸ rather than those our survey targeted in pre-identified strategic or operational roles, respondents to the Wellcome survey are significantly less positive across all comparable metrics on research culture and the research environment (see Figure 5). This suggests some **researchers appear less positive towards research culture and the working environment than those with strategic or operational responsibility for initiatives,** though this may be influenced by several factors: different sampling approaches adopted in the two surveys, the roles targeted in this survey and how culture may impact them, and timing differences with the Wellcome research undertaken pre-COVID in 2019.

¹⁶ Q: How do you think your institution/workplace compares to others (nationally) in regard to encouraging good research culture. A positive culture comprised a score of 5–7 on a 7-point scale, where 7 = Performs much better, 4 = about the same and 1 = performs much worse

¹⁷ Given the very wide range of influences on research culture, plus the limitations of the range of data collected through our survey, it was not possible to undertake a meaningful analysis on the statistical relationship between the adoption of initiatives and perceptions of research culture overall.

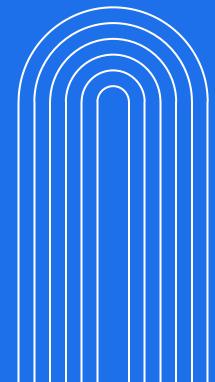
¹⁸ This was an international, self-selecting survey, which included researchers in industry and 30% from biomedical disciplines, so not directly comparable. The full breakdown of the Wellcome survey respondents can be found here [https://cms.wellcome.org/sites/default/files/what-researchers-think-about-the-culture-they-work-in-quantitative-research.pdf].

FIGURE 5: Results for comparable statements on organisational culture and working environment in the Basis survey for this review (n 510) and the Wellcome survey (n 4,267)



Section 4

The adoption of initiatives within organisations



30

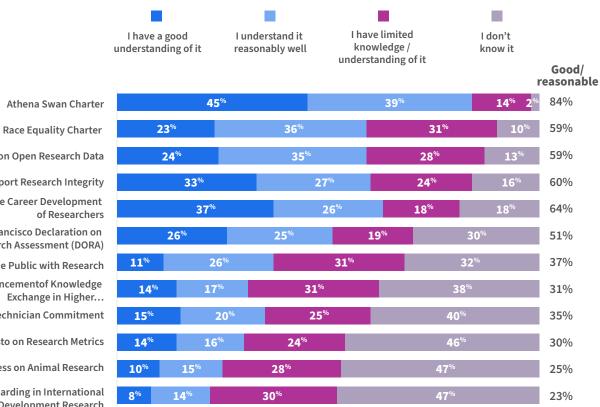
4.1 Awareness, familiarity and perceived levels of adoption of initiatives

Survey respondents were asked about their levels of awareness of initiatives, which initiatives their organisation had adopted and the extent to which these had been adopted within the organisation.¹⁹ In interpreting the findings reported here, it should be noted that there were substantial differences in awareness and knowledge between individuals within the same organisation. This reflects both differences in the ways in which initiatives have been operationalised and communicated within organisations and the different levels of maturity across initiatives. The figures reported for levels of adoption among survey respondents also differ from those reported by initiative owners.

As illustrated in Figure 6, survey respondents reported the highest level of awareness for the Athena Swan Charter (84% reporting a 'good' or 'reasonable' understanding), followed by the Concordat to Support the Career Development of Researchers (64%), the Concordat to Support Research Integrity (60%), the Race Equality Charter (59%), the Concordat on Open Research Data (59%) and DORA (51%).

¹⁹ Statistics on the reported take-up of initiatives relate to the point in time at which the survey was undertaken (July/August 2021).

FIGURE 6: Awareness of initiatives [Base: n 510]



Concordat on Open Research Data **Concordat to Support Research Integrity** Concordat to Support the Career Development of Researchers

> San Francisco Declaration on Research Assessment (DORA)

Concordat for Engaging the Public with Research Concordat for the Advancementof Knowledge Exchange in Higher... **Technician Commitment**

Leiden Manifesto on Research Metrics

Concordat on Openness on Animal Research

Guidance on Safeguarding in International **Development Research**

> In contrasting HEIs/HEPs with non-HEIs/HEPs, with the exception of the Technician Commitment and the Concordat on Openness on Animal Research, survey respondents from HEIs/HEPs were significantly more likely across all other initiatives to report higher levels of awareness. Significant differences were found across the initiatives, as detailed in Table 1.²⁰ This may, in part, be illustrative of the differences between initiatives in what type of organisations they are intended to support, or where the largest concentration of their community are situated.

