Tackling disinvestment in health care services

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Introduction

Rising levels of demand due to ageing populations and increases in long term conditions (White 2007), increased levels of expectation amongst patients and inflationary pressure caused by the rising cost of new technologies are amongst the explanations for the funding shortfalls in government funded health systems across the world (Newhouse 1992). The challenge facing these health systems has also been intensified by the worldwide economic downturn. Within health systems, efforts have been made to increase productivity and efficiency and to control costs without reducing quality (Garner and Littlejohns 2011) but the scale of the task necessitates further action (Donaldson et al. 2010). Beyond productivity and efficiency gains the next logical step for decision makers is disinvestment in cost-ineffective services, prioritisation of funding for one service over another or what Prasad (2012) refers to as 'medical reversal'. The aims of this study were to explore the experiences of budget holders within the English National Health Service (NHS) in their attempts to implement programmes of disinvestment, and to consider factors which influence the success (or otherwise) of this activity. This paper begins with clarification of terminology and a summary of the current state of knowledge with regard to health service disinvestment, before presenting and discussing findings. The research suggests that disinvestment activity is varied across organisations and ranges from 'invest to save' schemes through to 'true disinvestment.' Although the majority of interviewees accept that disinvestment is necessary most had made little progress at the time of interview beyond 'picking the low hanging fruit'. Interviewees identify a number of determinants of disinvestment such as: local/national relationships, co-ordination/ collaboration and; professional understanding and support.

Understanding disinvestment

There is some divergence in how the term 'disinvestment' is employed. Elshaug *et al* (2007, p.23) define disinvestment as 'withdrawing health resources from any existing health care practices, procedures, technologies or pharmaceuticals' and locate the term firmly within the tradition of health Technology Assessment. In essence, this is the mirror-opposite of *investment* and involves either full or partial withdrawal of resources. Frøndsal *et al* (2010) position disinvestment at the end of a technological life cycle which begins with innovation and moves through adoption before reaching a stage where that innovation is no longer "clinically or cost effective" (p.315). The reasons for undertaking disinvestment can also vary from identifying resources for re-allocation or reinvestment to finding savings to meet budgetary shortfalls. Garner and Littlejohns (2011, p.2) argue that disinvestment "is part of a broader agenda to improve efficiency and quality focusing on public health and prevention and ensuring that patients receive the right care at the right time in the right way".

Williams et al (2012) note that disinvestment can take a number of forms in a healthcare setting, including: full withdrawal or decommissioning, retraction, restriction and substitution. Nuti *et al* (2010, p.138) also suggest that disinvestment can include "service reductions due to inappropriateness" as well as "savings achieved through better efficiency identified through benchmarking (e.g. lower cost for the same output)." Withdrawal or full decommissioning of a service, treatment or intervention can be the most controversial approach to disinvestment whereas retraction or restriction can be the most difficult to monitor and maintain. Either way it is increasingly accepted that "the decision to decommission a service is always fraught with uncertainty and difficulty" (Puffitt and Prince 2012, p.111) and disinvestment is generally a "complex and often neglected task." Despite the promised efficiencies of disinvestment, as Smith *et al* (2010) point out, unless this is carried out in a planned, strategic way then unmanaged substitution may take place and activity in related services may rise causing an overall increase in cost.

If withdrawal is considered to be the full decommissioning of a service then retraction should be considered as partial decommissioning or "investing in less of an intervention" (Williams et al 2012, p. 117). Whilst the financial benefits of retraction may often be smaller than those of withdrawal it might reasonably be assumed to be more palatable from a political, patient, public perspective, and it can mitigate against the unmanaged substitution effect highlighted by Smith et al (2010). When services are retracted, access criteria are often not specified and patients continue to access services in the same way; for patients, the noticeable effects of retraction are often limited to lengthening waiting times. In addition to this, retraction allows for demonstration of the effects and consequences of disinvestment without the finality of full withdrawal and in this respect retraction can either pave the way for future withdrawal or can be reversed if unsuccessful.

