Chief Medical Officer Directorate
Chief Scientist Office Division

The Scottish Government
Riaghaltas na h-Alba

Project Evaluation Form
Translational Clinical Studies Research Committee

Project Reference:	TCS/16/25 [redacted]

PLEASE NOTE THAT ANONYMISED COMMENTS MAY BE FED BACK TO THE APPLICANTS

To help us, it would be useful if you would make your anonymised comments on page 2 in the following categories (**please do not write comments on this page**):

1. Importance

Please comment on the originality, relevance, implementability, and potential impact of the proposed research.

2. Methods

Please comment on the appropriateness, rigour, and feasibility of the methods.

3. Value for money

Please comment on whether the cost of the research is justified by the potential importance of the findings.

4. Modifications

Please indicate any changes that might improve the research.

5. Scoring Guideline

• Reject	0 - 1
• Major modification required	2 - 3
• Fund with minor modification	4 - 5
• Fund without modification	6

Please write in score: [redacted]

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ANONYMISED COMMENTS

Please feel free to comment on any aspect of this proposal

1. Importance

To assess the prevalence of CAD in HFpEF per se is not sufficiently interestingly to justify the study given the existing evidence in the field. What is interesting in this study is the prevalence of CMD, but this is a small part of the investigation.

2. Methods

The protocol does not seem to take into account that a substantial proportion of the patients will already have known coronary anatomy, have been previously treated with PCI or CABG. How will this be taken into the data evaluation? Another important question not mentioned in the protocol is the relation between the findings and outcome. Undertaking such a large effort without planning to collect outcome data seems odd.

3. Value for money

While the study in its present form would provide new information to this important field, it appears to me that an opportunity is missed to maximize the gains which is questionable, especially given it's invasive nature.

4. Modifications

Tha authors should account for the expected proportion of patients with known coronary anatomy and recent revascularization procedures and how are handled and potentially alter their power calculations. A follow-up analysis (MACE) should be included.

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ANONYMISED COMMENTS

Please feel free to comment on any aspect of this proposal

1. Importance

The proposed research aims to address one of the remaining conundra in the heart failure syndrome, namely the prevalence, and potential functional relevance, of coronary artery disease in patients with heart failure with preserved ejection fraction (HFpEF). The research aims to assess the prevalence of both epicardial coronary artery disease (and its functional relevance) and of microvascular coronary disease in HFpEF. As outlined in the application, HFpEF is increasing in prevalence and there are no proven interventions which alter disease progression and prognosis. This is likely to reflect the varyious aetiologies which lead to HFpEF; quantification of the amount to which CAD contributes has the potential to add significantly to the knowledge base around this condition, and to provide the basis for potential studies of interventions which may alter disease progression.
The proposed research is highly relevant, potentially implementable, and of high potential impact.

2. Methods

Please comment on the appropriateness, rigour, and feasibility of the methods.

The application proposes a very comprehensive and rigorous set of investigations which will (i) quantify the prevalence of CAD in the population with HFpEF (in the West of Scotland) and (ii) establish the functional relevance of the identified disease. The assembled research team has international expertise in all the required areas, namely heart failure research, Cardiac MR imaging, and interventional cardiology.
Ther are two important issues which are of direct relevance of the ability of the reaearch to be completed in the suggested timeframe.

1. The application reports that in a previous observational study, 61 near-consecutive patients with HFpEF recruited in 100 weeks and uses this to justify the estimate of 150 to be recruited over a 24 month (~96 week) period. This estimate requires recruitment at ~1.5 per week. Even allowing for the much larger catchment population likely to be available to the researchers for the current proposal, this seems ambitious for a study which requires both cardiac MR and invasive coronary angiography, particularly in a population whichis classically older than the population with heart failure and reduced EF.This issue is likely to impact upon the ability of the researchers to complete the study in the time suggested. The removel of the need for invasive coronary angiography would in all probability increase the acceptability of the study to patients but would detract markedly from the value of the science.
2. The sample size of 150 to some extent relies upon CAD having a prevalence of ~50%. This may be accurate or may be an under/over estimate. The impact of lower prevalence rates on the ability of the study to address the research questions should be considered and some contingency plans described. Sensitivity analyses indicating the required sample size for different rates of CAD prevalence should be presented.

