

Welcome everyone!

**Application and Research Design
Workshop**

**Thursday 8th May 2025 (online)
Tuesday 13th May 2025 (face-to-face)**

Today's Agenda

- NICHHS Strategy 2023-26
- Research application process
- Q&A
- Comfort break

Fidelma Carter,
Stephanie Cathcart

- Research design and methodology
- Questions, close

Prof Mike Clarke, QUB



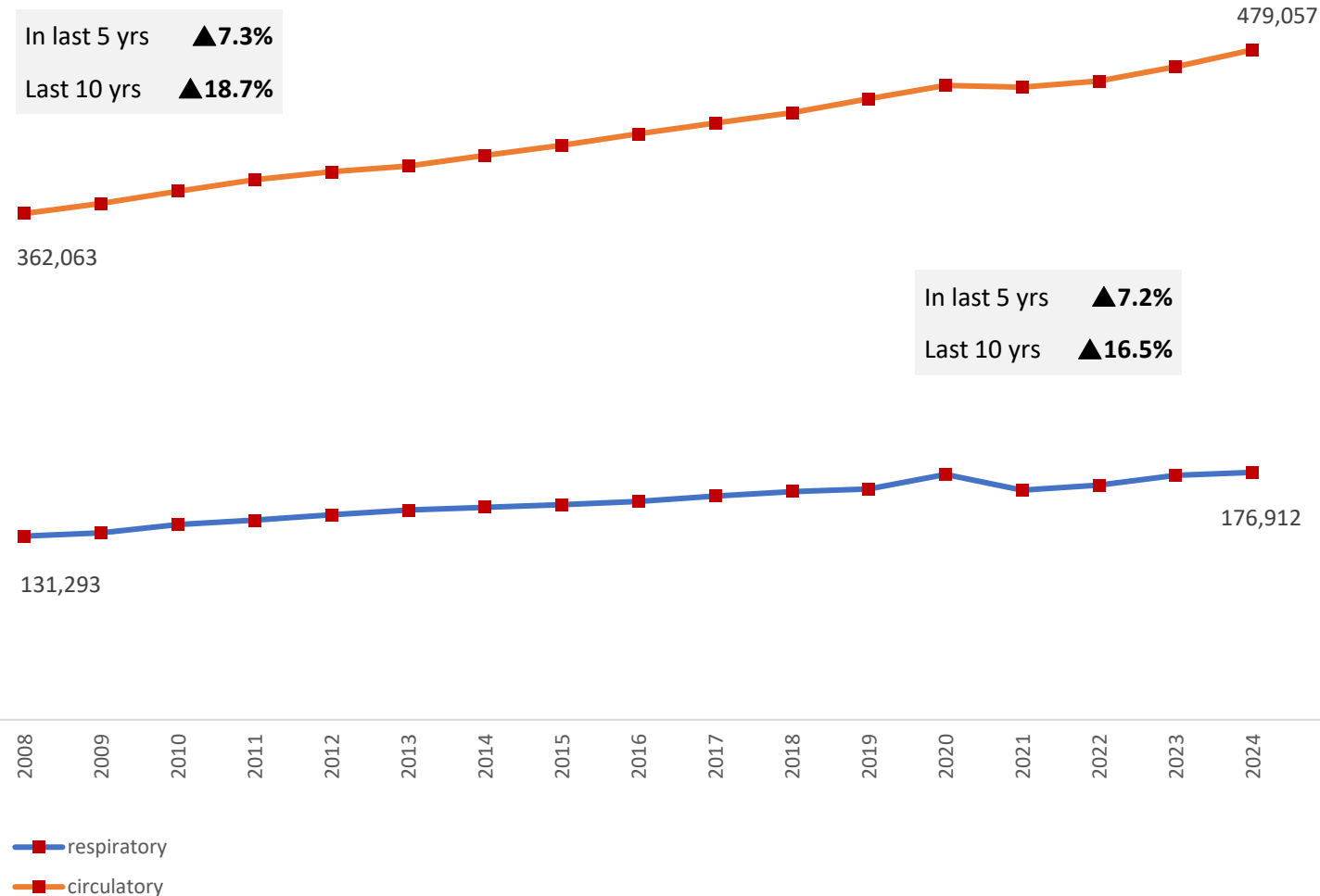
Strategic Plan

2023 – 2026



Chest heart and stroke disease, conditions and lifestyle risk factors are all on the increase. Life Expectancy is stalling. Inequalities persist

Nos with diagnoses for circulatory and respiratory conditions



You're more likely to die early from CVD depending on where you live



Preventable deaths are more likely in the most deprived areas.

