Organisation	Digital Health & Care Innovation Centre
Question 1: how should the outcomes framework	DHI has no specific comment to make on how University KEIF is structured.
currently in place for UIF evolve to ensure University	
KEIF is structured to deliver on its renewed purpose	DHI has a positive relationship in place with the UIF Collaboration Manager, who links in well with our
and has the right strategic drivers and incentives in place?	innovation cluster activities, signposting and promoting engagement with the academic research community. Our experience suggests the temporary nature of this post can present issues in terms of continuity and traction, and that it is difficult to mobilise cross-sectoral and cross-organisational collaboration without clear focus, impact measures and specific funding available.  An alignment with overall mission themes may focus effort on leveraging UKRI, overseas funding
	opportunities and other investments to further galvanise cross university research opportunities. We would also suggest an increased use of real-world evaluations/participation in Living Labs to align research effort with close to market industry opportunities. This would accelerate clear routes to market and support inclusive development over the short to medium term. A similar mechanism to support Scotland's colleges may also be useful to consider.
Question 2: what are your views on the current UIF	DHI has no specific view on the UIF collaborative framework or the Knowledge Exchange Concordat.
collaborative framework, how could this evolve and	
be sustained to support further good practice and	We feel it worthwhile to note that DHI continues to experience challenges identifying key individuals
purposeful collaboration? Is there a role for the	with relevant shared expertise within the university sector who are aligned to our market opportunity.
Knowledge Exchange Concordat in this context or more generally?	This hampers our ability to facilitate wider triple helix introductions and opportunities. An enhanced role for UIF in supporting these key attributes and individuals to surface may be useful, if appropriate.
	To support purposeful collaboration and shared learning, DHI maintains a database to capture specific interests within the digital health and care innovation space. We also gain additional insights via our academic grant award programme which supports a deeper appreciation of specific academic interest and expertise. The provides practical opportunities for greater collaboration and understanding between the research community and health/care practice which consequently drives up research quality and experience. A mechanism to increase these types of approaches would be beneficial and

	could be used to attract other specialist areas of cross-sectoral interest which are currently in short supply e.g. business planning/modelling, health economics.
Question 3: what are your views on how the impact	No DHI response
and outcomes of University KEIF should be	
measured, including the role of metrics or other	
indicators in any future funding and allocation	
model? We would welcome views on current or	
potential good practice regarding measuring net-	
zero KE&I activities and outcomes.	
Question 4: how could the University KEIF, with	No DHI response
Interface, help support collaboration with colleges,	
collectively supporting Scotland's SME base to be	
more innovative?	
Question 5: how could core capacity funding (College	No DHI response
KEIF) best support colleges to be effective agents of	
KE&I? We would particularly like to learn from	
colleges directly on what KE&I means to them and	
where capacity is needed to deliver this effectively,	
which could include building on current practice.	
Question 6: we would welcome views on what	No DHI response
would be an appropriate period for SFC to run the	
first cycle of College KEIF before formally reviewing it	
and establishing a mature model for future years.	N. 5111
Question 7: we would welcome views on the	No DHI response
potential value of using College KEIF to create	
frameworks for collaboration and sharing of good	
practice across the colleges, and with universities.	Differential hadron to an easy from hadron for the annual community at his base of the state of the later.
Question 8: our review recommended that we co-	DHI would be keen to engage further in Entrepreneurial Campus activities, as integral stakeholders
design the Entrepreneurial Campus strategy with	and experts in our field. Our expertise in participatory co-design and experience of navigating the

colleges and universities. We would welcome views
on what is proposed in this consultation, including
potential opportunities, weaknesses and gaps.

challenges of adoption into a complex system would enhance understanding of the benefits of triple helix collaboration with industry and the health and care sector.

We are also keen to support curricula evolution in response to future skills requirements associated with digital health and care. Our collaboration with Skills Development Scotland to better understand future skills requirements has been instrumental in informing proposals for a national campaign on this issue, working with key stakeholders in the statutory health and care system, universities, colleges and others to realise a significant opportunity here.

