Demand management for planned care: a realist synthesis

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Scientific summary

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Aims and objectives

This report attempts to meet the Health Services and Delivery Research commission to provide 'robust assessments of demand management interventions for elective care'. It does so by conducting a 'realist synthesis' of the primary research evaluating the wide range of strategies that have been devised to stabilise the threateningly high levels of demand for planned care that occur throughout modern health services.

This proved a challenging undertaking, given the extraordinary diversity of demand management activities. The task of the evaluator and reviewer is considerably simplified if the intervention under research is aimed at a well-defined problem, is implemented to a clear design and can be assessed on an agreed, measurable criterion. None of these desiderata applies in the case of demand management. The roots of the imbalance between capacity and demand are complex and intertwined. There are very few designated and independent 'demand management programmes'. Rather, attention to demand is part of the remit of specific agencies and one of the duties of particular post-holders. It is a routine aspect of the daily fabric of heath management. Moreover, on outcomes, it transpires that there is no common comprehension of 'excessive' demand, with, for instance, the line between 'premature' and 'appropriate' referrals often being difficult to draw.

Anticipating these complexities our research began with two broad objectives. The first aim was to survey the landscape of activities that have been mounted in the name of demand management. Here, we sought to provide an overview of how the problems of excessive and inappropriate demand had been understood and also to provide a catalogue of the many and varied responses. The idea was to furnish the review with a 'menu' of potential causes and proposed solutions. The second and fundamental objective was to provide a robust assessment of the effectiveness of the various strategies and schemes mapped in phase one. Alongside the abundant variety and evident heterogeneity of these approaches it was also clear from our preliminary research that managing demand had proved an uphill struggle and that we would discover no 'best buy' interventions with the capacity to outperform all others. We thus interpreted our second objective in terms of the provision of an explanatory account of the complex medley of conditions that lead to successes and failures of the respective schemes.

Review strategy

Our method of collecting together and drawing lessons from primary research evidence is known as 'realist synthesis'. Realist synthesis is a theory-driven approach to evidence synthesis developed by one of the current authors. Realist synthesis finds use in complex interventions that are not easily reproducible and where there is considerable heterogeneity in both implementation and the contexts in which they are mounted. The focus of attention switches to programme theories, the ideas that drive interventions and the analytic approach is theory testing – discovering why and why not the programme theories come to fruition.

In the present instance the beginning logic was to provide a thorough review of how the problem of excessive demand had been diagnosed and to compare this with the compendium of proposed solutions. The basic motif is thus to discover how well the 'remedy' addresses the 'malady'. We know that demand management is a domain of partial solutions and this approach provides an explanatory focus pinpointing some of the unforeseen challenges and unintended outcomes.

Search strategy

Phase 1

Given that our focus was on underlying policy thinking, we directed initial attention to the 'ideas literature'. We searched for sources in the so-called grey literature (planning documents, guidance materials, discussion documents, proposals, rationales, policy expositions, professional journals and critical debate). We used simple search terms that were identified in our research brief and borrowed those terms and synonyms used in previous reviews of demand management, which identify the core approaches such as 'referral management centres', 'guidelines', 'feedback', 'general practitioners with special interests' (GPwSIs), 'direct access to test results', etc. We extracted the underlying programme theories, the log of potential problems and solutions, on the basis of a close reading of this documentation.

Phase 2

The second phase of the review focused on locating empirical studies that enabled us to test the intervention theories in practice. The primary materials of interest here are evaluative inquiries and so the stock-in-trade materials take the form of formal 'research reports' as well as papers and commentary from the many health-care journals. Theory testing can make use of findings that emerge from any form of quantitative or qualitative inquiry; there is no hierarchy of evidence and, thus, no search restrictions on that basis. Having identified a particular type of intervention (e.g. 'referral management centre'), electronic searches commenced utilising its key terms and synonyms and employing the standard databases for health service research. As our understanding grew of the flows and blockages associated with each approach (e.g. disputes over the control in such centres), we explored them further using iterative, 'snowballing' searches such as pursuing 'references of references'.

Synthesis method

Realist analysis has an explanatory role, focusing on the particular circumstances, respects and reasons why an intervention might work. An efficient way to expedite such analysis is to focus on the tensions between diagnosis and remedy – how well does demand control deal with the causes of demand inflation, with what unanticipated causes and unintended consequences. To this end we initially proposed investigation on four preliminary frictions. Is demand management able to:

- respond to different and sometimes conflicting motivations that prompt referral
- balance the varied and sometimes uneven expertise and mandates of the participants in referral chains
- promote accountability for cost-containment ambitions in NHS staff groups who traditionally lack such a remit
- regulate provision while responding to other initiatives, which provide patients with increased choice of provision?

In the course of the review we were able to extend and refine such questions. Early analysis revealed a core tension. The causes of demand and capacity problems are system wide: they are rooted in the perpetuation of historic organisational structures, the multiplication of treatment pathways within increasingly complex divisions of clinical labour, constant improvements in diagnosis and treatments, demographic change and increasing wisdom in the patient population, and so on. The policy responses, however, are invariably limited and tend to have more specific remits to generate improvements by remodelling organisational structures or by introducing new roles and procedures or by designing more exacting guidelines or by incentivising behaviour change. The end result is a patchwork of success and failure, which our synthesis attempts to map and explain.