Imposing additional restrictions on services for population and patient sub-groups is another means of disinvestment. This entails defining set criteria for access to services/ treatments and barring those patients that do not meet the criteria from accessing provision. In some cases restriction of treatment may be on the grounds of patient safety and any associated cost saving may be merely coincidental. In other cases, however, the level at which the restriction has been set may result in intentional efficiency savings (Ford-Rojas 2012).

A further form of disinvestment is substitution. This refers to processes in which an intervention, treatment or practice is replaced by one which is considered to be more efficient. Duerden and Hughes (2010) identify two types of substitution which are commonplace in prescribing practice. The first of these is generic substitution where generic forms of treatments whose patents have expired are prescribed in place of more expensive branded drugs. The other is therapeutic substitution which involves switching to a cheaper, but apparently equivalent, treatment within the same drug class. This is more contentious and less common in practice than generic substitution. In

addition to Pharmaceutical examples, other instances of substitution could include Clinical Nurse Specialists taking on more traditionally medical roles (Lane and Barlow 2011) or the provision of community alternatives to inpatient care, such as 'hospital at home' (Jones et al. 1999). Substitution may also take the form of 'medical reversal' (Prasad et al. 2012) whereby clinical decision makers opt to replace out of date treatments and technologies with newer alternatives.

Tackling disinvestment

There are a number of approaches to the enactment of disinvestment advocated in the literature. For example, Donaldson *et al* (2010) propose a process of 'rational disinvestment' whereby marginal analysis of the benefits of each additional unit of treatment are compared with the benefits of another and a judgement is made as to where funding can be utilised most effectively. This approach builds on the Programme Budgeting and Marginal Analysis (PBMA) framework (Mitton and Donaldson 2001; Ruta et al. 2005; Bate and Mitton 2006) and a modified PBMA disinvestment framework has recently been developed by researchers at the University of British Columbia (Schmidt et al. Forthcoming). Central to both of these approaches is the notion of opportunity cost whereby spending money on one intervention necessitates withholding funding from another. This 'rational disinvestment' requires a means by which benefits can be accurately defined and measured as well as relatively high quality data. One criticism often levied at these approaches is the accessibility of high quality data (Twaddle and Walker 1995; Peacock et al. 2009).

One example of PBMA implementation was in Alberta, Canada, where PBMA was used to construct and apply a decision making framework to set spending priorities for the region (Mitton et al. 2003; Patten et al. 2006). This application of PBMA was successful in closing a CAD $40m budget deficit but it remains unclear how the organisation operationalised the decisions made using PBMA. Dionne et al (2009) carried out interviews with decision makers after a similar application of PBMA on Vancouver Island and highlighted one of the main criticisms of the approach. They found that, in

some quarters, there had been significant resistance to the implementation of PBMA which made it difficult to actually implement the decisions made using the framework. Whilst highlighting this criticism, Dionne et al (2009, p.234) did note that "many of the initial problems with PBMA implementation resolved themselves over time as participants became more familiar with the process".

An alternative means of disinvestment is through application of Health Technology Assessment (HTA) which is"the multidisciplinary evaluation of medical technologies with regard to efficacy, safety, feasibility, cost, cost-effectiveness and indications for use" (Herndon et al. 2007, p.1297). In the same way that HTA can be used to decide whether a new technology should be adopted, it can also be used to assess whether existing treatments should continue to be funded on the basis of their cost effectiveness. Despite there being a number of practical and theoretical examples of HTA being used in an effort to deliver disinvestment (Elshaug et al. 2009; Zechmeister and Schumacher 2012; Elshaug et al. 2008), as well as political mandates (Pearson and Littlejohns 2007), the evidence base for re-engineering HTA for this purpose does require further development (Ibargoyen-Roteta et al. 2009; Leggett et al. 2012).