DHI is about to launch a pilot Graduate Innovation Intern Programme, as a mechanism to create an effective bridge between the world of academia and the needs of the digital Lifesciences sector in Scotland. The growth of this sector represents a significant economic development opportunity for Scotland if we can effectively support its growth and development. This requires well skilled graduates who are employment-ready to step into high value jobs. DHI also supports the development of clinical entrepreneurs through its collaboration with Scottish Enterprise and academia, and are in discussion with National Education Scotland around the development of a Clinical Entrepreneurship Programme in Scotland.

Some of the above developments could inform scaling with the Entrepreneurial Campus opportunity.

Question 9: we would welcome evidence of current practice in Scotland (or elsewhere) to ensure we have an up-to-date picture of what is working well and upon which the Entrepreneurial Campus strategy could build on.

DHI has a base in the Glasgow Innovation District and is using this presence and our wider assets to attract SME's and other key interests to co-locate to drive collaboration opportunities aligned to the ambitions outlined in the Logan Report (2020). Our links with the NHS Skills Academy and our Moray Growth Deal Rural Centre of Excellence Programme with UHI and Moray College are also providing practical insights into how an Entrepreneurial Campus could be established and supported e.g. embedding co-design, and using mechanisms such as Living Labs and Challenge Competitions.

Our collaboration with the Glasgow School of Art has evidenced the importance of participatory, user-centred design (focusing on genuine engagement and involvement) in eliciting key challenges and

opportunities prior to developing solutions. We would recommend that this approach would be instrumental in furthering engagement and delivery of the Entrepreneurial Campus Strategy and Action Plan.

An Entrepreneurial campus should also cast its eyes outward to leverage value from international networks. For example, DHI utilised our international networks to quickly harvest global good practice on Covid-19 responses, informing Scotland's strategy and delivery. We are currently expanding our Digilnventors Challenge to showcase and support Scotland's international campus presence in collaboration with SDI e.g., Heriot Watt Dubai. This is also providing a small contribution to addressing equality and diversity issues in the digital sector (recent Digilnventors winners from Scotland and UAE were all female winning team).

Through the Challenge we are also widening our engagement across the education tiers, developing further relations with schools to create a funnel of talent into STEM/ computing science/ digital in colleges, universities and the sector overall.

Question 10: the Review recommended that the university and college sectors join SFC in repositioning Innovation Centres (ICs) as stable long-term infrastructure investments. We would welcome views on the details of the proposed 'repositioning' as described in this consultation, including any opportunities, weaknesses and gaps.

DHI is supportive of repositioning the Innovation Centres as a fundamental component of Scotland's research and innovation landscape, and is keen to explore with the wider community how our significant expertise and experience can best be leveraged for extended impact. We consider that establishing the IC's as a stable component of Scotland's long-term infrastructure will enhance wider system resilience, mobilise concerted effort to address medium to longer-term ambitions such as Covid-19 Recovery and create a greater sense of urgency to galvanise R&I growth. Scotland's IC have developed some significant assets and infrastructure that can be pivoted to support further collaborative effort and impact.

All IC's have access to an extensive network of members, which can be mobilised to support concerted effort, e.g. DHI Innovation Clusters can be used as strong anchor points to mobilise collaborative effort for the Wellbeing Economy Mission. These can operate as a conduit for funding opportunities and build discovery research into collaborative developments. The DHI clusters already

leverage insights from international networks and build wider collaborations to expand impact, pushing up Scotland's reputation and expertise. The ultimate target would be to build opportunities which can be scaled for system adoption and subsequent commercial success, using DHI relationships with key stakeholders to support an effective innovation funnel. Currently universities and colleges can struggle with releasing time to engage in exploratory activities as this is not a KPI, and it would be useful to consider ways to further encourage participation.

Our asset of the DHI Exchange could also provide an infrastructure contribution. It provides a virtual environment where people come together to create and connect digital services, use simulated data for testing, and also includes a physical immersive environment that demonstrates these technologies, alongside co-design and market analysis outputs, to engage and empower people to use digital capabilities to transform health and care services. Through this activity we mitigate risk for industry, academia and practitioners in support of collaborative innovation. This asset can be further mobilised in support of a mission-led approach, and we are aware our sister Innovation Centres have similar, extensive assets.