20 Within HEIs/HEPs there were also several differences in the levels of awareness of initiatives between those survey respondents in TRAC Peer Group A versus others (see Appendix D4).

TABLE 1: Significant differences in awareness of initiatives between HEIs/HEPs and non-HEIs/HEPs [Base: n 510; note this only includes those initiatives where statistically significant differences were found between HEIs/HEPs and non-HEIs/HEPs]

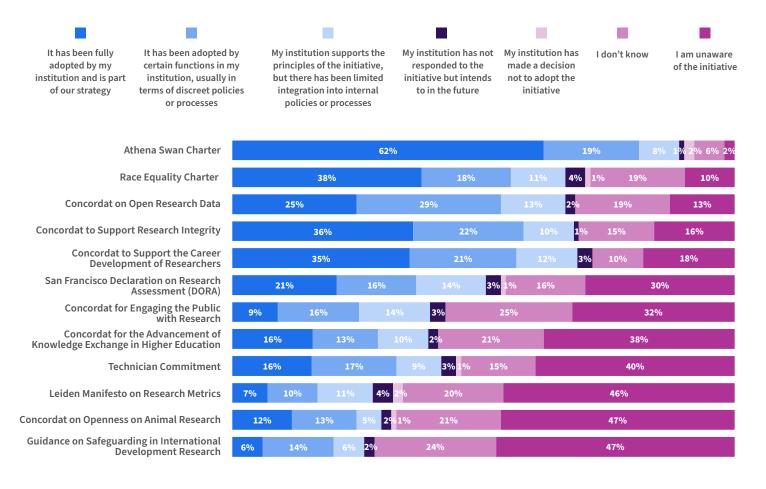
Initiative	HEI/HEP adoption (n416)	Non-HEI/HEP adoption (n94)
Concordat to Support Research Integrity	88%	66%
Concordat to Support the Career Development of Researchers	87%	60%
San Francisco Declaration on Research Assessment (DORA)	75%	46%
Concordat for the Advancement of Knowledge Exchange in Higher Education	69%	29%
Leiden Manifesto on Research Metrics	60%	29%
UKCDR Guidance on Safeguarding in International Development Research	57%	34%

Survey respondents were then asked about the extent to which different initiatives had been awarded or adopted by their organisation (see Figure 7).

The most adopted initiative was the Athena Swan Charter, which was reported as being fully or partially awarded/adopted by 81% of survey respondents, followed by the Concordat to Support Research Integrity (58%), the Concordat to Support the Career Development of Researchers (56%) and the Race Equality Charter (56%). Other initiatives were reported as being fully or partially awarded/adopted by between one-fifth and two-fifths of survey respondents. Of the initiatives with the lowest levels of reported adoption, two have specific remits rather than covering all research (the Concordat on Openness in Animal Research and the Concordat for the Advancement of Knowledge Exchange in HE)

33

FIGURE 7: Perceptions of how initiatives have been adopted (or awarded) in organisations [Base: n 510]



In the survey, there were some significant differences in which initiatives were reported as awarded/adopted between HEIs/HEPs and non-HEIs/HEPs as detailed in Table 2. There were also significant differences between those respondents in TRAC Peer Group A and others,²¹ with those in Peer Group A generally reporting higher levels of award/adoption (see Appendix D5).

34

²¹ Given the size and complexity of the HEI/HEP population we conducted analyses of five KEF clusters to try to achieve greater nuance in the data; however, this excluded non-English organisations, and it clustered organisations predominantly in relation to knowledge exchange performance only. We therefore opted to analyse the data according to the six TRAC Peer Groups, which correspond to different levels of research income. The Transparent Approach to Costing (TRAC) is a methodology developed with the higher education sector to help them cost their activities.