3. Value for money

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As it stands, this proposal represents excellent value for money. However, recruitment rates and adequate sample size may well impact upon the ability of the study to deliver within the suggested time frame and study extension my increase costs to a significant degree.

4. Modifications

As noted above, contingency plans (? Additional recruitment centres; ? omit invasive coronary angiography) should be considered.

I reitarte that as it stands, this is an excellent proposal bit one which is entirely dependent upon adequate recruitment and sufficiently high disease prevalence, both of which may present significant obstruction to the ability of the researchers to deliver.

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Please comment on whether the cost of the research is justified by the potential importance of the findings.

4. Modifications

Please indicate any changes that might improve the research.

5. Scoring Guideline

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Please write in score: [redacted]

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ANONYMISED COMMENTS

Please feel free to comment on any aspect of this proposal

1. Importance

This is an important study that will look at a potentially reversible cause of heart failure with preserved ejection fraction. This is a disease that is increasing in frequency and causing much morbidity and mortality. All randomised controlled studies have failed to show benefit in this group of patients. However treatment of myocardial ischaemia has not been extensively investigated.

2. Methods

The investigatory methods in this study are sound. I have a little concern over the ability of the investigators to recruit this number of patients over a relatively short period of time. Studies in HF PEF have been very difficult to recruit to and the investigators should consider enrolling patients from other hospitals in and around Glasgow. The investigators should also consider excluding patients who have pulmonary hypertension, particularly pulmonary hypertension of a secondary cause. I think it is important that they do further investigation to exclude a lung pathology, pulmonary embolism or other pulmonary vascular disease before entering patients into this study.

However, I applaud the robust methods planned to detect coronary artery disease and the systematic way they intend to go about it. The investigators should consider the impact of the 3 Tesla magnet which I understand introduces artefact as well as improving resolution. Investigators should be required to justify the use of this magnet.

Some questions will be raised by the ethics committee about the necessity for such an invasive assessment of these elderly, sick patients. Investigators will have to be very selective in patients that they take for the investigations and consent patients appropriately. Nevertheless it is my belief that this study is so important that the potential impact of the results for future patient care justify the study being performed.

3. Value for money

I have no concerns over the costs of the study

4. Modifications

Please see my comments in methods, above

Please return by email [redacted]

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ANONYMISED COMMENTS

Please feel free to comment on any aspect of this proposal

1. Importance

This project is highly relevant, and should have been performed several years ago. Heart failure (HF) with preserved ejection fraction is in the litterature often defined as clinical HF without reduced ejection fraction. Many mistakes have been made in clinical studies, as the phenotype is not clearly defined. This protocol will help to better define this population, examining for signs of coronary artery disease as well as signs of coronary microvascular dysfunction. The only point of minor criticism to the project is the descriptive nature focusing on coronary artery disease. I suspect that there will be many patients with a mixture of other diagnoses (amyloidosis and other rare diseases), and maybe there will be a large group of patients with poorly controlled hypertension.

2. Methods

The methods are all relevant and using state of art technology. The study is feasible, but the fellow will have to work hard to accomplish this within the time frame paid for in the application. The research group is excellent representing highest standard in modern western cardiology.

3. Value for money

300.000 £ for this project is far below the cost of the investigations performed. It should be possible to publish the results in a relatively high-impact journal and the main paper will most likely be cited well.

4. Modifications

The power calculation is based on 150 coronary angiograms being performed. However, this information is not the most interesting part of the study (but obviously needed in all included patients) so maybe number of patients sould be based on sufficient patients being investigated with CMR and having assessment of microcirculation performed. Similarly, patients with diabetes may be different from patients without diabetes, and power should ensure that relevant subgrops can be performed.

