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Meeting the challenge of increased demand on healthcare services

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Summary

The principles and practices of demand management are closely aligned with current thinking about prudent healthcare in Wales and will help to contribute to its successful adoption. This chapter provides an introduction to some of the approaches taken by demand management and examines their relevance and value to prudent healthcare.

The future of public services

If public services are to find an adequate response to the prolonged squeeze on overall public spending, at a time when demand for many services is rising, they need urgently to develop new and innovative ways of working. If we continue to deliver services as we have done in the past there is a very real chance that some could become overwhelmed. A fundamental change in public services is necessary if Wales is to achieve and sustain a commitment to equity and fairness, principles that have always underpinned our public services.

Faced with this challenge, there is growing interest in an emerging set of approaches, which can be been grouped together under the term demand management. Demand management helps to identify some of the shared challenges and opportunities for learning between health, local government and other public services.

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The challenge

Austerity is here to stay. It can no longer be dismissed as just a blip. In setting its next budget, the Welsh Government has had to make the toughest ever set of choices since devolution; and real terms reductions in budgets are likely to be a fact of life for most public services for the foreseeable future.

The sheer scale of the financial, demand and other cost pressures facing public services in Wales have been highlighted by many studies, including a series of papers produced by the Wales Public Services 2025 Programme. These project a gap between available finance and pressures of between £2.6 billion and £4.6 billion by 2025[1]. Subsequent modelling by the Nuffield Trust predicts that for health services in Wales alone, the gap could be between £1.1 billion and £3.6 billion by 2025 [2].

This gap is partly due to the demands of deficit reduction, but it also stems from other well known factors such as the impact of an ageing population, technological advances in medicine and rising public expectations.

With limited resources it has become even more pressing to tackle waste, focus resources on what works and limit the occurrence and impact of unintended consequences than ever before. Conventional sources of efficiency gains, such as procurement or estate management, although an essential part of any response, are unlikely to be sufficient on their own.

Improving quality and tackling complexity

Public service reform has often focused on improving the efficiency of the supply of services while driving up performance in delivering outputs through the imposition of targets. There has been less thought given to ways of managing the demand for services. As the Wales Public Services 2025 Programme and other analysts have argued, we now need a more radical approach, which takes account of the whole system of public service delivery and emphasises the importance of understanding the relationship between public services and those who need them most.

This kind of systemic change and engagement with service users and the wider public requires us to think about issues that are of different orders of magnitude in terms of complexity. At one end of the scale, there is unnecessary demand created by poorly-drafted letters and leaflets causing a high volume of calls to a call centre. This has been documented by a wide range of services, for example Colchester Borough Council realised that this was the case for their benefits and tax team[3]. At the other end of the scale, there are complex or "wicked" issues - chronic health conditions, antisocial behaviour, long-term unemployment - which no single organisation or sector can address on their own, where the causes may be poorly understood and the problem may seem to be intractable.

"Wicked" issues are multifaceted; solutions need to reflect this and be adapted to reflect local context and individual circumstances. Addressing them effectively will require public services to collaborate and work with both the people of Wales and specific target populations, so they can play a much more active role in helping to define the problem, design solutions and take greater responsibility for their own wellbeing and use of services.

Improving quality and tackling complexity in a time of sustained resource pressures will demand fundamental changes in the ways in which services are designed and delivered. Existing mind sets, tools and structures are not going to be sufficient. And, in light of this, new ideas have emerged, for example using behavioural insight, and some older, as yet unrealised, aspirations such as joining-up services, are being revisited.

What is demand management?

Demand management is an emerging field covering a range of approaches and practices. At its root it's about seeking to reduce cost and other resource pressures (often avoidable or preventable) on public services while achieving better outcomes by building a more responsive, informed and reciprocal relationship between service providers and the people they serve. It contrasts demand for services with need, as a means of making the distinction between inefficient use of public services from appropriate provision[4].

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There is a long tradition of public service leaders, managers and professionals working on various aspects of demand management. However, it is only recently that the discussion has focused on what it means for the way public service organisations and public service systems as a whole work. This includes how they relate to the public and service users as well as links to wider public service reform.