TABLE 2: Significant differences in levels of respondents reporting the full adoption (or award) of an initiative between HEIs/HEPs and non-HEIs/HEPs [Base: n 510; note this only includes those initiatives where statistically significant differences were found between HEIs/HEPs and non-HEIs/HEPs]

Initiative	HEI/HEP adoption (n416)	Non-HEI/HEP adoption (n94)
Concordat to Support the Career Development of Researchers	48%	5%
Athena Swan Charter	66%	52%
Race Equality Charter	44%	27%
Concordat on Openness on Animal Research	20%	34%

4.2 Influences on the adoption and implementation of initiatives

Based on the views of strategic and operational staff in the case study interviews, initiatives were reportedly adopted by organisations because:

- they felt obliged to sign up to initiatives (for example due to funder expectations, funder conditions or reputational risks of not signing up), and/or
- the initiatives aligned with the priorities of senior leadership

The case study interviews further highlighted how, for some, adoption was also based on the anticipated return on investment of adoption. The Athena Swan Charter, the Concordat on Research Integrity, the Concordat on Open Research Data, DORA, the Race Equality Charter and (where relevant) the Concordat on Openness on Animal Research were seen as important to adopt as a signal to the sector overall. This was particularly the case in more research-intensive HEIs/HEPs.

"

Any university cannot not be seen to sign up to these concordats. Our research is dependent on funders, so we need to be seen to be, by the funders, supporting in our actions the spirit of those key concordats. So, I think they are important in driving change, but I think most gain is made where the concordats and the action plans that we write to deliver on these are consistent with our values. **Strategic influencer, HEI/HEP**

In the case study interviews, the Concordat to Support the Career Development of Researchers and the Technician Commitment were also viewed as important to adopt due to alignment with internal (rather than external) priorities, particularly in supporting a clear career pathway for such staff.

In the case study interviews, organisations described having implemented initiatives in very different ways depending on several factors including:

- the importance of research relative to teaching within the organisation
- existing processes and decision-making structures within the organisation
- the perceived administrative burden to comply with the initiative
- the level of resources (funding and staff) to support implementation
- · the requirements specified by the initiative itself

The capabilities, resources and infrastructure that supported the implementation of initiatives were identified in the case study interviews as follows:

- senior leaders with a remit to manage and support research (such as Pro Vice Chancellors)
- core funding to put toward roles that support the coordination and implementation of initiatives
- administrative support for research processes that relate to initiative (such as meeting administration, data collection and compilation, publishing data/outputs)
- well-established networks where researchers can share ideas and collaborate across shared areas of interest

Overall, research-intensive organisations were seen in the case study interviews to have greater existing resources and administrative infrastructure to support the implementation of initiatives. For smaller and less research-intensive organisations, implementation was more piecemeal and often involved focusing down on a smaller number of initiatives or actions. Below we have provided two vignettes (Organisations A and B). These reflect the experiences of staff from organisations that vary both in research-intensity and supporting infrastructure. The organisations which form the basis for these vignettes are not named to maintain the anonymity of interviewees. Detail on the selection, analysis and reporting process for the deep-dive case studies is provided in Appendix A4.

Organisation A Implementing concordats in a less research-intensive organisation

"

Every Concordat has huge implications on small specialists in terms of the infrastructural limitations of those institutions, and the demands that reporting places on them.

Strategic influencer, GuildHE organisation

In smaller organisations and those with less of a research-intensive culture, the primary challenge in adopting initiatives was one of resources and resource prioritisation. Organisation A see themselves as supportive, socially engaged and practice-orientated, ambitious and able to punch above their weight. They were established as a teaching organisation, their research culture was described as being in its infancy and they have fewer than 50 researchers.

Up until very recently, the view among senior leadership was that research was both separate and secondary to teaching and that it should financially support itself. With some successes in the 2014 REF and new leadership, there is increased support for research, but the systems, processes and structures currently in place are not designed to support research. Initiatives are seen to be helpful in giving weight to strategic decisions and/or providing a standardised reference point for influencing research practice or culture. However, there is not seen to be sufficient people, expertise or wider infrastructure to implement and monitor the range of initiatives that may be of relevance, particularly those that come with policy, plans or reporting requirements (including administrative data). Consequently, the initiatives prioritised are those which they feel represent the organisation in the best light to funders or support their REF submission. They are led by a small group of senior research leaders with postdoctoral researchers providing administrative support.

"

My role doesn't come with the luxury of having the time to invest in reading these things. And my day-to-day work doesn't require it of me. We are fighting fires. That is what we do.

Strategic influencer, GuildHE organisation

While Organisation A is a signatory to only a small number of initiatives, others had been implicitly incorporated into policies and practices and have benefited the organisation.

"

Whilst these principles are relevant and pertinent, and we absorb them as best we can, we can't sign up to all the concordats, because we don't have the infrastructure or the funding mechanisms to enable us to do that in a coherent way.