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Report of an Independent Expert Review of the Nursing, Midwifery and Allied Health Professions Research Unit

2017

Version 5 Final

Background

1. The Nursing, Midwifery and Allied Health Professions Research Unit, based at the Universities of Glasgow Caledonian and Stirling receives core funding from the Scottish Government's Chief Scientist Office (CSO). The Unit is co-hosted by Glasgow Caledonian University and the University of Stirling with the Director as Principal grantholder at each site.
2. Core funding is provided under a contractual agreement between the Unit and CSO. The current contract between CSO and NMAHP RU specifies the aims and remit of the Unit:

    - To develop a high quality research agenda which is useful and relevant to direct patient care and achieves standards of international excellence.
    - To provide a strong national focus for patient care research.
    - To involve nurses and other allied health professionals where appropriate in its research.

3. The contract also specifies that the Unit Director will be responsible for:

    - Developing and delivering a high quality research programme which is relevant to improving health in Scotland and to the needs of the NHS and that fulfils the specific remit of the Unit.
    - Fostering links with other research groups and academics, and with the NHS and other organisations concerned with health improvement both within and beyond Scotland.
    - Governance arrangements within the Unit including personnel management, research management, financial controls, provision of regular information to CSO and the documentation, oral presentations and all the administration for the Chief Scientist Review.
    - Implementing the recommendations of the 2010 Chief Scientist Review.

4. CSO convenes an independent expert panel to review the quality, relevance, importance and impact of Unit's work and future plans and to provide advice to CSO to inform decisions about contract renewal. This is the report of the Review Panel.

Review process

5. In 2017, CSO convened an independent panel to conduct the review, which included members with expertise in NMAHP research, and public interest representation. The membership of the Review Panel is at Annex 1. The panel was tasked with providing advice to CSO under the terms of reference at Annex 2.

6. The review was conducted based on a comprehensive written report provided by the Unit and information presented during the course of a two day meeting that took place at the Glasgow Caledonian University on 23rd November and the University of Stirling on 24th November 2017. The review meeting included a series of presentations from the Unit Director and senior staff covering the Unit's research, knowledge exchange, postgraduate teaching, training and engagement activities and future plans for these. The panel also met separately with senior staff from Glasgow Caledonian and Stirling Universities and conducted site visits to the NMAHP-RU offices at each campus. The panel also received a series of presentations from early career researchers and PhD students from the Unit. There was also time for private discussions in order for the panel to form views and address the terms of reference. An outline of the content of the written report and the review meeting agenda are at Annexes 3 and 4, respectively.

7. A report was drafted of the Panel's deliberations taking into account the terms of reference for the review. This was considered by the Panel, revised to address comments, and provided to the Unit Director in order to correct any factual misunderstandings or inaccuracies. The final report was agreed by the Panel Chair and submitted to the Head of CSO.

Findings and conclusions

Headline Conclusions

The panel congratulated the Director on the quality of the reports provided, the presentations and the Unit's activity. The panel felt that the Unit was productive and that its work was of high quality. The Unit is highly regarded by the host institutions and external stakeholders. The Unit is well-led and provides an inclusive working environment with good core values. The panel noted that the move to a central location on campus for the GCU staff had been a positive development (although not all Unit staff could be accommodated within the single space).

Recommendations from the last review

8. The panel concluded that the Unit had responded to all 13 of the recommendations arising from the 2010 review. These had included focusing on improving sustainability through applying for funding out with Scotland, ensuring that the Unit's research

strategy reflects a mix of scientific excellence and translational outcomes, and applying conceptual clarity to the NMAHP Interventions and Quality & Delivery of Care programmes.

Director's Overview

9. The panel felt that the Unit Director had considered the question of Brexit opportunities and threats. The planned targeting of global challenges, in particular through interactions with low and medium income countries was noted. This is within the context of continuing to seek out opportunities in Europe while keeping appraised of developments and adapting strategy accordingly.

10. The panel agreed that the Unit continues its approach of meaningful engagement with Scottish Government Health & Social Care policy leads. This was felt to be particularly important given the recent integration of Health and Social Care in Scotland. The panel noted that a group of Members of the Scottish Parliament had recently visited the Unit.

