Introduction

There is a good deal of international policy and service interest in developing new models of care in order to achieve what is often described as the ‘triple aim’ of health care reform, namely: i) improved quality of patient care; ii) improved population health; and iii) reduced per capita costs of health care provision.[1] The emergence of integrated consultant posts/services, which aim to help bridge the current divide between community and hospital care, is one example of such a service innovation. Such innovations should ideally be evaluated to establish whether the hoped for improvements have been achieved and to provide insights into how the service innovation may need to be refined in order to maximise its impact.[2] This short paper aims to provide a framework for thinking about how such evaluations might be undertaken.

Being clear about the nature of the problem and the desired end-points

A key first question to ask is why is an innovation in service delivery (e.g., the introduction of integrated care consultants) needed? Framed another way, it is important to be clear and have a shared understanding of what the problem(s) is/are and what success would look like. This will help in clarifying the aims/objectives of the service innovation and the outcome measures that really matter.

How is it anticipated that the service innovation will translate into improvements in outcomes?

It is important to explicate how one hopes that the service innovation will translate into the improved outcomes. This can be done with the help of a logic model or driver diagram. For example, an assumption underpinning many service innovations in health services is that the intervention will operate through the Donabedian ‘structure-process-outcomes’ model.[3] This can then help guide both the development of the actual intervention (e.g., the nature of the integrated consultant’s job description and training) and the evaluation (e.g., investigating to see whether new structures were established, whether these translated into new care processes and then whether these in turn impacted on outcomes of interest).

Does an existing off-the-shelf evidence-based intervention already exist?

It is next important to establish that given the nature of the problem and the desired outcomes whether any suitable effective and cost-effective intervention already exists. It is important to, for example, search relevant clinical guidelines, particularly those produced using internationally respected processes (e.g. as is the case with BTS/SIGN and NICE guidelines). If so, the intervention should be implemented, as described in the guideline.

What to do in the absence of such an evidence-based intervention: the ideal scenario

If there is no suitable intervention already existing than there will be a need to develop and evaluate an intervention. The introduction of integrated care consultants/services is an example of what is
sometimes described as a ‘complex intervention’ (i.e. an intervention with multiple interacting components). The Medical Research Council (MRC) recommends a phased process of development and evaluation, which in essence begins with being clear about the theoretical underpinnings of such an intervention, undertaking evidence synthesis and feasibility work, piloting this and then ideally evaluating it in a formal randomised clinical trial or using a quasi-experimental design if a trial is not possible.[4] The final stage in the process is to undertake implementation work, which seeks to embed effective and cost-effective interventions into routine care and establish whether the desired outcomes are achieved in everyday clinical settings.[5]

**When the ideal is not possible**

It should be noted that the above described model is the ideal scenario, particularly if the aim is to generate generalizable knowledge that has the aim of influencing national deliberations. Such evaluations are however very costly and time consuming endeavours and are next to impossible to achieve without formal academic partners and substantial research grants.

The best must not however be allowed to be the enemy of the good; thus, even if such robust evaluation is not possible, this should not mean that evaluation should not be undertaken at all. This is because having some information and insights into the effects of the innovation are better than having no data at all. The one proviso here is that there must, as far as possible, be a commitment to producing unbiased information.

There are many possible alternative evaluation approaches, which include undertaking:

- Audit cycles: to see if certain standards of care provision have improved
- Quality improvement cycles: which involve more continuous monitoring of outcomes and repeated iterations of the intervention (e.g. aspects of the consultant’s role) to see if the parameters of interest (e.g. referral rates) are moving in the desired direction
- Questionnaire surveys: asking about various stakeholders perceptions and experiences of the quality of care; these should ideally be undertaken using a pre-post design
- Undertaking case studies: these typically involve qualitative interviews and may also involve ethnographic observations and documentary analysis.[6]

**Conclusions**

This short paper has provided a very high-level overview of some key considerations in relation to evaluating the introduction of integrated care consultant posts/services. The key take home message is that there are a range of approaches to evaluating service innovations – from the ‘gold-plated’ MRC complex intervention framework to undertaking pretty inexpensive and straightforward audits or questionnaire surveys – and they all have something useful to contribute to assessing whether the desired effects have been achieved and the lessons any particular service innovation may offer to others planning similar initiatives. Through such sharing of experiences and the collective distilling lessons learned [7] we have the opportunity to work towards the development of what the Institute of Medicine has described as a ‘learning health system’.[8]
References