Innovation Centres can also be used to attract and seed high quality staff for retention in support of a wider, thriving Scottish digital ecosystem.

Question 11: we would welcome views on how we could best strengthen the Innovation Centres' relationship with universities and colleges, ensuring added value, sense of partnership and collaboration, avoiding duplication of effort etc. This would include opportunities for alignment and partnership with Interface, Scottish Enterprise, Highlands and Islands Enterprise, South of Scotland Enterprise and other relevant agencies and organisations.

Reference is often made to Scotland's 'cluttered' R&I environment in health and care, and the need to provide clarity and avoid duplication. Strengthening lines of communication and co-ordination at a senior pan-Scotland strategic level involving Innovation Centres, Interface, University and College representatives would help address this and provide focused effort on the identified Key Missions.

We would also benefit from greater clarity on: a) the processes which enable Innovation Centres to benefit from HEI research and education infrastructure, and vice versa how the Innovation Centre links with Industry and public sector flow back into HEI development; b) how to measure the impact and effectiveness of this two-way flow of benefits.

At an individual DHI level, we have excellent relationships with our host university and collaborating

	partner Glasgow School of Art, with all parties realising mutual benefits. Currently, we see this model as an effective and efficient way of supporting the innovation infrastructure with potential for future spin out opportunities if appropriate.  Our strong Scottish Government sponsorship from the Digital Health & Care Division, and our crosscutting work with a number of Scottish Government Directorates help us identify key challenge and collaboration opportunities e.g. through DHI growing involvement with the Scottish Health & Industry Partnership (Note: Scottish Government and health and care providers operate as the DHI customer base, in the same way that industry is a customer for some of the other IC's). DHI engages, partners and supports lots of other university and college partners in our projects and activities.
	Our reach has also extended to working with 'out of the system' organisations such as TEDxGlasgow to enhance our credibility, extend our global networks and explore collaborative funding opportunities that align to United Nation's Sustainable Development Goals (SDGs) and Scotland's National Performance Framework.
Question 12: we would welcome views on potential areas of future opportunity where the Innovation Centre model could help deliver outcomes for Scotland.	There are opportunities for wider innovation centre collaboration on Education Curriculum Evolution and Innovation Procurement. For example, we are keen to develop our Graduate Innovation Intern model, with DHI proposing to pilot this in 2022/23. We intend for this to inform potential expansion into the other innovation centres, streaming into employment opportunities in the NHS, Government and industry, to optimise high-value jobs opportunities and support a talent pipeline. Although initially low numbers, the aim would be to develop an approach which is scalable, with DHI acting as a catalyst and amplifier of innovation activities 'the added value of our innovation centres'.
Question 13: we would welcome views on strengthening Interface's relationship with universities and colleges, ensuring added value, sense of partnership and collaboration, avoiding duplication of effort etc. This would include opportunities for alignment and partnership with	DHI has no specific views on this aspect. From our experience of working with Interface, we feel they are well placed to support businesses across all sectors and projects with academia to help to validate and realise new products or new ways of working. We are aware they have established strong and effective relationships with other organisations that are seeking to maximise the benefits from Scotland's expertise in digital technologies, e.g. the other Innovation Centres, the Enterprise Agencies