11. The Unit Director responded to the panel's query around the Unit's strategy for implementation of its research. The panel agreed with the approach adopted, namely to grow the international reputation of the unit, wherein the Unit will produce an evidence base that can be utilised worldwide. In parallel, the Unit will work to make its research accessible to local "coal-face" colleagues. This is an expansion of the Unit's original remit of directly impacting the health of the Scottish population and complements that.

12. The panel expressed some concern that the Unit did not have a greater amount of nurse-led research within its portfolio. The Unit Director updated the panel on plans to replace the recently vacated senior academic post (Nursing Professor) with someone from a nursing background and the recent appointment of a nurse as Associate Professor at University of Stirling. The Unit recognises its capacity building role and will work going forward to encourage more nurses to engage with the Unit, for example through offering opportunities for study leave/secondment.

13. ***Recommendation: The Unit should work with the Scottish Government Chief Nursing Officer Directorate to explore opportunities for increasing nurse involvement. The Unit should also seek support in this from their two host HEIs.***

Future Directions and Strategic Goals

14. The Unit Director outlined the plans for the Unit to introduce 3 cross-cutting themes:
    Innovation in NMAHP Healthcare Technologies
    Transforming Care Delivery

Improving the Efficiency of Healthcare Research

The panel asked what the focus of the Unit will be, in particular the conceptual plan underpinning the 3 themes. The panel agreed with the focus on research policy development (e.g. the role of advanced nurse and AHP practitioners), and the recognition that many of the issues facing Scotland are internationally relevant. The panel recognised the importance of achieving a balance between international impact and policy focussed work.

15. The panel agreed that the Unit should work towards the highest level of international recognition. The panel felt that the unit could be more effective at disseminating work to an international audience. The Unit should work to identify its unique selling points (USPs) and flag up its key achievements. The panel felt that the current proposed strategy would need to be augmented to move the Unit to world-leading status. It was also noted that the Unit does not generally attract a high level of international interest when advertising posts.

16. ***Recommendation: The Unit should revisit its strategy for moving to a position of full international recognition. This should include approaching the host institutions to seek support for inward visiting chairs. The Unit Professoriate should be more pro-active in seeking international experience, for example through outward visiting chairs. The Unit should work to identify and publicise its USPs.***

17. The panel recognised the strength of the Unit in areas including Stroke, Pelvic Health and Maternal & Child Health and Wellbeing. It was felt that the Unit could work to frame this expertise in a more holistic, cross-cutting language. The panel felt that the Unit already had strong international recognition in these areas and that maintaining this status was dependent on a relatively small number of key staff. The Unit should look to further strengthen and diversify its Professoriate if possible.

18. The panel noted that consideration was being given to changing the Unit name. Some concern was expressed that removing the reference to Nursing in the title could be controversial and potentially destabilizing to the unit's position.

19. ***Recommendation: The Unit should engage in market research and a process of consultation with key stakeholders, including with clinical partners before any decision is taken to change the Unit name.***

Research Programmes: current strengths and research going forwards

Innovation in NMAHP Healthcare Technologies

20. The panel noted that this theme had evolved from the interventions programme. The panel did express some concerns that the term "technologies" had a specific resonance in the UK due to the influence of the NIHR Health Technology Assessment programme and that this might be confusing for an international audience.

21. There was some concern expressed by the panel on the conversion rate of pilot studies to full trials, raising doubts that an internationally competitive level will be reached across the theme.

22. ***Recommendation: While the panel recognised the potential of "Innovation" in NMAHP Healthcare Technologies programme, the Unit should consider changing the programme name due to the term "technologies" having a different meaning in this context in the UK and internationally. The unit should also give consideration to increasing the number of pilot studies that lead to full trials.***

Transforming Care Delivery

23. The panel recognised that this programme represented a considerable conceptual change from its predecessor. The panel did express the opinion that the programme was to a certain extent rooted in current language / terminology. A critical aspect of this programme is the interface between health and social care and the panel would have liked to see more critical thinking in this area.