Furthermore, Haas *et al* (2012) suggest that, internationally, there is a gap between application of the HTA process to identify disinvestment opportunities and the process of actually disinvesting in these technologies; this implementation gap mirrors the difficulties that have been reported in implementing PBMA (Henshall et al. 2012). They discuss incentivising patients and clinicians to follow HTA recommendations and thus increasing the possibility of freeing funding from outdated or ineffective technologies. Examples of incentivising behaviours include the Quality and Outcomes framework in the UK which financially rewards GPs for delivery against specific indicators (Doran et al. 2008) or the use of performance information to aid patient choice of provider in the US and ensure that providers prioritise quality and innovation (Haas *et al*, 2012). The use of decision aids

amongst patients has been shown by O'Connor *et al* (2007) to not only increase the value of clinical interventions but also to reduce the use of interventions which patients perceive as being of little value. In practice, another way to incentivise disinvestment through HTA could be to reinvest a proportion of savings into new services and innovations (Noseworthy and Clement 2012).

In the past research into priority setting has focussed primarily on *investment* decision making rather than disinvestment (Robinson et al. 2011). Although recent years have seen some reversal of this pattern, significant progress still needs to be made before a consensus on effective disinvestment practices, including the use of health technology assessment and PBMA, can be reached (Jonsson 2009). There is also a lack of specific investigation of the perspectives and experiences of health care budget holders tasked with putting disinvestment into practice. Given this lack of consensus and clarity, this research on the experiences of health care resource allocators is timely and the study is intended to yield insights for policy and practice but most importantly for future research into this nascent area of health care.

Methods

In keeping with the exploratory aims of the research – i.e. to explore a relatively under-investigated area of resource allocation and management – we adopted a qualitative methodology drawing on semi-structured interviews with budget-allocating (commissioning) organisations within the English NHS (Marshall and Rossman 1995). Self-reported rates of disinvestment in the NHS have previously been identified (Robinson et al. 2012), so, in order to add to this literature, a qualitative interview approach was employed to explore attitudes and experiences in more depth, as well as to identify the perceived determinants of successful disinvestment. Respondent selection was carried out in a process of purposive sampling. At the time of research Primary Care Trusts (PCTs) were responsible for spending around 80 per cent of the NHS budget and therefore key to any programmes of

disinvestment or 'decommissioning'. The following criteria for respondent sampling were established based on an existing quantitative survey of PCT priority setting (Robinson et al. 2012):

- Role within the commissioning organisation: we targeted commissioning leads
- Prior record of disinvestment: individuals recruited to the study worked for PCTs that had reported undertaking some disinvestment activity in the previous study
- Geography: we sought to include organisations from a range of geographical settings

Between the dates 1st January and 28th February 2011 a total of 28 PCT employees were contacted with 14 consenting to participation. Twelve interviews were conducted in the period 24th January to 15th March 2011. All interviews were administered by telephone according to respondent preference. Interviews were audio-recorded and transcribed with all data anonymised. Interviews lasted approximately 30-60 minutes and were structured around a pre-established interview schedule, but allowing for new areas of importance and/or interest to be discussed. The pre-set questions focussed on: interviewees understanding of the terms 'disinvestment'; current disinvestment activities, and; perceived determinants of successful disinvestment decision making and implementation. Data were organised into themes according to standard qualitative data coding practices (Miles and Huberman 1994). Our initial coding structure reflected research aims and included:

- Examples and types of disinvestment undertaken
- Perceived determinants of disinvestment
- Other issues

These were used to organise data and enabled sub-codes to be developed and refined in an iterative and interactive process of collective data analysis (Mays and Pope 1995).

Results

Disinvestment types

Interviews uncovered five types of activity currently carried out within the English NHS that might be classified as 'disinvestment'. These were 'invest to save', substitution, retraction, restriction and 'true disinvestment'. Each is defined and explained below.

Figure 1. 'Hierarchy of Disinvestment'

INSERT FIG. 1 HERE

Invest to save

'Invest to save' is the process of making an investment in the short term which will bring about savings in the longer term. An example of this might be to invest in a new piece of technology which promises to improve efficiency and outcomes in the longer term thus saving money in the future. Another example of 'invest to save' could be public health education programmes which can be costly to implement but can deliver longer term savings through reductions in long term conditions for example. Invest to save was the most commonly mentioned type of disinvestment throughout the interviews. A number of specific schemes which had already been enacted were identified by the interviewees; one example of this was investment in community services to reduce hospital admissions.