Strategic influencer, GuildHE organisation

Organisation B

Implementing concordats in a research-intensive organisation

"

Because our science is at the cutting edge the Board and our Directors expect our support functions to reflect that, so we should be ahead of the curve on research culture as well. We may not always succeed, but that is the intention.

Operational delivery, Research Institute

Organisation B is an independent Research Institute dedicated to undertaking high-quality scientific research and working with collaborators nationally and internationally. The nature of their research and the legal and regulatory frameworks within which work is conducted mean that research integrity is key to their reputation and credibility. The focus on excellence in scientific processes is seen to have shaped the culture and the working environment. This is supported by a top-down thematic research programme, mid/long-term core funding of researchers, a centralised support team and individual programmes supported by teams of research administrators headed by a Research Manager.

Strategic and operational stakeholders see initiatives as helpful to the extent to which they align with existing practices, and in some cases push organisations to improve their practice. For Organisation B, initiatives were initially adopted without significant thought, as their existing practices were perceived to meet or exceed minimum requirements (for example of Open Data and DORA). Over the past few years, they have begun to be more discerning as to which initiatives to become signatories to, ensuring that they align with their publicly stated impact framework and good research practice guidelines. When committing to an initiative which seeks to improve on existing practices – as they have done with Athena Swan, the Technician Commitment and the Concordat on Openness on Animal Research – they are able to draw on core funding to appoint dedicated staff to lead on implementation and work through consultative processes with a range of staff where possible. Where initiatives have been aligned to organisational priorities and interpreted at a local level, they have had the greatest impact.

"

The impact and multiplication factor of the Technician Commitment and what it has changed in the perception of that community has been hugely beneficial to the organisation and there is a real sense of achievement there. Strategic influencer, Research Institute

Strategic influencer, Research Institute

4.3 Administration of initiatives

Generally, within our case study interviews, participants in more operational roles saw initiatives in isolation from one another. Many were unaware of the full range of initiatives adopted in their organisation,²² with knowledge limited to those where they were directly involved in their implementation. Administratively, it was common for initiatives to be overseen by different teams in different parts of the organisation, with limited strategic connections made between either the aims or the processes involved.

In turn, **the direct awareness of initiatives by research staff was felt to be very low** in the case study interviews, largely because initiatives were seen to have been folded into other organisational policies and processes which were already one step removed from their day-to-day roles.

"

I think it is difficult to tell what drives university strategy and higher-level policy and the links with these initiatives are therefore very difficult to see 'on the ground' where they are translated into institutional policy, training and evaluation. I am aware of a focus on race and equality and have attended training but I am not aware of the way it links with other Charters or how the policies are linked (if they are indeed linked).

Researcher, HEI/HEP



Probably very few people in the university would really know what [concordats] say. They might be aware of their existence, they may have heard of some of the names before, but I think very few would actually know what they say, why they say it, and how it can be useful to you, with the exception of maybe one or two individuals in the university, who either might have a passion for developing research culture to be more inclusive and helpful, or it might be part of their institutional role.

Strategic influencer, HEI/HEP

²² This reflects both the survey results and differences between these results and Initiative Owners' reporting of adoption levels.

This aligns with the views of initiative owners interviewed in this research, that most initiatives were more likely to be familiar to those in strategic, managerial or operational roles, and that the collective awareness of benefits for individual researchers (rather than the research processes as a whole) was less clear. Again, this was seen to be an artefact of initiatives being translated and subsumed into wider organisational policies and practices.

In the case study interviews, while initiatives were seen to have different objectives, the processes through which they were administered were similar and created pressure in smaller organisations (where responsibility fell on the shoulders of a few individuals) and inefficiency in larger organisations (where responsibilities were spread across a wide group of staff, but with limited strategic coordination).

"

The concordats tend to imagine one type of institution and forget the ecology of higher education in Britain and that there's a number of specialist institutions which are small, bespoke, for whom these concordats are relevant, but the mechanisms may be more difficult to work.

Strategic influencer, GuildHE

41

There were, however, examples of organisations identified through the case study interviews which looked to take more of a proactive and unified approach to research culture (and the role of initiatives in supporting this). One example can be seen in Organisation C, which had developed an overarching strategy for implementing initiatives and coordinating resources. This typically occurred when senior leaders had a clear vision for improving research culture, prioritised which initiatives to focus on and minimised the burden that could result from multiple processes and structures running in parallel.