24. The panel asked how the Transforming Care Delivery programme would contribute to the Unit's ambition of achieving world-leading status. The Unit provided examples such as the evaluation programme carried out in partnership with the Scottish School of Primary Care and the Getting it Right for Every Child (GIRFEC) work, both of which had attracted high-level international interest. The panel recognised that work within the Transforming Care Delivery programme was potentially transferrable across different healthcare systems and could potentially lead to international recognition for the Unit.

25. The panel acknowledged that there was a good balance between the Transforming Care Delivery and Innovation in NMAHP Healthcare Technologies programmes in terms of grant income and publications.

26. ***Recommendation: The Transforming Care Delivery programme was well-liked by the panel. However, the Unit should provide written evidence to CSO of strategic thinking to align the programme with developments around health and social care integration. The Unit might consider if the terminology used in describing the programme is fully reflective of the current landscape.***

Improving Efficiency of Healthcare Research

27. The panel recognised that this represented a new programme drawing on the Unit's expertise in areas such as innovative use of methodology, data and collaborations. The panel acknowledged that, in the 2 programme model adopted by the Unit to date, some projects did not fit readily into either programme, and that the introduction of this new strand would allow fuller recognition of Unit expertise and address contemporary imperatives to reduce waste in research and facilitate the implementation of research findings into practice.

28. The panel received clarification that the current theme leads within the Unit would bring their expertise individually to build into this proposed programme.

29. The panel's opinion of the programme was that the Unit would be using innovative and wide-ranging methodologies to address cutting edge issues in health and social care. This should be emphasised more in the description of the programme. It was recognised that methodological papers can have high impact and that the proposed programme therefore has good publication potential as well as garnering international recognition.

30. ***Recommendation: The Unit should consider changing the title of the programme as the panel felt the term "Improving Efficiency" did not adequately describe the proposed workplan. The Unit should provide additional justification as to how this work constitutes a separate programme. Once established, the programme elements should be incorporated into the Unit's USP.***

Partnerships, collaborations, stakeholders, PPI

31. The panel were provided with examples of collaborations that were durable and extended beyond individual research grants. These included the CATS Network, which

had extended beyond the original funding period and had also leveraged additional funding.

32. The panel were provided with examples of systems in place to support public involvement in the work of the Unit. It was noted that the Unit engages with the Alliance for Health & Social Care Research which offers training for PPI representatives. The Unit provided examples of engagement with local support groups in the areas of both Multiple Sclerosis and Mental Health. The panel was supportive of these initiatives.

33. The panel recognised that individual projects demonstrated good practice around the inclusion of people who are often under-represented in research. However it was unclear if this engagement extended beyond the project-centred model to a more Unit-wide strategic approach.

34. The panel felt that some of the terminology employed by the Unit around involvement (e.g. use of the term PPI)did not fully reflect current thinking in this area.

35. ***Recommendation: The panel recommends that the Unit establish a user reference group. The Unit should also consider putting in place a strategy for engagement beyond project specific initiatives. It is recommended that this user reference group is asked to provide advice on relevant issues to the NMAHP RU management Team.***

Capacity Building

36. The panel was impressed by the breadth and quality of doctoral and postdoctoral research within the Unit, which was evident in the presentations from early career research staff and Ph.D. students. The Unit is clearly maintaining its reputation for developing excellent NMAHP researchers.

37. The panel noted that a high percentage of NMAHP students from the Unit have progressed to permanent academic posts. It was noted that the issue of career progression for NMAHP researchers was more challenging in the context of the NHS.

38. Many graduates from the Unit go onto work in healthcare, academic and research posts. The panel felt that a formal follow-up process would provide an evidence base for the impact of the Unit on NMAHP research graduates career progression

39. ***Recommendation: The Unit should consider formally following up graduates from its research programmes with a graduate destination survey and having a section on its website providing details of destinations of former students. The Unit should explore***

opportunities for pro-active capacity building approaches such as internships for undergraduate students.