% deaths are attributable to deprivation...	
preventable deaths	48%
premature respiratory deaths (<75)	42%
premature circulatory deaths (<75)	37%



#1 cause of death

Deaths due to chest, heart and stroke conditions, when combined, are the #1 cause of death



17 deaths per day

(6,233 each year) are caused by chest, heart and stroke conditions combined



36.2% of all adult deaths

in 2023/24 were caused by chest, heart or stroke conditions

Circulatory Conditions

Any conditions that affect your heart or blood vessels.



185,554 people

are living with circulatory conditions



11 deaths every day

(4,168 in 2023/24)



79 hospital

admissions every day
(40,864 each year)

10 people every day are admitted to hospital because of heart attacks

780 people died from heart attacks in 23/24

75,265 people are living with Coronary Heart Disease

21,701 people are living with Heart Failure

Coronary Heart Disease is the biggest single cause of premature deaths (in people younger than 75) across NI

239 calls a day are received by the ambulance service for people who have a cardiac arrest (OHCA). Most of these people died.

Hypertension (High Blood Pressure)



293,503 people or **20% of the adult population** have high blood pressure



Around 120,000 have undiagnosed high blood pressure... maybe more



When those diagnosed and undiagnosed are combined, **up to 1/3 of the adult population** have high blood pressure



Hypertension is the **#1 cause of stroke**

Women and Heart Disease



4 in 10 heart attack deaths are females

2x

Heart disease kills **more than twice as many** women in NI as cervix, uterus, ovary and breast cancer combined



Nearly twice as many women **died from Coronary Heart Disease than breast cancer** in 2023-24

Respiratory Conditions

Any disease that affects the lungs and airways.



176,912 people

are living with respiratory conditions



6 deaths every day

(2065 in 2023/24)



83 hospital

admissions every day
(30,239 in 2023/24)

43,390 people are living with COPD
It killed 833 people in 2023/24

133,522 people are living with asthma
It killed 47 people in 2023/24

Stroke & TIA

When the blood supply to part of the brain is cut off.

A transient ischaemic attack (TIA) or "mini stroke" is caused by a temporary disruption in the blood supply to part of the brain.



41,487 people

are living with a stroke or TIA



2 deaths every day

(888 in 2023/24)



9 people had a stroke every day

(3,379 people in 2023/24)

50% of stroke survivors are <75

38% of those who had a stroke in 2023/24 were <69

1 in 5 had a prior stroke

Almost half had hypertension before their stroke

About 1 in 5 had AF before their stroke

Around 1 in 5 were diagnosed with type 2 diabetes



Our Mission

Prevent chest, heart and stroke conditions and support people affected.



Our Vision

A healthy Northern Ireland free from chest, heart and stroke illnesses.



Our Guiding Principles

Engage with people to improve our work.

Contribute to population health and reduce inequalities.

Ensure that what we do is informed by evidence.