Organisation C Strategic implementation of initiatives in a small HEI

"

There is a bit of the teaching versus research tussle. And so you get some people higher up, who are who really understand that research underpins everything we do. And then there are people who are mostly concerned with bums on seats, and how many students have we got?

Researcher, small HEI

Organisation C are a teaching-focused organisation with less than 2,000 students. They have a relatively small number of researchers as compared with other HEIs, a limited history of conducting research and minimal infrastructure for supporting research. Nurturing a research culture in such an environment is challenging, as resources tend to be focused on increasing student recruitment and enhancing their experiences and outcomes. That said, half of the organisation's staff are recognised as research-active, and they feel they have a dedicated and passionate community of researchers.

The initiatives were perceived to be helpful by providing direction and instruction for shaping research culture. They also provided 'legitimacy', as they were often driven by key external research influencers (such as funders) and provided staff with the 'licence' to campaign for attention and resources to be put towards their adoption.

"

I think certainly it's given us more ammunition to talk about [research culture] as something that's important and meaningful and valuable in the university ... And I think these Concordats at least have supported the legitimisation of that kind of work as important to the university. I hope in the long term when HE is in a slightly better position this will lead to more support.

Operational delivery, small HEI

Organisation C have signed up to most of the initiatives that were in the scope of this review, and for these they do the essentials. However, as a small organisation, key staff have also taken the strategic decision to invest more resources in the concordats on Research Integrity, Career Development of Researchers, Open Research Data and Knowledge Exchange, with the aim that this will reap dividends and make a tangible positive impact.

"

So yeah, I would say we've prioritised some, but we've prioritised them on the grounds of what will make the biggest difference to us you know, by investing in pushing these ... you have to pick wisely.

Strategic influencer, small HEI

Furthermore, despite lack of resources, there were benefits seen in being a small organisation adopting the initiatives. For example, as the team is lean and centralised, the communications between members is effective and it helps to identify areas of mutual interest across initiatives and drive efficiencies.



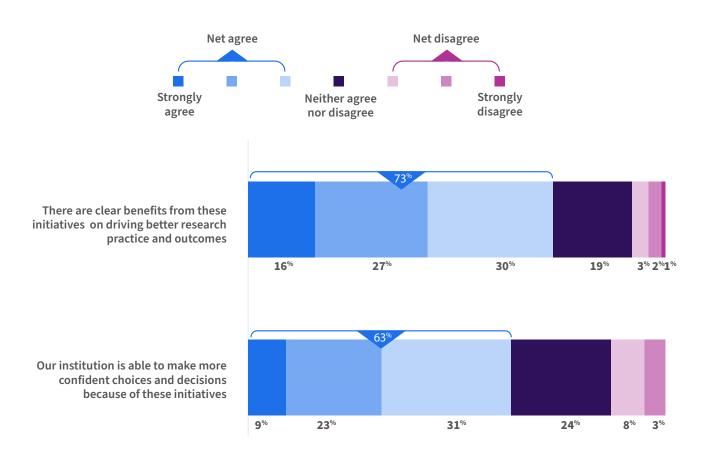
Section 5

Views on the impact of initiatives

5.1 The collective impact of initiatives

Three-quarters of survey respondents agreed initiatives had benefits in driving better research practice and outcomes (73%; of which 30% reported only weak agreement). Almost two-thirds of survey respondents agreed initiatives enabled their organisation to make more confident choices (63%; of which 31% reported only weak agreement) – see Figure 8.

FIGURE 8: Perceived benefits of initiatives [Base: n 510]



Where survey respondents did identify 'clear benefits from these initiatives on driving better research practice and outcomes', they were asked to provide further details.

The primary benefit of initiatives reported by survey respondents was the development of common standards, structures and principles to support high-quality research (33%).

Additionally, initiatives were seen by survey respondents to:

- provide common strategic goals for the sector (16%)
- promote research integrity and accountability (15%)
- break down silos and encourage collaboration (13%)
- improve awareness of issues (12%) and specifically those related to EDI (10%)
- improve focus on careers and development (11%)

These benefits were also highlighted in the case study interviews. Specifically, initiatives were perceived as promoting a positive working environment and driving a positive research culture by reflecting principles of good practice across a range of important aspects of the research process. They could also encourage consultation and provide a mandate for action on important issues at all levels in an organisation.