Knowledge Exchange and Impact

40. The panel was appraised on the use of social media by the Unit. It was appreciated that some groups (e.g. older patients) have limited interaction with social media and that the Unit will continue to adopt a mixed strategy of engagement accordingly.

41. The Unit's publication record was discussed. The panel acknowledged that practice orientated journals tend to have low impact factors but publish important research. The Unit publishes some very good papers, however it was noted that a number of the Unit's initiatives included in the report have not led to publications.

42. The panel recognised the importance of the Unit producing policy briefings as part of its core remit. It was felt that a systematic approach to producing these should be introduced.

43. ***Recommendation: The Unit should revisit its publication strategy and put in place a programme for developing writing skills. This should include an objective of encouraging all academic staff to write papers for publication. The Unit should consider putting in place a strategy for producing policy briefings.***

Relationship with host HEIs

44. The panel noted that the Unit was well integrated within Glasgow Caledonian University. The University was committed to the Unit and had supported the Unit by funding the contracts of a number of senior and earlier career positions. The provision since 2015/16 by the University of office space within the main estate was noted by the panel and seen as a positive development. The Unit was seen as central to a number of strategic initiatives within the University, including the multi-disciplinary "Centre for Living" development. The University sees impact of research on patient outcomes as the critical measure of Unit success going forward.

45. Within GCU some funded posts are wholly funded by the institution (as return of a proportion of REG income to the Unit), whereas other are funded via the 60% of project overheads and core staff re-charges on grants which are returned to the Unit. The panel recognised that this arrangement provides the Unit Director with a degree of autonomy over the use of grant (overhead) income for investment in new academic or support posts.

46. The panel noted that the Unit was well integrated within Stirling University. The University was committed to the Unit and had supported the Unit by funding the contracts of a number of senior and earlier career positions. The Unit Director sits on the executive of the Faculty of Life Sciences and Sport and the University considers the Unit to be a flagship research centre

47. Within the University of Stirling the proportion of HEI funded posts which are allocated to conducting research within the Unit is decided at Faculty level (currently allows for 40% WTE of any staff member) and all income generated by the Unit (including REG income) is retained by the University/Faculty, except for a return of fEC at 15% which is awarded to the Faculty and top sliced before awarding a proportion to NMAHP RU (approx. £10-12k per annum). Research awards obtained by the Unit also incur an institutional tax (currently 44%) which is written down as a budget deficit to the Unit. UoS then 'write-off' this deficit as further 'in-kind' contribution to the Unit. The panel recognised that the University gives some degree of discretion to the Unit Director around meeting the teaching commitments of staff it funds in the Unit, with teaching (including PhD supervision) provided by non-University funded posts counting towards these commitments.

48. The panel noted that 2 different funding models are in operation. The view of the panel was that the GCU model more explicitly encourages growth but that greater detail from the HEI's would be useful. The panel also felt that formal meetings of the two HEI's and the Unit to discuss strategic matters should be considered.

49. ***Recommendation: That CSO feedback to both Glasgow Caledonian and Stirling Universities the panel's request that greater clarity be provided regarding the funding arrangements for the Unit, and that the host HEI's initiate formal meetings at an appropriate level to discuss strategic linkages between the two host HEIs and the Unit.***

50. The panel concluded that NMAHP RU is a very highly regarded centre of academic excellence in NMAHP research and is clearly focussed on and actively addressing the objectives set out in the contract with CSO.

51. The panel noted that in addition to CSO core funding the Unit receives substantial support from both Glasgow Caledonian and Stirling Universities and wins, in its own right or in collaboration with others, substantial additional grant income from other research funders some of which is also disbursed to other Institutions across Scotland involved in health research. Hence as well as addressing needs for applied research, the panel considered that there is added value from CSO core-funding in the form of inward investment to NMAHP RU and to others in the wider Scottish health research community.