Demand and need

We can identify four types of unnecessary, potentially wasteful demand[5]:

Excess demand: unnecessary provision or insufficient targeting of services. Examples include over-prescribing, provision of an unneeded care aid or lab test, even an unnecessary length of stay in an acute bed. On the user side it might include 999 calls which are not emergencies

Failure demand: caused by poor service design or previous failure by a service to adequately resolve an issue. This can include unnecessary referrals or hand-offs by front-line staff, multiple assessments, or the failure to respond first time to a simple request

Avoidable (or preventable) demand: where services tackle the symptoms or consequences of behaviours rather than the root causes, for example interventions which provide children with a solid social and emotional foundation or support people to become good managers of their own health

Co-dependent demand: public services unintentionally promote dependency, sometimes linked to a supplier knows best relationship between provider and citizen which does not build on the capabilities and resources of the recipient.

It is worth noting that these categories are not mutually exclusive; indeed there will be services that experience all of these to some degree. There is evidence that in many services some proportion of use is either unnecessary or ineffective. Common examples of unnecessary or ineffective use include instances where:

- A needs assessment determines someone is eligible for something, even if they don't need it or intend to use it

- Time is wasted asking people the same questions on multiple occasions, because each point of contact starts as if it is the first
- The problems faced are multiple and interacting, but the available services are designed on the basis of organisational remits rather than the needs of the service user.

Whatever the case, the key is to understand the behaviours and circumstances that drive demand, as opposed to need, for a service.

This concept of demand is broader than the idea of imprudent healthcare[6] .It acknowledges the health system faces demand which arises from factors outside its remit or control, whether that be other services or wider societal factors. This suggests there could be value in a broader discussion of the challenge facing the Welsh NHS - one which considers the way in which the health system interacts with wider society.

Demand management strategies

A variety of techniques for understanding and managing demand are now emerging across a range of public services. We have not attempted to compile a definitive list but the literature points to a range of strategies including:

Customer insight - using tools such as user panels, customer journey mapping, analysis of data sets, risk stratification, to build a clearer picture of how and why people engage with public services

Designing and integrating services around the user – by involving users in the design and delivery of services, improving integration of delivery, co-production, increasing self-management, peer-to-peer support and community support

Changing the relationship between citizen and state - encouraging greater community cohesion and resilience, and changing public expectations

Investing in prevention and early intervention - moving up-stream in interventions to avoid more costly down-stream, reactive interventions

Focusing on value and outcomes - moving away from using cost and output as performance metrics as a way of reducing waste and eliminating excess provision

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Using behavioural science to inform interventions - understanding and targeting behavioural drivers, segmenting user groups, using behaviour change techniques.

The diagram below outlines types of demand how different strategies can be used modify the relationship between services and those who use them, in order to meet demand effectively.