"

These initiatives seek to establish and promote the kind of behaviours which engender open, transparent, reproducible, ethical, justifiable research practice and outcomes. They enable those considering a research career to see pathways into, through and out of it, having a positive influence and making lasting change for society along the way.

Operational delivery, HEI/HEP

"

It promoted a good solid discussion across diverse groups – from leadership down to researchers – focused on understanding the principles and how they apply to us, and deriving concrete action plans for implementation and monitoring. This underpins positive movement on research culture and practice – if supported by the institution for the longer term.

Operational delivery, HEI/HEP

Initiative owners also echoed the above views during their interviews, highlighting the primary benefit of initiatives as signalling issues of importance to research culture and practice across higher education specifically. In a very complex policy arena, initiatives were seen to act as a beacon, enabling a collective focus on significant issues and providing a common framework to commit to improvements. Additionally, the HEI/HEP sector was viewed as very diverse (both across and within organisations) by initiative owners, making the development of common governance and administrative standards challenging. Initiatives were seen to play a significant role in highlighting good practice and encouraging shared learning and capability building within organisations.

"

It has helped provide a reference point to smaller institutions and those based more in arts and humanities. It has helped to define a set of cross-disciplinary expectations to translate into local policies – though it's hard to delineate the impact of the concordat from other [related] policies.

Initiative owner

In the case study interviews, for HEIs/HEPs with lower levels of research income and less experience undertaking research (relative to teaching), the initiatives were reported by interviewees as having helped to develop policies and procedures for research that reflect good practice, even when not formally adopted.

"

The Concordats have allowed us to articulate what we do in very precise ways. As I said, we're combative. So it's actually extremely helpful, where there may be some parts of the organisation that are pulling in a different direction. We can point to the Concordat. And we absolutely must meet the obligations of these principles. You know, regardless of what we signed up to or not, this is the kind of benchmark.

Strategic influencer, GuildHE

For organisations with a longer history in undertaking research and/ or larger research resources, the initiatives were reported by case study interviewees as being used more as a reference point to validate and refine existing policies and processes.

In the case study interviews, initiatives were also seen to provide an important focus on 'grassroots' issues that affect the personal development of staff, including gender and race equality and career progression, encouraging senior leaders to commit greater resources and attentiveness to these issues.

"

They provide frameworks for those working in EDI to spread issues throughout the organisation. They raise the profile of these issues and an element of external scrutiny of what HEIs are doing or not doing. They serve as a rallying point to get community involvement in the issues.

Strategic influencer, HEI/HEP

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The different initiatives, while imperfect, provide frameworks and guidance to help drive improvements across career development and inclusivity, breaking down elitist barriers and power imbalances that have been constructed and reinforced over decades (if not centuries). They help improve diversity (slow as this may be) and therefore boost the quality and breadth of thought, enquiry and experience, all contributing to better research practice and outcomes.

Strategic influencer, HEI/HEP

Aligned to the above benefits, the initiative owners highlighted a range of other perceived positive impacts of initiatives on staff within adopting institutions including:

- a safe space to talk about any concerns in the research process
- greater visibility of different groups (such as technicians) or issues (such as equality and diversity)
- shining a light on the systemic barriers that may prevent those involved in the research process being fully recognised and reaching their potential
- access to resources, training and (for those initiatives with a specific people focus) a more structured approach to career development
- an ability to attract talent

5.2 The impact of individual initiatives

Within the survey we explored the influence of each of the initiatives relative to how they were implemented. In Appendix B we provide detailed findings for each initiative, drawing on quantitative data from the survey responses and feedback gathered both from the qualitative case studies and from open comments in the survey. In reviewing these findings, it is important to acknowledge the challenge in decoupling the impact of initiatives from wider organisational policies, strategies and practices and wider influences on culture.

Summary findings are as follows.

Each initiative was seen to have a net positive effect on research culture and the working environment by respondents to the survey, (with the exception of the Concordat for the Advancement of Knowledge Exchange in Higher Education, which is within its first year of development meaning it is likely too early to assess its full impact) (see Table 3).