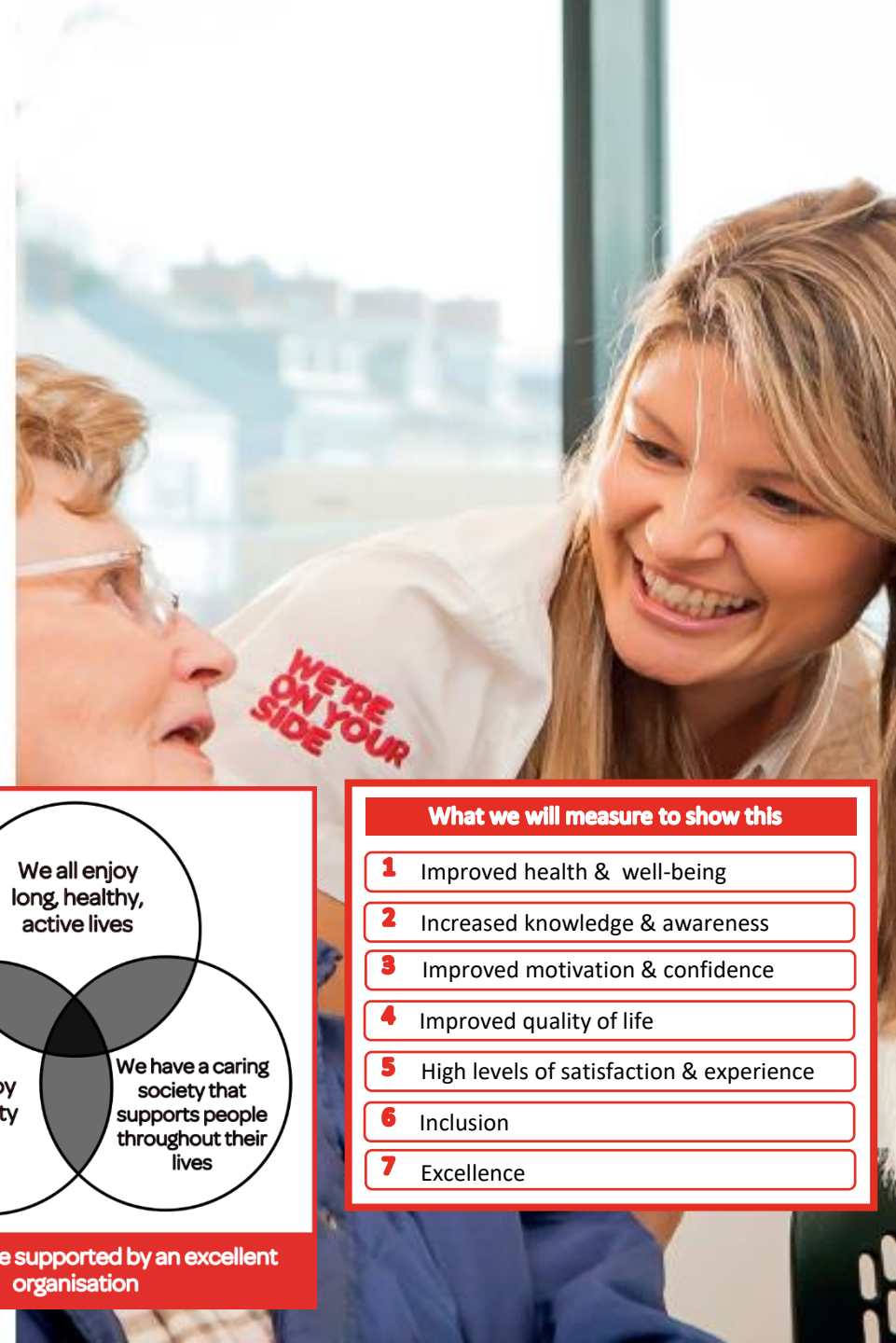
Allocate our resources to deliver the greatest impact.



All people are supported by an excellent organisation

What we will measure to show this

- 1 Improved health & well-being
- 2 Increased knowledge & awareness
- 3 Improved motivation & confidence
- 4 Improved quality of life
- 5 High levels of satisfaction & experience
- 6 Inclusion
- 7 Excellence



What We Do

We have been leading the fight against chest, heart and stroke illnesses in Northern Ireland since 1946.

We do this by working across four main areas:

- We Care
- We Prevent
- We Research
- We Campaign

We provide expert **care** and support to anyone living with chest, heart and stroke conditions.

We work to **prevent** these illnesses, by helping detect early signs of chest, heart and stroke illness and empowering individuals to make healthy choices.

We fund **research** to advance how we treat, care for and prevent chest, heart and stroke conditions.

We **campaign** for better care, treatments and awareness of chest, heart and stroke conditions.

As a charity, almost 90% of our work is funded thanks to public donations.



Lobbying & Campaigning



Aim:

To make chest, heart and stroke conditions a priority for decision makers.



