Implementation Science

Implementation science (also known as improvement science) is a developing field of study focused on the methods, theories and approaches that facilitate or hinder efforts to improve quality and the scientific study of these approaches.

The Unit is developing expertise in Implementation Science to provide robust research evidence of which strategies work to facilitate implementation of evidence based healthcare in a safe and effective way, reaching the intended target audience and maintaining the outcomes demonstrated in controlled trials.

We are doing this via the following broad activities and the research questions they address:

Understanding adoption and up-take of research and evidence: an organisational change and behaviour change process

Adoption of research evidence by providers: Who needs to be involved at strategic levels? Do they have all the information they need to make decisions? Who will deliver the service changes? Other considerations such as: availability of workforce; costs and other resource implications; and training needs.

Adoption of research evidence by users: Who needs to be involved to ensure utilisation (patient groups, professionals/referrers)? How will they know about the intervention? How do you ensure the right intervention gets to the right people? How do you ensure ease of access for all? How do you address concerns? What influences or hinders adoption?

Modeling Implementation:

Will the delivery of the intervention maintain fidelity to the evidence based intervention or are local adaptations necessary? Will the delivery of the intervention include planned modeling of different skill mixes and scenarios for delivery? OR will naturalistic implementation in different contexts/ settings be studied to document adaptation in relation to the achievement and sustainability of outcomes.

Monitoring of variation and sustainability of outcomes:

Did the intervention reach its target audience, ensuring equity of access for all? Has the intervention been adopted and maintained in everyday practice? Are the expected benefits and outcomes achieved in trial conditions sustained over longer term?

Find out more

The Unit has a website: www.nmahp-ru.ac.uk.

Here you can find details on all our recent research projects and publications and keep up to date with our latest news.

Contact Details:

Director: Professor Brian Williams

Deputy Director Stirling and QDC Programme Lead: Professor Margaret Maxwell Deputy Director GCU and Interventions Programme Lead: Professor Suzanne Hagen

General Contact Stirling: General Contact GCU:

Karen Stanton
Iris Murdoch Building
University of Stirling
Stirling
Glasgow
Kim Stewart
Buchanan House
Cowcaddens Road
Glasgow

Stirling Glasgow FK9 4LA G4 0BA

01786 466341 0141 331 8100

Karen.Stanton@stir.ac.uk Kim.Stewart@gcu.ac.uk Twitter: @nmahpru



www.nmahp-ru.ac.uk

Quality and Delivery of Care Programme This programme focuses on identifying problems and variation in quality and delivery of care and understanding why they occur. It concerns understanding the behavioural (patient and practitioner) and organisational influences on care delivery and uptake of best practice. It also researches the implementation and translation of evidence based solutions into practice, along with further examination of models of delivery of care.

This includes exploring: who delivers care; where and how it is delivered; who receives care; and what are the outcomes of care delivery. The processes by which professionals and patients make decisions about care are central elements of this programme, alongside the organisational context in which decisions are made and care is delivered. A key influence on the delivery of care is the recognised importance of the patient experience

Unit Background:

and patient involvement.

Research Unit

Health Professions

Allied

and

Jursing, Midwifery

The Nursing, Midwifery and Allied Health Professions Research Unit (NMAHP RU) is a multidisciplinary national research unit, funded by the Scottish Government Health Directorate **Chief Scientist Office (CSO)**. It has academic bases within Glasgow Caledonian University and the University of Stirling.

Research Programmes:

NMAHP RU focuses its activity on strong programmes of research that will impact on NMAHP practice and benefit patient and population health. Following the Unit's successful 2010 Scientific Review, its activity was consolidated into two new programmes: Interventions and Quality and Delivery of Care. This leaflet provides information on the Quality and Delivery of Care programme. Further information on the Interventions Programme is available at www.nmahp-ru.ac.uk.