> *"...a small amount of investment in community and primary care stuff in order to yield a much greater return by reducing, preventing or reducing the amount of people who go to hospital."* (Interviewee 6)

When asked about disinvestment schemes that they were aware of the interviewees invariably discussed invest to save schemes first, perhaps suggesting that respondents had a preference for these schemes over others. These schemes promised to negate the requirement for more direct disinvestment through upstream interventions and greater technical efficiency in service design and delivery. However, what distinguished these initiatives from other forms of investment was the importance of making future savings:

> *"the first process was around the invest to save type initiative ... that was kind of plan A"* (Interviewee 10)
>
> *"you can only get any investment whatsoever as long as it's a sort of invest to save"* (Interviewee 5)

The ways in which 'invest to save' was discussed were dependent upon the financial circumstances of the organisation for which the respondent worked. Those organisations that still had capital to invest were persisting with 'invest to save' schemes as a first course of action whereas those that were most stretched financially talked about 'invest to save' schemes either in the past tense or as part of a wider ranging disinvestment plan. This is why invest to save is presented as the cornerstone of disinvestment as shown in Fig.1. However, such decisions clearly do not conform to the definition of disinvestment provided by Elshaug (2007) and they are arguably an attempt to defer difficult decisions, with little evidence to show the extent to which they deliver the intended savings in the long term. We return to the question of whether this form of activity can be considered as disinvestment in the discussion.

Substitution

The research suggests that plans to substitute services were well advanced within a number of PCTs and that, once the 'invest to save' option has been fully explored, the preferred next step was to

consider substitution. One example was the introduction of an 'Improving Access to Psychological Therapies' (IAPT) service to replace existing primary care counselling services. IAPT was a government-backed initiative intended to standardise provision of psychological therapies by providing trained counsellors and therapists to work in a variety of clinical settings. The standardisation required under the IAPT initiative resulted in existing services, which varied in availability, quality and cost, being substituted for the new IAPT services.

> *"I am actually trying to disinvest from the primary care counselling provision or disinvest it and buy something similar but in line with the overall pathway."* (Interviewee 7)

The IAPT scheme was brought about by a service-specific directive from central government requiring commissioners to substitute existing services and, as a consequence, resulting in financial savings for some organisations. A similar, though slightly less explicit, instruction has been for commissioners to seek to ensure that care is provided closer to the patient's home where possible (DH 2007). In a number of instances this has resulted in secondary care services being substituted for community alternatives. An example of this substitution, which was highlighted in the research, was the provision of Dermatology services; it was felt these could be provided in the community at a lower cost with the same level of quality as the existing secondary care provision.

Interviewees were generally positive about substituting services where this was feasible and saved money with no detriment to patients, but one respondent noted that where substitution does take place it will only be successful in making savings if the new service is actually used and the existing service is no longer available:

> *"We can redesign a Dermatology pathway until the cows come home but if* [general practitioners] *and commissioners continue to refer in to secondary care we're probably going to end up spending more."* (Interviewee 10)

This example indicates that in order for substitution to be successful those with the power to refer in to services must be aware of what provision is available and must follow the specified care pathways and commissioners must ensure that alternative pathways are fully decommissioned and no longer available to referrers.

Retraction

During the interviews the word 'retraction' was not used explicitly but a number of the respondents discussed 'contract management' and 'contract variation' which are methods often employed to reduce the amount of a service or treatment made available without full decommissioning or withdrawal.

> *"we're now moving to a more formal process that is intended to lead to downsizing - and we would say right-sizing - the acute sector in the city."* (Interviewee 4)

The examples of retraction identified in the research link closely to efforts to substitute services or treatments. Indeed, without accompanying retraction or full withdrawal, the interviews suggest that the efficiency savings gained from substitution are likely to be minimal. A recurring characteristic of the retraction examples is that proposed contract variations formed part of an overall service redesign strategy.