Priorities:

- Influence public policy relating to the prevention of chest, heart and stroke illnesses.
- Ensure people living with chest, heart and stroke conditions have access to the best treatment and care.
- Build relationships with relevant decision-makers.
- Work with other relevant organisations to achieve shared lobbying.



Health Promotion



Aim:

To empower people to make healthy lifestyle behaviour changes and reduce their risk of preventable chest, heart and stroke illnesses.



Priorities:

- Expand, develop and review services to empower healthy living for children, young people and families.
- Contribute to a reduction in health inequalities by developing programmes for people and communities with greatest needs.
- Deliver and improve access to high quality health promotion services across NI.
- Partner with people and organisations who need our services and who share common priorities.
- Ensure all services are informed by evidence of what works and achieve the greatest impact.



Care Services



Aim:

To offer and deliver exceptional Care Services to meet the needs of people who have chest, heart and stroke illnesses and their carers.



Priorities:

- Increase the number of people availing of our chest, heart and stroke services.
- Expand, develop and review Cardiac and Respiratory rehabilitation/ support services which can demonstrate impact.
- Involve and listen to service-users in service planning, design and review.
- Expand, develop and review services for carers which can demonstrate impact.
- Improve the reach and accessibility of the charity's care services through digital technology.
- Evaluate existing services against a needs analysis and establish clear decision-making criteria for new services.



Research & Impact



Aim:

To find better ways to prevent, treat and care for people affected by chest, heart and stroke illnesses.



Priorities:

- Fund high quality local research into chest, heart and stroke diseases and their risk factors.
- Support research that enables the charity to achieve its strategy and mission with tangible benefits.
- Support collaborative research to leverage funding, profile and impact through partnerships.
- Involve and listen to CHS community and service-users to ensure our research is relevant to local needs.
- Measure and share the impact of the research we fund.
- Apply research findings to improve the evidence base and effectiveness of our work.
- Embed and continuously improve how the charity measures the impact of its work to inform the development of the charity.



Supporting functions

- Good governance
- Communications
- Physical and digital
- Finance
- Income Generation

Communications



Aim:

To increase awareness of NI Chest Heart & Stroke, what we do and the difference we make.



Priorities:

- Increase brand awareness of Northern Ireland Chest Heart & Stroke.
- Increase public awareness of what we do.
- Increase public awareness of the symptoms and causes of chest, heart and stroke illnesses.
- Increase public awareness of how to reduce risk and prevent chest, heart and stroke illnesses.
- Continuously develop our digital platforms and digital marketing, increasing our reach and growing our audiences.
- Improve internal communications across the charity.






Thank you

Almost 90% of our care and prevention services and research are funded exclusively by public donations.

**Find out how you can support us at
www.nichs.org.uk**

Follow us:

-  Facebook: www.facebook.com/NorthernIrelandChestHeartandStroke
-  Twitter: [@nichstweet](https://twitter.com/nichstweet)
-  Instagram: [@nichestheartandstroke](https://www.instagram.com/nichestheartandstroke)
-  LinkedIn: www.linkedin.com/company/nichs
-  TikTok: [@nichestheartandstroke](https://www.tiktok.com/@nichestheartandstroke)

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INVESTORS IN PEOPLE
We invest in people Gold





Application and Research Design Workshop

Stephanie Cathcart

We have invested
£2,267,914

in research over the last five years



Since 1994 we have invested over £9m in local research, funding 123 research projects



Current research investment

£1,828,239



22 live studies



7



9



4



2



Success rate

38%

avg over the last 5 years

Funding year	% funded
2019-20	36
2021-22	53
2022-23	50
2023-24	18
2024-25	33





NICHS Current Research & Funding Process



When does the
window open?