Strategic aims of the Programme

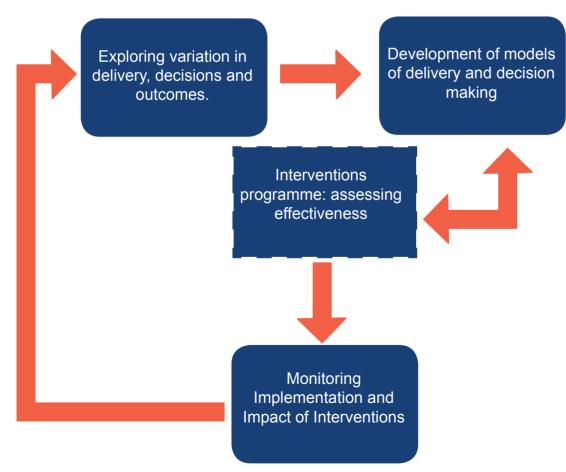
To enable safe, effective and patient centred changes to the delivery of care provided by NMAHPs by:

- Exploring and developing models of delivery (location, technology, staff skill mix)
- Researching up-take and implementation of effective/evidence based models of delivery (adoption, consistency of implementation, costs)
- Exploring the processes by which patients and clinicians make decisions about care
- Exploring patient experiences of quality and delivery of care, and up-take and adherence/ concordance among patient groups (reach)
- Exploring variation in outcomes (inequalities, inappropriate/avoidable admissions, mortality and adverse events) and maintenance of intervention outcomes
- Developing theory and methods in implementation health research

Improving the quality and delivery of NMAHP practice also involves using a wide range of study designs and methods to investigate:

- who delivers care e.g. health professionals, para-professionals, the patient (self care), their carer, friends or voluntary sector partners; and how to improve judgements and decisions around the transition of care between these different groups;
- where it is delivered e.g. focusing on issues around the effectiveness of out of hospital delivery which we have already considered in relation to paramedic care, and the issues surrounding transfer between different care settings;
- how to improve clinical effectiveness and professional practice, to identify and reduce variation in care standards and develop and test most effective models of care delivery.

Quality and Delivery of Care programme and its links to Intervention programme



Examples of current projects:

Safety

SAS COPD study

Evidence suggests patients with Chronic Obstructive Pulmonary Disease (COPD) are still receiving higher than required levels of oxygen in the pre-hospital phase of their treatment and that this is having a detrimental effect on ongoing care.

A retrospective linked data study of ambulance service and patient mortality and morbidity data is currently being undertaken. The study aims to determine pre-hospital and emergency department treatment patterns of oxygen therapy and the short-term patient outcome.

Follow-up of hypoglycaemic emergencies

Patients, with certain conditions, who are attended by ambulance services are increasingly being treated and left at home, instead of routinely transported to hospital. Research has shown that patients who are treated for hypoglycaemic emergencies and left at home do not routinely follow up their care. This project developed and piloted a dual intervention to encourage and support patients to follow-up their care: a patient prompt card that was left with patients; and a follow-up telephone call from NHS24. Further studies are now planned to test the effectiveness of this intervention.



Effectiveness and Quality Assessment of Care

Measurina Variation in Outcomes

The Framework for Measuring Impact is a decision support resource to guide therapists in the selection of appropriate outcome measurement.

The CARE Measure Website provides a mechanism for therapists to collect data on their own levels of therapeutic empathy, and to receive individualised feedback on their performance and how they compare with their peers.



Patient Centred Assessment of Need (PCAN)

Developed in partnership with University of Minnesota this is a practical tool for nurses conducting health checks to holistically assess mental wellbeing and biopsychosocial needs of patients in a manner which facilitates the referral and sign-posting to appropriate medical, psychological, social and lifestyle/self-help services.

Patient Centred and Patient Experience

The Scottish Person Centred Interventions Collaboration (ScoPIC)

(www.nmahp-ru.ac.uk/scopic). A Scottish Government funded collaboration between universities in Scotland and several NHS boards. Its core aims are: the evaluation of NHS national and local initiatives aimed at improving patient experience of care; improving the understanding of the causes and consequences of good and poor patient experience of care; and developing effective research and audit tools for the evaluation of patient experience of person centred care.



Scottish Maternity Patient Experience Survey 2013

This survey is being undertaken in partnership with the Scottish Government Patient Experience Programme and will provide high quality national data on women's experiences of maternity care. It will inform improvement in maternity services as outlined in the NHS Scotland Healthcare Quality Strategy.

Models of Delivery

Postnatal Care Resource Allocation Model (PRAM)

The project uses computer based service re-design methods to develop an effective and efficient model of postnatal care.



Preventing and Treating Depression

The development of an internet-based guided self-management tool for mild to moderate depression: an evidence based approach. Translated for 9 European languages. www.ifight-depression.com