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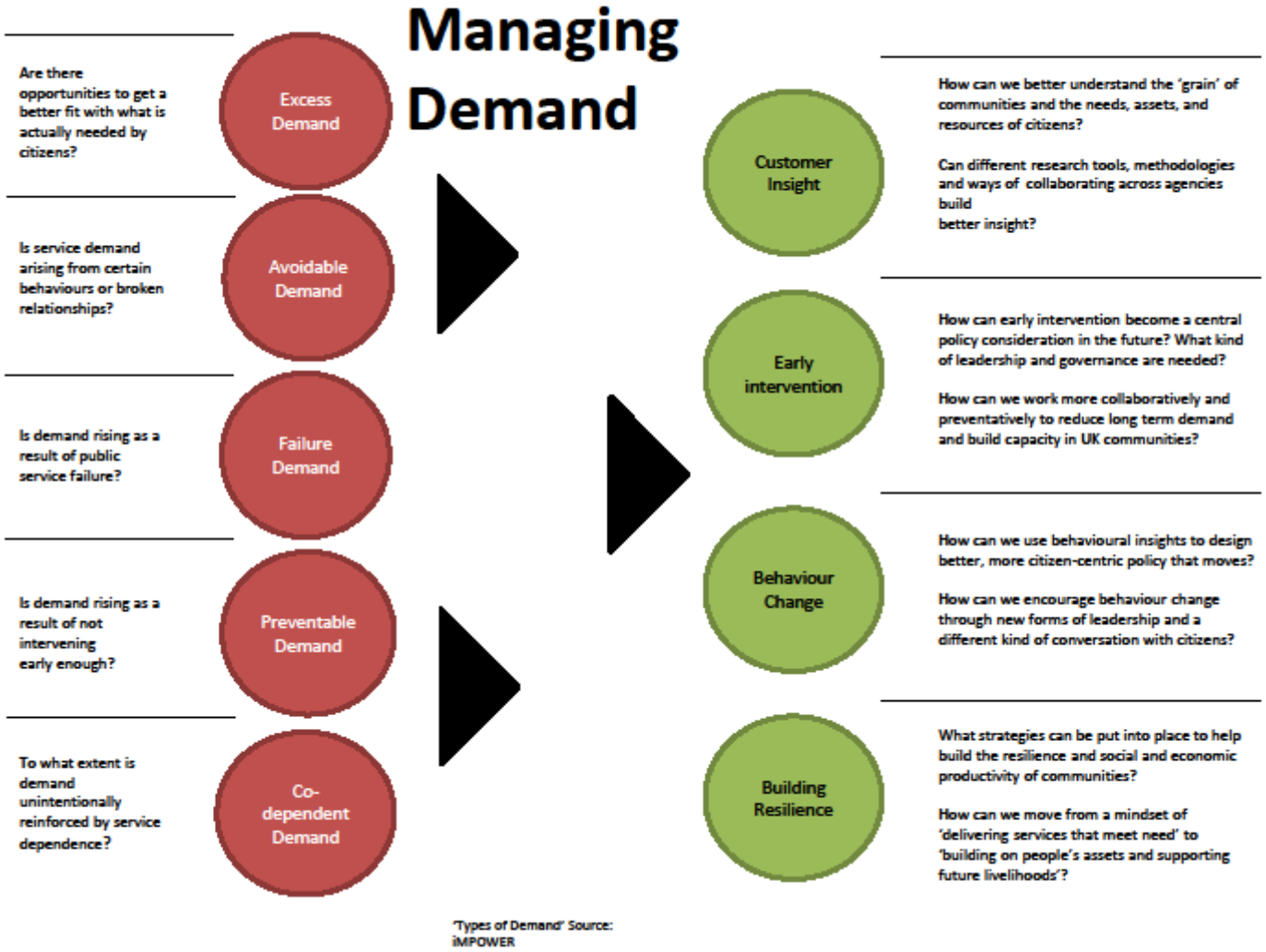

'Types of Demand' Source: iMPOWER

1000 LIVES O FYWYDAU

GIG CYMRU NHS WALES

Iechyd Cyhoeddus Cymru Public Health Wales

Llywodraeth Cymru Welsh Government

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Demand management in local government

Local government has shown an increasing interest in demand management strategies and there are a growing number of case studies and examples. The quality of the evidence varies and independent evaluation of interventions using these strategies is not common, though some agencies have attempted to quantify benefits. There is reasonably strong evidence to suggest that demand management strategies can help to achieve better outcomes, but the extent to which this is accompanied by an overall reduction in cost is less clear.

Examples of demand management based initiatives include:

- The application of lean systems thinking in social care and other services
- Early intervention to improve the life chances of vulnerable people
- Co-production with older people
- The use of peer groups rather than reliance on professionals
- Service integration.

There are fewer examples of bringing all these strategies together to achieve organisation-wide change - Oldham and Monmouthshire are often quoted as being examples of councils trying to achieve this. There are others who are rethinking the whole way they work and their relationship with communities but this remains very much work in progress especially as there is more to be done to firm up the business case. There is also a compelling need to make a sometimes bemusing array of different and variable sources of evidence more accessible to busy policy-makers, managers and professionals so they can adopt demand management approaches they know will work.

Demand management and the health service

The issue of rising demand and limited resources has been driving reform in healthcare for some time. Demographic pressures, alongside the increasing costs of new technologies and drugs and a wage bill that only gives limited scope for efficiencies has meant many approaches to demand management have been trialled in healthcare. The term demand management has gained some currency in

the health service over the last decade[7], although is often used in a far narrower sense to refer exclusively to patient flows.