> *"We can agree some kind of a capitated, capped budget around an agreed amount of activity and re-designing pathways in an agreed format that will deliver the right amount of activity to the right providers in the right scenarios."* (Interviewee 10)

This method of combined retraction and substitution can help decision makers to control costs whilst attempting to maintain equity and quality of services. This suggests that without the ability to manage contracts and retract services it will be impossible to achieve the required level of savings.

> *"To achieve the level of efficiency gains, productivity gains, whatever you want to call it, cost containment that the NHS faces, you have got to have a completely comprehensive, consistent, systematic approach to* [contract management]*."* (Interviewee 1)

In the examples above contract management was clearly being used as a lever by resource allocators in ensuring that providers control activity levels and, as a result, reduce overall costs in the system.

Restriction

Restriction directly affects some groups of patients and can mean that they are unable to access treatment. The research suggests that, for many decision makers, restriction was considered difficult to achieve and therefore the research uncovered a relatively small number of examples.

> *"We're looking at setting criteria for hip and knee replacements. Again we've been able to do it in line with the evidence around PROMS (Patient Reported Outcome Measures) and sort of do it in a phased way."* (Interviewee 6)

Work has been carried out at a national level to standardise which procedures are funded by commissioners and which are not but some organisations are more advanced than others in identifying their priorities:

> *"We'd already done all the standard stuff of stopping varicose veins, you know, all the stuff that most PCTs stopped doing ages ago"* (Interviewee 4)

> *"The PCT was quite pro-active and did a low priority treatment policy and came up with 100 or so procedures that weren't normally funded"* (Interviewee 12)

> *"We're just about to release a PLCV (procedures of limited clinical value) policy and that will require strong and continual communication with primary care and within hospital."* (Interviewee 2)

The relative lack of examples of restriction signifies the difficulty with which restriction decisions are made. It is possible that some respondents did not feel comfortable in discussing restriction or that their organisation had not yet resorted to restricting services. In addition to this it is important to distinguish between restrictive action which constitutes disinvestment (and cost reduction) and restriction which merely contains costs within a given limit.

'True Disinvestment'

'True disinvestment' was a term used by interviewees to refer to fully withdrawing services and interventions. The results suggest that within organisations there was some discussion as to whether their current plans constituted 'true' disinvestment. In some cases organisations wished to be seen to be making the bold moves necessary to meet their financial challenge whereas other

organisations wished to distance themselves from outright disinvestment due to its negative connotations.

> *"We talked about whether it was a true disinvestment or was it a contractual variation or a tender?"* (Interviewee 3)

The word 'true' suggests that the respondents consider substitution, restriction and retraction not to be disinvestment in its most literal sense. 'True' disinvestment was generally seen as a last resort by the interviewees and was typically only considered after other options had been exhausted.

> *"Starting to talk about disinvestment makes everybody extremely nervous....more so than before, I think. Because we could have been saying 'Well look you won't do that, but we are going to be talking to you about all these new services.' Well those days have gone."* (Interviewee 7)

> *"a number of PCTs have been pushed by financial imperative to do what you might regard as 'nasty' disinvestment....more of a strategic, high level ambition at the moment, rather than really starting to bite hard."* (Interviewee 6)

> *"We're actually going through a process of actually implementing the disinvestment ... one that's just in the mix at the moment is we're closing down day services because they are outdated."* (Interviewee 3)

In order to aid clarity, 'true' disinvestment will be referred to as 'full withdrawal' for the remainder of the paper: in addition to giving an example of full withdrawal, the quote above also demonstrates the rarity of this kind of measure. The repeated use of the word 'actually' suggests that the

interviewee is surprised that the disinvestment has taken place and that the organisation has firstly been required to carry out a ' full withdrawal and secondly actually been able to implement its plans.