Findings

Chapter 2 reviews the manifold interconnected processes that generate demand for health care. These explanations span a remarkable range of features, covering physician motivations, professional closure, demographic change, diagnostic improvements, supply-induced demand, the informed patient, etc. Our task was not to rank or adjudicate between these accounts but simply to provide a typology encompassing the wide range of demand pressures and to provide evidence showing that each one is substantial enough to command a policy response. It presented us with a daunting hypothesis, namely that multiple, intertwined problems are unlikely to yield to singular solutions, however well aimed. The demand for health care may be regarded as a swelling punch-bag. Landing a blow in respect of one problem may simply be absorbed as other vicissitudes gather.

Chapter 3 examines the programme theories that underpin the small army of interventions that have attempted to quell the inflation in demand for services. Potential solutions include referral management centres (RMCs), clinical assessment and triage services, service relocation, referrals to GPwSIs, financial incentives, audit and feedback, guidelines, queue sculpturing and behaviour change. We elicited the programme theories underlying each intervention. The scope of the intended solution varied substantially from the macro to the micro, with reforms being introduced, in turn, at strategic, administrative, role, procedural and motivational levels. We also observed that programme theories are not static. In the light of experience gained under critical scrutiny and via the trial and error of actual interventions, the core assumptions tended to modify, recommending the need for supplementary action. Invariably, the programme theories became 'whole system' models – suggesting the powerful hypothesis that sustainable change required the interweaving of the various macro, meso and micro mechanisms.

Chapter 4 examines the effectiveness of large-scale administrative reform in the guise of RMCs and other centralised triaging services. The programme theory posits that efficiencies to demand management are generated by rationalising decision-making along referral pathways between primary and secondary care. RMCs function to this end only in the presence of a cluster of supportive and somewhat rare conditions, for example (1) extensive collaboration between NHS managers and clinicians to agree on the governance structures; (2) continuity in the form of the recruitment of experienced local general practitioners (GPs) (rather than adjunct professionals) to help manage the triage; and (3) all protocols and guidelines that define the RMC's remit and functioning are codeveloped locally rather than imposed.

Chapter 5 examines the theory that establishing intermediate professional roles, such as the GPwSI, could manage demand in the system by siphoning off and dealing with an intermediate case mix appropriate to their medial experience and proficiency. This ambition fails to realise and the new role descends into an administrative support function when (1) consultants remain in relative control of referral decisions and the protocols that govern them and either (2) GPs retain referral habits by maintaining direct referrals to secondary care or (3) GPs use the new GPwSI pathway to offload many cases for purposes of patient reassurance. The new function comes to fruition only when there is protracted negotiation on (1) division of labour; (2) recruitment strategy; (3) case-mix; and (4) physical spacing.

Chapter 6 examines a procedural reform, namely the theory that providing GPs with direct access to diagnostic tests will enable them to distinguish between those patients who can be managed in primary care and those requiring referral to secondary care. Much depends on the nature of the test. GP direct access to tests designed to 'rule out' serious pathology or 'clinical indicator tests', designed to identify where patients were in a disease trajectory, led to greater efficiencies than GP direct access to tests designed to provide a 'differential diagnosis'. However, the improvements in patient flow resulting from direct access to rule out or clinical indicator tests are realised only when there is clear guidance from specialists indicating which patients should be referred and how they should be subsequently managed.

Chapter 7 examines the role of guidelines in moderating demand. The evidence revealed repeatedly an elementary design principle that they work more effectively if they are adapted to local circumstances. The process of adaptation, however, requires far more than the rewriting of guidance to a local rubric. The guidelines need to be mapped into local organisational structures. The people responsible for adapting the guidelines should be the same people who organise the implementation of the new guidelines. Without this level of accommodation, the documentation is likely to be added to 'the guideline mountain in the corner of the clinic'.

Patient and stakeholder involvement

Throughout the review we sought advice on our theories and synthesis from a range of stakeholders, including those within our project team, individual and group meetings with key stakeholders within the local health economy, a specially convened stakeholder group meeting and regular meetings with a patient group. Their views helped us to develop and revise our programme theories, assess whether or not our findings were of use to their own decision-making and identify appropriate methods of dissemination.

Conclusions

There are no instant reforms that have the capacity to deal with the deep-seated and system-wide strain on capacity in health provision. There is no best-practice manual to be found, out there or in this report, to guide health-care personnel on when, where and how to make referrals. Instead, our review found many, diverse, hard-won, local and adaptive solutions. The key evidence in this review comes in the form of detailed expositions of the immense difficulties and occasional, bespoke successes in bringing into equilibrium the interlocking systems on which sustainable change depends.

Our conclusions (see *Chapter 8*) are thus presented as a small set of design principles, gathering together the configurations of ideas that apply in the most effective demand management interventions, pointing to the strains that have to be overcome and the interdependencies that have to be forged. The conclusions also include vignettes of some successful reforms – presented because they portray an understanding of the nature of system adaptation rather than as blueprints to be imitated indiscriminately. A final recommendation turns to the importance of system-wide collaboration in affecting sustainable change. 'Group model building' offers considerable potential in realising this goal.

Chapter 9 is aimed at policy-makers and practitioners who, perchance, may not have the time or inclination to wade through several hundred pages of detailed analysis. A constant theme of that analysis is that demand cannot be managed by rote. There are no silver bullets; there is no list of best practices to be imitated. There are, however, many instances in which capacity has been well managed and this has usually followed through trial and error as practitioners think through a succession of challenges that apply in their corner of the patient pathway. Different practitioners occupy quite different intersections in the system but what is transferable is the process of thinking thorough all of the conditions and caveats. Hence our final title: 'Thinking it through: Prompts for practitioners'.

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