Innovation Centres, Scottish Enterprise, Highlands	Scotland IS, Civtech. Expanding their support and expertise into Scotland's College community would
and Islands Enterprise, South of Scotland Enterprise	seem sensible if appropriately resourced.
and other relevant agencies and organisations.	
Question 14: if you have direct experience of	DHI and Interface hold regular quarterly meetings to discuss and agree specific collaboration
working with Interface, we would welcome	opportunities and actions. Our experience of working with Interface has been very positive. DHI
suggestions for evolutions to its operating model to	refers industry interests to Interface to plug them in to appropriate academic expertise and
help it develop even more effective support for	Innovation Vouchers, and Interface highlight industry and academics relevant to our market sector.
productive relationships between businesses and our	
universities and colleges.	To further strengthen collaboration opportunities, DHI and Interface are developing a formal MOU with associated Action Plan. This will include extending our bi-directional signposting, exploring how we utilise our shared assets as conduits to greater collaboration and impacts e.g. the use of the Innovation Clusters as a point of access to share knowledge on funding opportunities, policy insights, cross-fertilise ideas, engage special interest research groups, signpost to individual researcher expertise etc. The availability of Innovation Vouchers to support SME participation in collaborative opportunities emerging from the clusters.  Expanding Interface's support role into college networks would seem a logical and useful expansion should sufficient resources accompany this opportunity, and would assist DHI to navigate to specialist expertise in this sector.
Question 15: we would welcome general views, based on direct experience of the Innovation Voucher scheme, on how it could evolve and better support our system for KE&I.	DHI refers Innovation Voucher opportunities to Interface. To date, there have been six companies referred to Interface from DHI that have directly resulted in collaborative projects with academia. These are most often delivered with IC Consultancy support, or escalated from an Innovation Voucher when a company was not at the appropriate stage for IC support but then escalated to IC support e.g. Current Health (formerly Snap40 Ltd) Interface Knowledge Connection (interface-online.org.uk).  DHI has had some ad hoc feedback from industry in terms of funding amounts being very limited, and perhaps a more graduated scheme with different levels of funding support could be beneficial.

Question 16: we would welcome views on widening	No DHI response
the scope of Innovation Vouchers to encompass	
wider KE activity but retaining the key objective of	
using them as a means to promote first time	
collaborations and encourage longer-term	
relationships.	
Question 17: how could colleges and universities	No DHI response
help SFC understand, or monitor longitudinally, how	'
many Innovation Vouchers have led to ongoing	
relationships? Are there cross sectoral digital	
solutions to this which can help us better understand	
the outcome we hope to achieve?	
Question 18: From experience of mission-led	DHI has experience from involvement in UKRI missions - Advisory Board participation; supporting
approaches elsewhere, how would you advise SFC to	competition assessment; facilitating engagement; and direct funding applications. Our most recent
use its resources and investments to facilitate such	collaboration with UKRI on the Designed for Ageing Competition via the Healthy Ageing Innovation
activity in support of Scottish Government objectives	Cluster has given us enhanced insights into challenge competition processes and resourcing. We
for economic transformation?	have also benefited from insights from Scottish Enterprise's Can Do Challenge and other catalyst
	programmes. In our opinion, the mission approach works well but requires clarity of scope with in-
	built flexibility to encourage innovation, alongside market sector expertise, and innovative
	procurement mechanisms. Caution also must be considered to avoid future SME dependency.
	Should it be of interest to SFC, a sub-set of IC's with relevant partners could effectively collaborate to
	define and manage responses to individual Mission Challenges as we did with the Net Zero activities
	around COP26. For example, competitions to support the Wellbeing Economy Mission could be
	aligned with or deliberately avoid emerging catalyst from other organisations. Initial focus would be
	on near market opportunities to more quickly realise inclusive development over short to medium
	term, and successful initiatives would be linked into the health and care ANIA pathway to support
	scale and spread. The SFC proposed university-run challenge consortia missions could be designed to
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	explore earlier stage innovation opportunities along similar themes to create a coherent opportunity pipeline.
Question 19: We would welcome views on the breadth of the role a KE&I Advisory Board could play and what stakeholder membership would give us the most effective support for SFC's role in the ecosystem.	To be effective on a national basis, the KE&I Advisory Board will require to link in with the breadth of relevant activity in this space. Permanent representation on the Board from the proposed senior stakeholder group of IC's Interface, Challenge Consortia would support this, along with key NHS and care sector stakeholders, e.g. NHS Academy, SSSC. This representation could be from one of the Innovation Centre Chairs.
We may publish a summary of the consultation responses and, in some cases, the responses themselves. Published responses may be attributed to an organisation where this information has been provided but will not contain personal data. When providing a response in an individual capacity, published responses will be anonymised. Please confirm whether or not you agree to your response being included in any potential publication.	Publish information and excerpts from this survey response INCLUDING the organisation name.