TABLE 3: Summary of net agreement on relative impact of different initiatives[Base varies by initiative²³]

Initiative	Positive effect on research culture	Positive effect on working environment	Burden outweighs benefits	Ease of measuring success
Concordat to Support Research Integrity (n 119)	64%	60%	13%	24%
Concordat on Open Research Data (n 120)	68%	47%	15%	45%
Concordat on Openness on Animal Research (n 116)	60%	54%	14%	33%
Concordat to Support the Career Development of Researchers (n 117)	65%	67%	15%	32%
UKCDR Guidance on Safeguarding in International Development Research (n 116)	54%	49%	12%	17%
Technician Commitment (n 118)	60%	72%	13%	29%
Concordat for the Advancement of Knowledge Exchange in Higher Education (n 116)	49%	47%	21%	34%
Concordat for Engaging the Public with Research (n 116)	70%	50%	12%	22%
Leiden Manifesto on Research Metrics (n 119)	60%	61%	11%	23%
San Francisco Declaration on Research Assessment (DORA) (n 118)	62%	58%	8%	25%
Athena Swan Charter (n 120)	65%	71%	29%	43%
Race Equality Charter (n 118)	55%	69%	6%	22%

23 For the total adoption levels of each initiative, see Figure 7.

The initiatives perceived by survey repondents to have the strongest net positive impact on both research culture and environment were: Athena Swan, the Concordat to Support the Career Development of Researchers, the Technician Commitment, the Concordat to Support Research Integrity and the Race Equality Charter.

Around one in four survey respondents reported that it was easy to measure the success of initiatives (rising to just under one in two for Open Data and Athena Swan), with the administrative burden seen to outweigh the benefit for around one in seven (rising to just under one in three for Athena Swan).

A statistical analysis of the survey data identified a relationship between the impact of an initiative and it being embraced by senior leadership.²⁴ This analysis of 'respondents' views suggested that where an initiative was reported as having been fully adopted, they reported greater impact on improving the structures and processes for those issues the initiative was trying to address within an organisation.

As an example, one of our case study interviews was with an independent research organisation that had a long history of animal research but, until they became a signatory to the Concordat on Openness on Animal Research, had rarely shared details of the work undertaken. Researchers were even secretive with their own families and friends about their work. The concordat was seen to provide a flexible framework and the impetus to adopt a different approach to communicating about the research carried out with animals. With support from leadership, this resulted in putting additional information on their website and hosting a public engagement event, both of which benefited staff as well as the organisation itself. It raised awareness of which other organisations were working with animals, enabling networking and information sharing.

"

We had some technicians saying, 'I've never been able to talk to my family about what I do as a job. But I've brought them to this event. And we're talking about it now at home.' They didn't feel that they were in a job where they don't talk about it; in some ways that they were stigmatised. But now they could. They felt proud about what they were doing, how they were supporting science.

Strategic influencer, Research Institute



Opportunities to improve the impact of initiatives

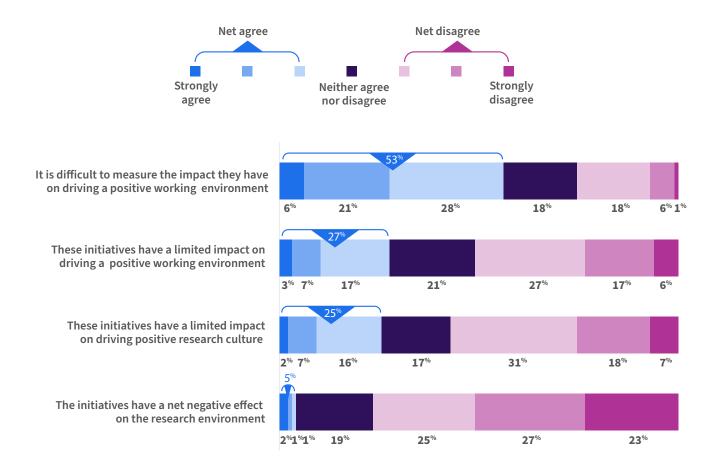
Section 6



6.1 Reflecting on the capacity for initiatives to influence research culture and the working environment

Overall, survey respondents were more positive than negative towards the impact of initiatives on research culture and the working environment – see Figure 9.