'Low hanging fruit'

The research suggests that, depending on financial position, organisations are at different stages in their disinvestment programmes. Some organisations are at the 'true' disinvestment stage whilst others are following a policy of substitution or retraction. It is clear from the research that many of the easier to implement schemes (or 'low hanging fruit') have already been carried out and that further disinvestment is likely to involve more challenging programmes of change. The research suggests that decision makers are aware that the work that many of them have so far carried out is the start of a longer process and that they have much more difficult choices to come:

> *"My feeling is that most of the easily identifiable stuff has been taken out and what we need to do now is actually prioritising the other things that we need to do, but we need to have grown up conversations about the fact that we can't afford to do them all."* (Interviewee 12)

The research does not provide a consensus on progress so far, other than to say that much of the 'easiest' disinvestment has already taken place. Interviews suggest that disinvestment is considered to be easier to implement when it stops short of 'true' disinvestment and when some level of service, whether remains available to patients.

Whilst disinvestment work was underway, to some extent, in all of the organisations studied, ambitious plans were required to meet the full scale of the financial challenge. In a number of areas service re-design was taking place involving a wide range of stakeholders in an attempt to make efficiency savings across the whole health economy. An example of this was the introduction of integrated care pathways involving both primary and secondary providers to ensure that care is

given in the most appropriate setting. This integrated approach relies on organisations working together and delivers savings through reduced hospital outpatient appointments, acute admissions and length of stay in hospital. Terminology such as service or pathway redesign – albeit informed at least in part by a cost agenda – was considered more palatable to stakeholders:

> *"Lots of work is going on to get integrated care pathways....there will be quite a lot of service redesign and it will be wrapped up as service redesign rather than disinvestment."* (Interviewee 12)

Plans to implement 'true' disinvestment were also underway in some areas but results were at best mixed. For example, in some cases there had been an unmanaged substitution effect where spending in one area has been reduced only to be replaced by spending in another. In other areas attempts to reduce spending were hampered by a lack of co-operation from partner organisations.

> *"What we want to do is care closer to home and move care out of hospital. You will find very few people who disagree with that up until the point where you say 'and that means we can start to close beds and shut hospitals'...at which point it becomes a major political issue."* (Interviewee 6)

> *"...the only way to be sure about making the savings is to reduce the capacity in the hospitals...unless there's a very specific service, you can say 'we've put this alternative service in place, we don't need that anymore, stop it'...as long as there's a medical bed somebody will go into it, you can be sure about that, and you don't make the savings."* (Interviewee 4)

Determinants of disinvestment

In addition to exploring rates and types of disinvestment, the interviews also highlighted a series of key determinants of disinvestment. These can be categorised as: local/ national relationships; co-ordination and collaboration, professional understanding and support and; public perception/ wider popular opinion.

Local-national relationships

The research indicates that efforts to disinvest at a local level are directly affected by national policy. On a clinical level national policy affected disinvestment decision making in that some decisions were directly driven by government directives (see IAPT example) and some were driven by a requirement to meet national targets. Some respondents felt that their ability to make difficult decisions at a local level was limited by a need to satisfy government requirements at a national level.

> *"So much of what else* [PCTs] *'commission'...they don't actually commission. What they do is provide information that goes into a team somewhere that puts bits into a contract that's drawn up nationally and over which they have very little control."* (Interviewee 9)

At the time of research the UK government had just announced that PCTs would be replaced by new Clinical Commissioning Groups at the same time as the existing organisations were wrestling with a centrally imposed cap on management costs. The uncertainty and disruption experienced by decision makers was considered a barrier to effective disinvestment and the research suggests a feeling of short-termism which prevented them from making the kind of long term plans necessary to deliver the efficiencies required.

Co-ordination and collaboration

The findings demonstrate the importance of co-ordination and collaboration within and across organisations and sectors to effective disinvestment. In order for plans by decision makers to deliver

savings they are reliant upon partner organisations. Most important amongst these, according to interviewees, were secondary care providers and GPs. Many of the examples of disinvestment identified during the interviews relied upon a reduction in secondary care activity in order to deliver savings and interviewees argued that as secondary care organisations receive income for every patient they treat they were often unwilling to collaborate on these schemes. One interview claimed that schemes to reduce activity (and therefore income) are directly contrary to the ethos of most provider organisations.