Window opens:

Tuesday 27th May 2025

Window closes:

Wednesday 27th August 2025





**How much is in the
grant “pot”?**

Research “pot” for 2025-26

£400,000



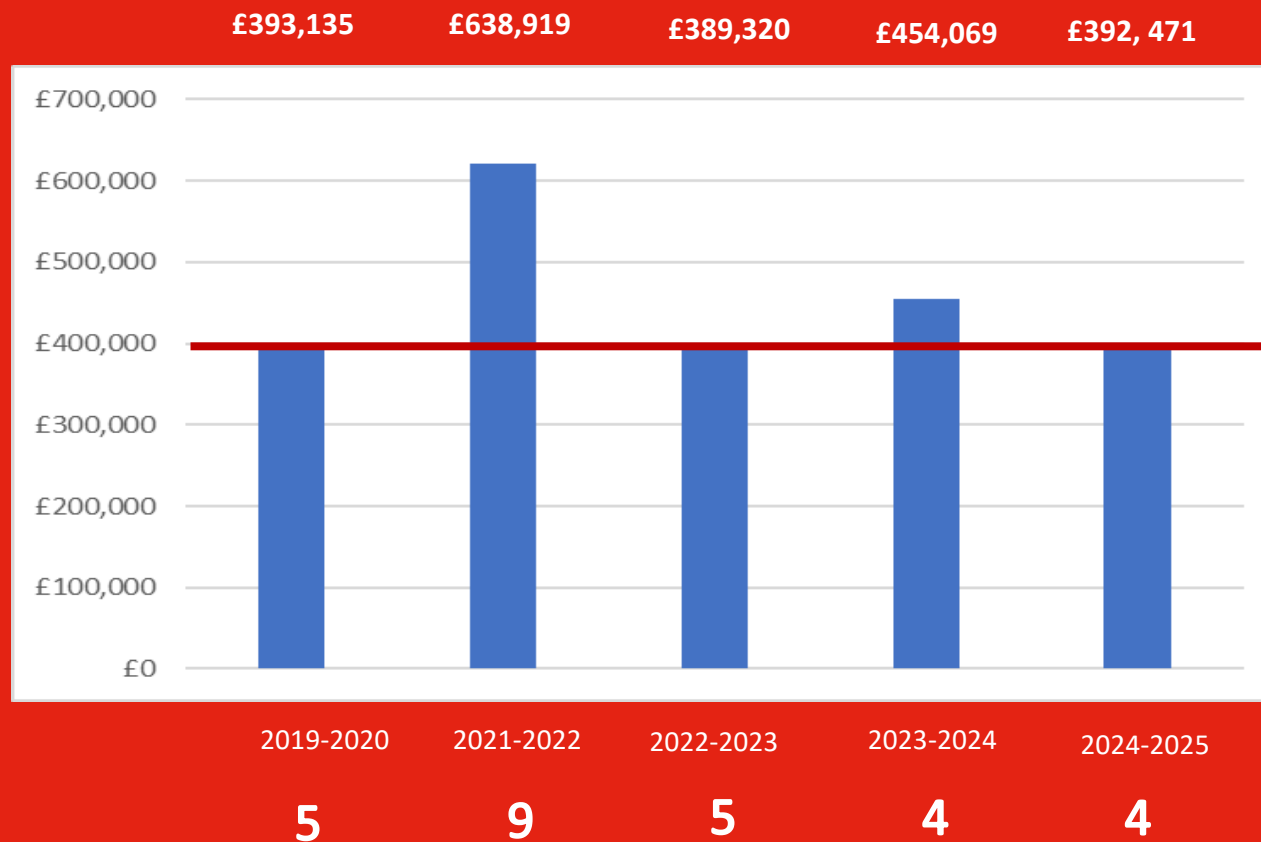
Depending on quality of applications received, we will spend all, none (and sometimes more*)





£2,267,914

invested in research over the last 5 yrs





What sort of research do we fund?



In the broadest sense, **high quality** research that is a **good strategic fit**.

Research & Impact

Strategic Plan 2023-26



Aim

To find better ways to prevent, treat and care for people affected by chest, heart, and stroke illnesses

- **prevent, treat, care**
- **ideally, as close to the person as possible**
- **tangible benefit**

Research & Impact

Strategic Plan 2023-26



Priorities

- Fund high quality local research into CHS diseases and their risk factors
- Support research that enables the charity to achieve its strategy and mission with tangible benefits
- Support collaborative research to leverage funding, profile and impact through partnerships
- Involve and listen to CHS community and service users to ensure research is relevant to local needs
- Measure and share the impact of the research we fund
- Apply findings to improve evidence base and effectiveness of our work

high quality

relevant to need

collaborative

co-production

improves what we do



Can an over-the-counter medication for cold sores help in the fight against COPD?