FIGURE 9: Agreement with statements relating to impact of initiatives [Base: n 510]



However, in the survey, **just under half of those responsible for the strategic integration and implementation of initiatives were either unsure of the impact or agreed they have had a limited impact on research culture (42%) and the research environment (48%).** Although only 5% of survey respondents agreed that initiatives have had a net negative effect on the research environment, this rose to 24% when including those who neither disagreed nor agreed (this net figure was significantly higher in non-HEIs/HEPs at 31%). While in part driven by the challenges in measuring the impact of initiatives (reported by 53% of survey respondents), there were a variety of factors reported in our survey and the case study interviews which influenced more negative perceptions of initiatives. These included:

- There was a perceived limited direct impact of initiatives on their respective domains. On average two in five survey respondents (40%) were either unsure or disagreed about whether individual initiatives have helped to improve the structures or processes which they were aimed at improving.²⁵ This ranges from 29% for the Technician Commitment to 55% for the Concordat for Engaging the Public with Research.
- The burden of administration of specific initiatives was seen to outweigh the benefits. This was a concern for a minority of survey respondents (approximately 10–15% across initiatives). This increased to one in three respondents for Athena Swan (29%), which involves compiling relatively detailed administrative data,²⁶ to one in five respondents for the Concordat for the Advancement of Knowledge Exchange in Higher Education (21%), which involves distilling strategic aims to create an organisational action plan. As noted, how an individual organisation responded to an initiative also shaped the perceived administrative burden.
- In the case study interviews, the collective administrative impact of initiatives was particularly cited as an issue. While each is laudable, their breadth, different levels of maturity and lack of strategic integration were of concern.

6.2 Areas for improvement

In the case study interviews, while there was not a significant policy overlap seen between initiatives at an individual level, they often required similar processes and people to administer, monitor and evaluate their implementation. There was felt to be a need to integrate, rationalise and streamline these initiatives to help to minimise administrative burden.

As can be seen in our vignette of Organisation C (see page 42), in some cases organisations were already doing this through adopting more of a strategic approach to implementation. However, case study interviews highlighted the need for greater coordination across initiative owners, to provide a unified framework to aid adoption and to prioritise the most important issues to address.²⁷

²⁵ In part, this may be due to challenges in measuring impact as concordats were integrated into local policies and processes.

²⁶ Note that this review does not include data and views about the 'transformed' Athena Swan Charter (https:// www.advance-he.ac.uk/equality-charters/transformed-uk-athena-swan-charter) which was finalised during this research.

²⁷ It should be noted that a range of broader factors affecting research culture were highlighted during our case study interviews. These included job security and short-term contracts, the level and allocation of funding, plus a competitive environment that can breed individualism. These were discussed in systemic terms, rather than in the context of specific initiatives. While noting their complexity, they were also seen as priority areas to address.

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The various concordats and initiatives covered in this survey are all individually valuable and useful. However, work to actively coordinate across these, and provide efficiencies re reporting etc., would be beneficial. Often such concordats may operate in silos, and it requires effort, or happenstance, to create links across.

Operational delivery, HEI/HEP

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There are now so many of them. Whenever an issue emerges that needs attention a new concordat or initiative is set up which requires more internal processes and external reporting ... A better way would be to have one concordat on research on which universities would report. As well as the initiatives listed here there are many others that add burden and cut across each other.

Strategic influencer, HEI/HEP

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I think it would be very valuable to combine the proliferation of Concordats and initiatives into a unified framework. It was necessary for them to be separate as they were each independently 'born' and introduced, but recent discussion of research culture clearly shows that their separation allows for awkward areas of overlap and tension, as well as synergy. Having them as separate frameworks with separate enforcement and separate reporting results in duplicative activity in institutions. Combining them would also provide parity of relevance of the different initiatives to institutional leadership and the research community, and help to secure support and momentum for the kind of joined-up activity that is needed to tackle the issues in research culture.

Strategic influencer, HEI/HEP

To further support implementation and the impact of initiatives, the case study interviews highlighted a need to ensure greater clarity as to 'what success looks like'. This is less about good practice in implementation (which was welcomed and acknowledged as a resource that many initiatives do share) but rather what represents a good outcome and the development of common standards and measures – accounting for organisations' different starting points – through which progress can be assessed.

"

Researchers really want to know, locally, what is it I need to do? Organisations need to know what are the measures? How will we know we're being successful?

Strategic influencer, Research Institute

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Assume I'm the Vice Chancellor. I go: 'Yes, I agree. This race equality charter is extremely important. How would I know if we'd been successful? What would be your suggestion? Is it longitudinal monitoring of the application rate compared to the appointment rates of protected characteristic?' There is value in having shared commonalities here to assess and benchmark.

Strategic influencer, HEI/HEP

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