> *"We've a fundamental problem that our acute provider trust has been allowed to grow too big....we're working in a system where providers can take us to the cleaners and they do."* (Interviewee 5)

> *"Any provider can just take you for a walk in the woods"* (Interviewee 11)

Collaborations with organisations from other sectors were also shown to be important in disinvestment decision making. In the implementation of integrated care pathways, for example, co-operation between health, social care and sometimes non-statutory, non-profit organisations was considered vital in order to ensure that the patient receives seamless care and the overall pathway is as efficient as possible. However, these concerns were generally considered secondary to the need for collaboration across the commissioner-provider divide.

Professional understanding and support

An important finding from the research was that effective disinvestment programmes relied upon support from a range of stakeholders. Specifically, there was a perception that without the understanding and support of clinical colleagues disinvestment programmes could not be implemented successfully. In particular the research highlights the importance of clinical champions

in making disinvestment decisions; these influential supporters of disinvestment programmes can assist colleagues in understanding the rationale behind decisions and give the process legitimacy amongst the clinical body. As well as championing disinvestment programmes, the wider clinical function was considered important for referring patients into a substitute service and ensuring adherence to revised prescribing guidelines.

In order to gain clinical support it was considered important for the decision making process to be seen as transparent and considered. Perceived legitimacy was weakened where a decision was seen to be taken as an emergency, short-term measure.

> *"Any time you* [make an emergency decision] *like that you are almost by definition doing it probably in the face of clinical opinion rather than with any sort of clinical backing."* (Interviewee 6)

When considered alongside the requirement for clinical backing the identified shortfall in legitimacy of emergency measures suggests that disinvestment decisions taken at short notice are less likely to be successfully implemented.

Public perceptions and wider popular opinion

Interviews suggest that high-profile disinvestment processes are also partially reliant upon public support and that gaining this support again relies upon the perceived legitimacy of the decision making process:

> *"Part of what the public and patients need is the reassurance that these decisions are taken through a considered process which has a degree of empathy for the consequences on the user."* (Interviewee 6)

If decision makers fail to explain the rationale behind their decisions or the public and patients do not buy-in to the legitimacy of the process then this can destabilise clinical and political support for the decision and will jeopardise implementation and future disinvestment work. Findings from the research suggest that where consultation with the public is undertaken this should be properly planned.

> *"Cutting services is an emotive issue so I think just because you've got to consult on something is not a reason not to do it, but you need to do it properly."* (Interviewee 3)

Interviews indicate that organisations sometimes shy away from difficult decisions because of the need for consultation and that this requirement can stall disinvestment programmes. Comments from one respondent whose PCT had undertaken public engagement exercises suggest that this had been useful in overcoming resistance:

> *"Because they'd been to the public event, they had an understanding that you know, there's a finite budget, there was an awful lot of ill people, there was more demand than resource to meet it and therefore you had to have some criteria by which you could make those decisions."* (Interviewee 8)

Discussion

The research and previous literature both demonstrate that there are a number of different forms of disinvestment taking place within healthcare organisations. 'Invest to save' was the most commonly employed method and it therefore forms the basis of the hierarchy of disinvestment activity. However 'invest to save' schemes require long term vision, planning and patience as well as start-up funding. The research suggested that all of these ingredients were in short supply and this perhaps,

explains why many organisations have since moved on to look at more challenging disinvestment schemes further up the hierarchy. Figure 1 demonstrates the options that were typically considered before full withdrawal was undertaken. Woolf (2009) also highlights that, in addition to the short term expense of 'invest to save' (in this case disease prevention) being high, the longer term savings are also very difficult to predict. It also remains unclear as to whether or not such activity can be understood as disinvestment within the specific definition explicated by Elshaug et al which arguably wouldn't include invest to save schemes. It is certainly true that the intention of the schemes is to pave the way for the future withdrawal of funding and can lead to future disinvestment and in this way their inclusion in the hierarchy of disinvestment is justified, but their inability to deliver short term efficiencies or savings makes this problematic. The research suggests that those making disinvestment decisions wish to minimise disruption to services and patients wherever possible and will consider full withdrawal only as a last resort. The conceptual implications of this multiplicity are that there is a need to reconcile or demarcate the divergent understandings of 'disinvestment' present in research and practice settings.