52. ***Recommendation: CSO should consider continuing core-funding for NMAHP RU, subject to plans for an overarching review of investments in core-funding of research units.***

Recommendations

53. The panel recommended that NMAHP RU:

- ***should work with the Scottish Government Chief Nursing Officer Directorate and the host HEIs to explore opportunities for increasing nurse involvement.***
- ***should augment its strategy for moving to a position of full international recognition. This should include approaching the host institutions to seek support for inward visiting chairs. The Unit Professoriate should be more pro-active in seeking international experience, for example by through outward visiting chairs. The Unit should work to identify and publicise its USPs.***
- ***should engage in market research and a process of consultation with key stakeholders, including with clinical partners before any decision is taken to change the Unit name***
- ***should consider changing the NMAHP Healthcare Technologies programme name due to the term "technologies" having a different meaning in this context in the UK and internationally. The unit should also give consideration to increasing the number of pilot studies that lead to full trials.***
- ***should provide evidence of strategic thinking to align the Transforming Care Delivery programme with developments around health and social care integration. The Unit might consider if the terminology used in describing the programme is fully reflective of the current landscape.***
- ***should consider changing the title of the Improving Efficiency of Healthcare Research programme as the panel felt the term "Improving Efficiency" did not adequately describe the proposed workplan. The Unit should provide additional justification as to how this work constitutes a separate programme. Once established, the programme elements should be incorporated into the Unit's USP.***
- ***should establish a user reference group. The Unit should also consider putting in place a strategy for public engagement beyond project specific initiatives.***
- ***should consider formally following up graduates from its research programmes with a graduate destination survey and having a section on its website providing details of destinations of former students. The Unit should explore opportunities for pro-active capacity building approaches such as internships for undergraduate students.***
- ***should revisit its publication strategy and put in place a programme for developing writing skills. This should include an objective of encouraging all***

academic staff to write papers for publication. The Unit should consider putting in place a strategy for producing policy briefings.

The panel recommended that CSO:

- ***feedback to both Glasgow Caledonian and Stirling Universities the panel's request that greater clarity be provided regarding the funding arrangements for the Unit, and that the host HEI's initiate formal meetings at an appropriate level to discuss strategic linkages between the two host HEIs and the Unit.***
- ***CSO should consider continuing core-funding for NMAHP RU, subject to plans for an overarching review of investments in core-funding of research units.***

Acknowledgements

54. The Review Panel thanks the Director and all the staff at NMAHP RU for the very high quality of the written material provided, and presentations made, to the Panel for this review and for the arrangements for the review meeting.

Annex 1 - Membership of the Review Panel and conflict of interest statements

[redacted]

Conflict of interest

[redacted]

Annex 2 – Terms of Reference of the Review Panel

To advise CSO on:

- the scientific quality and potential for impact on policy and/or practice of the Unit's programmes/themes since the last review, including the extent to which the Unit has achieved its aims and addressed recommendations of the last review;

- the relevance to, scientific quality, and potential for impact on policy and/or practice in Scotland of the proposed programmes/themes of future work;

- the success of the Unit's dissemination and knowledge exchange activities, and the plans for these going forward;

- the success of the development of research skills and expertise (i.e. the capacity building role of the unit), and the plans for these going forward;

- the wider contributions of the Unit to the health research, policy and practice environments in Scotland and beyond;

- whether the Unit funding represents value for money and whether a core funded Unit offers the best option to CSO for progressing work of the kind proposed, including whether and what changes to the funding arrangement should be considered by CSO.

Annex 3 - Content of written report provided by the Unit and the review meeting agenda

Content of written report

A written report was provided to the review panel by the Unit that included the following information:

- a Director's overview of the Unit's vision, principles and operating environment;
- a strategic statement prepared mid-2016 by the Unit Director summarising the achievements and future plans of the Unit that was circulated by CSO to key stakeholders with a synthesis of stakeholder views prepared by CSO;
- recommendations from the 2010 Unit review and subsequent actions towards these;
- a description of each of the Unit's programmes and workstreams;
- a report for each project funded within the review period, a list of publications and a partial analysis of publication impact;
- details of the Unit staffing, income/grant capture, scientific outputs, capacity building activity;
- a summary of the Unit's engagement with the public/patients, policy makers and the NHS;
- a list of Unit staff;
- a financial summary.