Are severe common cold infections in childhood linked to developing asthma?

Are people less likely to keep using their asthma inhalers when treated with powerful new biologic medicines?

How should we treat dangerous bacteria that grow in intensive care ventilator tubes, in order to prevent VAP (pneumonia)?



Developing a lateral flow device to test for heart failure.

How many people have an inherited heart condition?

Why do some children develop life threatening heart conditions after a COVID infection?

Can Vitamin B2 be used to lower high blood pressure?

Co-developing a heart failure resource for care home staff and residents.

Developing a support intervention for people with advanced heart failure and their carers

Developing a brief intervention to improve people's adherence to cardiac rehab

Developing technology that scans the eye to identify risk of CVD.

Can fenugreek seed be used to prevent CVD?



Can we improve our post-rehab programme for stroke survivors by adding arm exercises?

Developing a psychological therapy that's suitable for stroke survivors with cognitive impairments.

Developing a digital app to help people who have had a "mini" stroke make lifestyle changes.

Can a lifestyle change tool be simplified and still be effective for people who have had a stroke?

Designing a programme to help people with stroke to keep active in the longer term.

Testing a new technology that provides stroke patients with feedback of their brain activity while they imagine movements, in the form of a computer game



Can we modify a tried and tested Irish post-primary physical activity programme, and deliver it in NI schools?

Can a successful Australian primary school programme be adapted to suit Northern Ireland?

Can providing financial incentives encourage pregnant women to quit smoking?

Why do young people use e-cigs? What are their (and their parents') attitudes to them?



Type of research funded

Basic / preclinical

Intervention

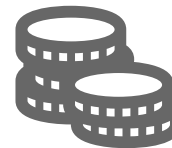
Remainder = registries*



Who can apply?



Collaboration



Match funding



How do we decide which studies to fund?










**The process is independently audited
/ accredited**



Funding decisions are made using a
thorough and transparent process



Grant timeline and process

	1 Application window	27th May – 27th August 2025.
	2 Application check	September 2025
	3 Expert review (x2)	September 2025 – November 2025
	4 SRC member review	December 2025- January 2026
	5 PI reply / clarify	January 2026
	6 SLT & PPI meet	January 2026
	7 SRC meet and score	February 2026
	8 Finance Comm. Meet	March 2026
	9 Notification and next steps	April/May 2026



Scientific Research Committee (SRC)

