Health equity impacts – a research agenda

Dr Richard Cookson recently won a five-year NIHR Senior Research Fellowship from 2014-18. Here, he explains how he wants to use this opportunity to help shift health inequality research away from documenting problems and towards evaluating solutions.

Researchers have made progress measuring social inequalities in health, and understanding their causes. But health care and public health decision makers still do not know how to reduce health inequalities, because they lack evidence on the health equity impacts of their actions. During my five year fellowship period I plan to conduct a sustained programme of research to help decision makers find cost-effective ways of reducing health inequalities.

My programme has three inter-linked research streams focusing on three important gaps in the evidence base. Decision makers lack evidence on, A: How well are organisations performing in reducing health inequalities? B: What are the health equity impacts of specific interventions? And C: In a resource constrained environment, what are the equity-efficiency trade-offs between reducing health inequality and improving total population health?

Stream A will develop new equity metrics for monitoring NHS performance in tacking health inequality. I’ll produce “equity movies” showing how inequalities change over time, and “equity dashboards” to help NHS organisations monitor equity performance in their own areas. By linking large datasets, I’ll also build a data platform for Stream B.

Stream B will use quasi experimental methods to evaluate the health equity impacts of strategically selected interventions. I’ll start by evaluating one NHS intervention designed to reduce health inequality (e.g. health inequality support for primary care of CHD and diabetes) and one designed to improve overall health but with a risk of increasing health inequality due to social gradients in uptake (e.g. the NHS bowel cancer screening programme).

Stream C will develop new methods of economic evaluation that analyse equity-efficiency trade-offs by modelling the social distribution of costs and benefits. I’ll first develop methods for distributional cost-effectiveness analysis of healthcare interventions, and then extend this to distributional cost-benefit analysis of wider social policy interventions with costs and benefits falling outside the health sector. The methods will be illustrated through applications to bowel cancer screening and pre-school education.

I will also develop international collaborations with a view to analysing health equity impacts in other high income countries and exploiting opportunities for cross-national quasi experiments. I’ll then develop my programme beyond the fellowship period by harnessing powerful new sources of “big data”, by evaluating the health equity impacts of other health and public services, by collaborating with people analysing health equity impacts in low and middle income countries, and by developing training resources to help analysts use these methods to inform health care and public health decisions in the UK and across the world.
NIHR Senior Research Fellowship 2014-18

Health equity impacts: evaluating the impacts of organisations and interventions on social inequalities in health

- **Stream A: Health Equity Impacts of Organisations**
  - Study 1: National and Sub-National NHS Equity Performance
    - Changing social gradients in use and outcomes of effective healthcare (time series analysis)
    - Creative use of national administrative datasets
    - Equity dashboards for NHS organisations
    - Data platform for Stream B
  - Future Work After the Fellowship
    - Refinements using linked survey and clinical registry data
    - Equity dashboards for other UK and overseas organisations

- **Stream B: Health Equity Impacts of Interventions**
  - Study 2: Health Inequality Support for the Primary Care of Coronary Heart Disease and Diabetes
  - Study 3: NHS Bowel Cancer Screening Programme
    - Quasi experiments (“difference-in-differences”)
    - Methods for analysing the distribution of health impacts
    - Lessons for the delivery of future programmes
  - Future Work After the Fellowship
    - Evaluate health equity impacts of other healthcare and public health interventions in high and low income countries

- **Stream C: Economic Evaluation of Health Equity Impacts**
  - Study 4: Healthcare Interventions
    - Ways of promoting uptake of bowel cancer screening
  - Study 5: Wider Social Policies
    - Ways of delivering pre-school education
  - Future Work After the Fellowship
    - Other applications in high and low income countries
    - Develop training resources