Annex 4 – review meeting agenda

AGENDA – INDEPENDENT REVIEW OF THE NURSING, MIDWIFERY AND ALLIED HEALTH PROFESSIONS RESEARCH UNIT (NMAHP RU)

23-24 NOVEMBER 2017

Glasgow Caledonian University (23rd November) and the University of Stirling (24th November)

Date	Timing	Item	Lead	Notes	Papers
23/11/17	09.45-10.00	Closed session of review panel	Panel Chair/ [redacted]	To confirm understanding of remit and designated responsibilities	Panel briefing paper (CSO)
	10.00-10.50	Director's overview and update. Strategic direction and unit contribution to science in Scotland. Summary of knowledge exchange and dissemination and addressing recommendations of previous review.	Panel Chair	Panel discussion with director	Presentation and NMAHP RU review report
	10.50-11.00	Break			
	11.00-11.30	Future directions and strategic goals. Introduction to 3 cross-cutting programmes. Plans for unit to reflect changing landscape while retaining core strengths	Panel Chair	Panel Discussion with director	Presentation and NMAHP RU review report
	11.30-12.30	Discussion	Panel Chair	Panel discussion with director and unit staff	NMAHP RU review report
	12.20-13.30	Lunch (GCU Unit staff also in attendance)			

Date	Timing	Item	Lead	Notes	Papers
23/11/17		**Research Programmes: current strengths and research going forwards**			
	13.30-14.00	Innovation in NMAHP Healthcare Technologies [redacted]	[redacted]	Presentation and discussion with theme leads	Presentation and NMAHP RU review report
	14.00-14.30	Transforming Care Delivery [redacted]	[redacted]	Presentation and discussion with theme leads	Presentation and NMAHP RU review report
	14.30-14.45	Tea/coffee break			
	14.45-15.15	Improving the Efficiency of Healthcare Research [redacted]	[redacted]	Presentation and discussion with theme leads	Presentation and NMAHP RU review report
	15.15-16.00	Questions and discussion	Panel Chair	Discussion with director and theme leads	Presentations and NMAHP RU review report
	16.00-17.00	Closed panel meeting with Glasgow Caledonian University senior management [redacted]	Panel Chair	Discussion on funding model and strategic position of Unit	NMAHP RU review report
	17.30-18.30	Travel from Glasgow to Stirling Court Hotel			

Date	Timing	Item	Lead	Notes	Papers
24/11/17	08.30-09.30	Closed panel meeting with Stirling University senior management [redacted]	Panel Chair	Discussion on funding model and strategic position of Unit	NMAHP RU review report
	09.30-10.00	Tea/coffee break			
	10.00-10.30	Partnerships, collaborations, stakeholders, PPI [redacted] + PPI partner video contributions)	Panel Chair/ [redacted]	Presentation and discussion with theme leads	Presentation and NMAHP RU review report
	10.30-11.30	Capacity Building [redacted] Presentations from [redacted]	[redacted]	Presentation and discussion with theme leads	Presentations and NMAHP RU review report
	11.30-11.45	Tea/coffee break			
	11.45-12.15	Knowledge exchange and impact [redacted] + external stakeholder video contributions)	[redacted]	Presentation and discussion with theme leads	Presentations and NMAHP RU review report
	12.15-12.30	Closing remarks from Unit Director followed by questions and discussion	Panel Chair	Discussion with director and theme leads	NMAHP RU review report
		Lunch (Stirling Unit staff also in attendance)			
	13.30-15.00	Closed Panel Discussion	Panel Chair	Discussion on key themes, panel recommendations and feedback to Unit director	Presentations from 2 day review and NMAHP RU review report

	15.00 – 15.30	Feedback to NMAHP Research Unit	Panel Chair	Initial pass of key recommendations	
	15:30	Close of Panel Review	Panel Chair		