16 

Researchers

Professional working in clinical posts

Two PPI Reps

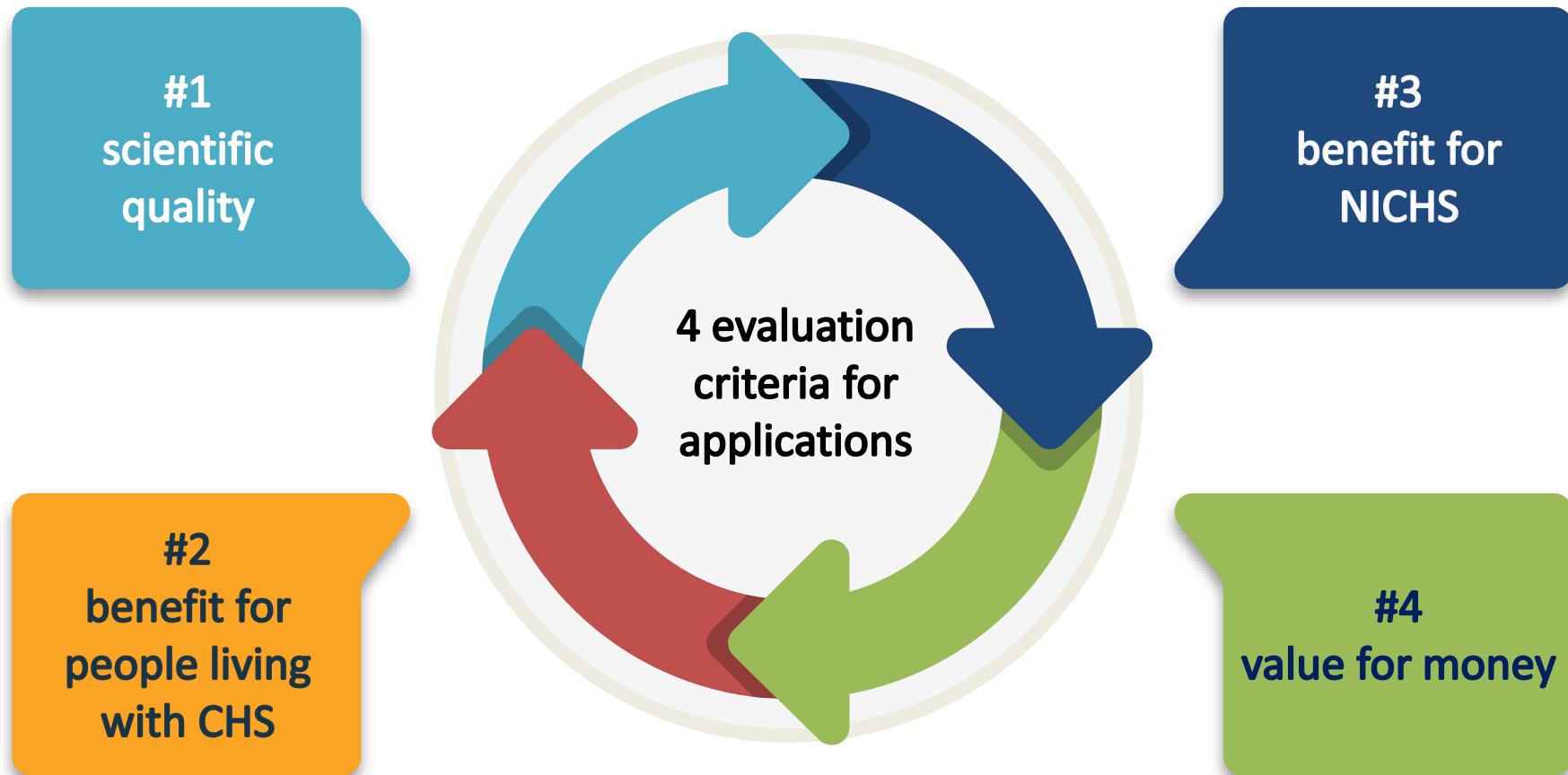
(members of the public / living with CHS / personal experience)



What are the decision-making criteria?



Funded projects must demonstrate:





Applications are scored on these four criteria

scoring on 11-point scale

Extremely poor 0

Excellent 10

final overall score

average of SRC (group) scores and SLT score



#1 Scientific quality

Reviewers base their scores on

Is the study needed?	Is it a well thought research question? Are aims & outcomes clear?	Is there a well described plan to achieve them?
Is there a clear plan to manage the project?	Ethical, scientific, statistical, technical considerations	Skills and experience of team

IS YOUR STUDY...

- ? Credible, relevant, needed?
- ? Unambiguous, clear “story”?

- ? a high quality design?
- ? delivered by a high-quality team?



#2 benefit to people living with CHS

Reviewers base their scores on

Has the application clearly identified who will benefit, how and when?


Are outcomes realistic and achievable?


Is there a well described plan to achieve them?

Is the plan / timeframes realistic and achievable?

Are people living with CHS meaningfully involved in the study?

Have you engaged with stakeholders?

 Who will benefit, how, when?

 Are you being realistic?




#3 benefit to NICHS

Reviewers base their scores on

Does study align with our mission and aims?	Is your study attractive to our stakeholders?	Can we justify spend to our donors and stakeholders?
Will outcomes of study improve our work?	Do you require any other resources / input from us?	How will you promote NICHS across the study life cycle?

IS YOUR STUDY...

 Why should we fund your study?

 Is there a risk to funding it?

#4 Value for money

Reviewers base their scores on



Clear justification of allocation
of funds

clear and justifiable
management plan

Clear deployment of skills and
resources

clear milestones and
deliverables

clear contingency plan

Is this study “Value for money”,
given the resources required
and expected benefits?



VFM does necessarily not mean cheap



Are funds requested realistic?



Will you deliver on time and within budget?