In order to avoid the unmanaged substitution effect identified both here and in previous research (Smith et al, 2010), substantial programmes of disinvestment arguably require a system-wide approach (Henshall et al, 2012) and will often entail service redesign. This requires information, analysis and local intelligence and in order to be successful requires the backing (or at least acquiescence) of stakeholders (Ham 2003; Greenhalgh et al. 2009; Watt et al. 2012) . An important source of support identified in the research could be clinical champions, however, as has been noted by commentators such as Haas et al (2012), they will not be effective in supporting disinvestment if wider structural incentives are not in place. In addition to information and stakeholder support the other key requirement of successful service redesign is project management (Greenhalgh et al, 2009), which may itself be in short supply in a context of fiscal retrenchment. However, whilst financial pressures can inhibit programmes of change, they can also help to bolster the claims of those arguing for more radical approaches to tackling scarcity (Hewison 2010). Our interviews

suggested that a difficult financial climate, the consequences of which were widely publicised and understood, helped to justify disinvestment and service re-design decisions which in some cases had been under consideration for a number of years. Overall, one of the key messages from the research is that effective disinvestment is reliant upon relationships at both a local and national level.

Despite the need for constructive relationships, relatively little direct mention was made of public and political engagement in disinvestment decision making during the interviews. It is possible that engagement was overlooked by the interviewees because, in most cases, full withdrawalwas yet to take place and that public and political engagement had therefore not been deemed necessary. It is also possible, however, that, within the organisations in which the participants worked, effective means of engaging the public had not yet been developed. Mitton et al (2009) report inconsistencies in efforts to involve the public in priority setting and note that outcomes of these activities are rarely reported in the published literature. Another possible explanation for the lack of explicit details of public engagement methods is that the public do not always desire involvement in the decision making process; previous research has shown that the level of involvement sought by the public can depend on the nature and level of the decision being taken (Litva et al. 2002; Wiseman et al. 2003). However, the role and level of public and political engagement in the disinvestment process, and the most effective means of engaging these stakeholders, are key areas for development if larger and more substantive programmes are intended (O'Cathain et al. 1999).

The research focussed on commissioners within the English NHS and the findings suggest that one of the primary determinants of successful disinvestment was the role of secondary care organisations. However, this sample did not contain any representatives from provider organisations and in retrospect this is a significant omission given the difficulties reported in implementation of disinvestment decisions. Much of the existing literature (and, indeed, this study) focus on decisions being taken at meso level by regional boards or authorities. However, individual provider trusts are

under increasing pressure to deliver disinvestment in their own right in order to remain financially viable and research into the most effective ways that this can be done would be valuable. Research into disinvestment at a provider level may therefore provide some important additional insights.

As well as attention to the role of the public and providers, the evidence base currently lacks studies which take a longitudinal approach to tracking the journeys that large-scale and controversial disinvestment projects take from inception to implementation, as well as the impact that disinvestment decisions have on efficiency, productivity and health outcomes. In order to address the gaps in the current literature there is a need for research which crosses organisational boundaries and highlights the behaviours which are most conducive to successful implementation of disinvestment decisions. Therefore, ethnographic research which considers the experiences of a wide range of stakeholders and examines not only the process of disinvestment, but also the outcomes, would be timely.

Conclusion

The study reported in this paper was small-scale and exploratory and was designed primarily to introduce an empirical account of the local experience of disinvestment into largely prescriptive extant literature. Findings indicate that experiences of disinvestment are varied and that organisations are currently adopting a range of approaches. There are a number of apparently influential determinants of disinvestment which relate to both health system features and organisational characteristics. According to the experiences of the interviewees, many of the easier disinvestment options have now been taken and more ambitious plans, which require wider engagement and more thorough project management, will be required in the future. The study suggests that, in the England National Health Service at least, there is a disjuncture between common usage of the term 'disinvestment' and the way it has been understood by the research community. We recommend that these issues of terminology should be addressed and that a more

in-depth and ethnographic research agenda will be of most value in moving forward both the theory and practice of disinvestment.

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