Important Points

- Try to “break” your question, before we do
- Think carefully, plan accordingly
- Assume nothing
- Write plainly. Be clear. Be precise
- Engage with stakeholders
- If unsure, seek input / advice
- **remember, we want to fund you (if you’re good enough!)**



Important Points

All applications must

- Be completed as per guidance
- Be submitted by date specified
- align to NICHHS strategy and
- meet our 4 decision making criteria

More details will be provided in application guidance



Next steps

Open call

- We welcome research that strengthens the evidence base for our work and improves our services.
- Applications must align with our strategy and mission.
- We welcome applications from across disciplines



Next steps

Making an application

Materials will be available online from **Tuesday 27th May 2025**
([NICHHS | How to Apply to our Scientific Research Grants Programme](#))

Queries

- Stephanie Cathcart scathcart@nichs.org.uk
- Professor Mike Clarke m.clarke@qub.ac.uk



Thank you



**QUEEN'S
UNIVERSITY
BELFAST**



Research Design and Methodology

Online
Thursday 8 May 2025

Professor Mike Clarke
m.clarke@QUB.ac.uk

Some things to think about

- What is the problem you want to address?
- What is your research question?
- Why do you want to answer this?
- Who will use your answer and what impact will it have?
- What study design will you use?
- Who are you going to study?
- What are you going to do with them?
- How long will your study (and its impact) take?
- Do you have funding partners?
- Why will your study succeed?

Is your study a good fit for the NICHS?

Try to break your study
while preparing the
application, so that **you** can
put it back together
stronger, making it less
likely that someone else will
break it after you submit it

**Getting the
research
question right**

**Defining the research question is a
vital first step, because ...**

It (ie everything else you
will do) depends on that
question.

- Is a vegetarian diet good?
- Does drinking a cup of coffee make people happy?

Is a vegetarian diet good?

- What is a vegetarian diet?

Is a vegetarian diet good?

- What does 'good' mean?

Is a vegetarian diet good?

- Good for whom?

Is a vegetarian diet good?

- Compared to what?

Is a vegetarian diet good?

- What is a vegetarian diet?
- What does 'good' mean?
- Good for whom?
- Compared to what?

Does drinking a cup of coffee make people happy?

- What is a cup of coffee?

Does drinking a cup of coffee make people happy?

- What people?

Does drinking a cup of coffee make people happy?

- What does 'happy' mean?

Does drinking a cup of coffee make people happy?

- Compared to what?

Does drinking a cup of coffee make people happy?

- What is a cup of coffee?
- What people?
- What does 'happy' mean?
- Compared to what?

**Defining the research question is a
vital first step, because ...**

It (ie everything else you
will do) depends on that
question.

Formulating a research question

Pet therapy for cardiovascular rehabilitation

Choosing the study design

What design?

Your design needs to match your question

- Comparing the effects of interventions

➡ randomised trial

- Identifying risk factors

➡ case control or cohort study

- Estimating the size of the problem

➡ survey

- Better understanding of people

➡ qualitative research

**Why should
NICHHS invest in
your study?**

Strengthening your application

NICHHS

- How well does your study fit with the NICHHS strategy and their priorities for the services they provide?
- Why should a Northern Ireland charity fund you?
- When will your study deliver impact?
- What difference might you make in the next five years?

PPI

- What personal, patient and public involvement have you had?
- If you are developing or evaluating an intervention, is it co-produced?

EDI

- What areas of inequity will you address?
- How will you ensure inclusion of under-served groups?

Research

- How will you avoid research waste?
- Is there a systematic review to justify your new study?
- Will your study contribute to helping Northern Ireland's health and social care research to become more resilient and grow?

**How much would
you pay for the
answer to your
research
question?**

Northern Ireland Implementation Plan for Clinical Research Recovery, Resilience and Growth

www.health-ni.gov.uk/publications/northern-ireland-implementation-plan-clinical-research-recovery-resilience-and-growth

tinyurl.com/f76w7u57



HSC Statistical and Methodological Support Service

research.hscni.net/hsc-statistical-and-methodological-support

Personal and Public Involvement in Research

research.hscni.net/personal-and-public-involvement-ppi-research

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