There is an extensive literature on these type of initiatives and there are a number of approaches that are fairly closely aligned with the broader understanding of demand management presented in this chapter. Examples include:

Redesigning healthcare systems and practice - There have been many studies into systems and practice, from using lean techniques to *Choosing Wisely*. The Kings Fund[7] has reviewed approaches to demand management. This review acknowledges that demand management strategies alone will not solve the future NHS budgetary problems and highlights a range of potentially valuable interventions such as using patient-reported outcome measures, shared-decision making as well as touching on the use of IT, assistive technologies , the increasing evidence for the use of telehealth methodologies and remote monitoring by patients themselves.

Investing in prevention and early intervention - In the last few decades the focus on prevention has increasingly shifted towards population health, and the social determinants of health – the conditions of daily life that contribute to health and ill health[8].

The evidence about what works in changing health behaviours varies both in terms of quality and quantity. There is good evidence about the behaviours that need to be addressed, but the evidence base for the effectiveness of interventions is still developing. How to tackle smoking and substance misuse are better understood than, for example, how to increase physical activity. Similarly, while there are interventions that have been shown to be successful, for example education programmes using reminders, providing targeted support and raising awareness [9], the long-term effects and relative cost effectiveness of preventative interventions is still not well understood.

Changing the relationship between citizen and state - The Health Foundation, among many others, argues the case for self-management. This approach is

supported by their review of 550 pieces of high-quality research, which evidence the effectiveness of self-management[10].

The authors of this review state:

"Hundreds of systematic reviews, randomised controlled trials and large observational studies have examined the impact of supporting self-management for people with long term conditions. Whilst the findings of individual studies are mixed, the totality of evidence suggests that supporting self-management can have benefits for people's attitudes and behaviours, quality of life, clinical symptoms and use of healthcare resources."[10]

Some studies included in the review, argue that supporting self-management reduces the use and costs of health services. It has been suggested that self-management support programmes may reduce visits to health services by up to 80 per cent.

Other findings suggest it is more likely that patterns of service use change, rather than reduce overall. For example, people may engage more frequently with a practice nurse, telephone coach or with peers, but less with hospital services. The aim is not to reduce contact overall, but rather to support a different *pattern* of contact which may lead to fewer crises and inpatient admissions.

Some long term co-production interventions have been argued to be success stories, such as the Esther Network in Sweden, which helps to focus services on patient needs[11]. However, how far the success of the well resourced Swedish healthcare system is attributable to the Esther Network is up for debate.

Using behavioural insights to design interventions - Unhealthy behaviours have a big impact on demand for health services and people may not always respond positively to direct instruction, legislation or enforcement. 'Nudge' theory is premised on the notion that positive reinforcement and indirect suggestions can influence the motives, incentives and decision making of individuals. The concept to nudging acknowledges that we have freedom of choice but purports that the government should encourage the public to do the right thing]12]. The Behavioural Insights Team, also known as the Nudge Unit and part owned by its employees, the

UK Government and the National Endowment for Science Technology and the Arts (NESTA)[13], has created the *Mindspace* framework to help policy makers design interventions with behavioural insights in mind.

There have been studies on the use of incentives to influence health behaviours[14, 15, 16, 17, 18], these include:

- Using financial and non-financial incentives to change behaviour
- Using information campaigns to change behaviour
- Improving individuals' motivation and confidence through support to change behaviour.

State of the evidence

As in local government, there appear to be relatively few examples of all the demand management strategies coming together in the health service to achieve system-level change. Knowledge about how to support behaviour change and put these principles into practice is still being developed. Research suggests that in order to change behaviour, people need to want to change[10]. Researchers at the Kings Fund argue that changing behaviour is a complex process that requires long-term commitment. They also argue that approaches that work for one behaviour are unlikely to be easily transferable to another[14] and they emphasise the importance of interventions having a clear understanding of the nature of the behaviour they aim to tackle and targeting a specific group of individuals.

Shared Challenges and Opportunities

The principles of prudent healthcare align closely with demand management approaches. The prudent healthcare principles of do no harm, only do what you can do and use the minimum intervention necessary can be mapped to the different types of demand. Similarly, there is a shared focus on outcomes, on co-production, and on changing the relationship between the service and its users - or, more generally, between citizen and state.

The fact that most public services are, in different ways, grappling with these issues suggests that there is considerable potential for them to work together more

effectively to pool intelligence and learning. There are two key areas in which we see significant challenges but in which real progress could be made.

Encouraging the emergence and dissemination of innovation

There is a need to trial new approaches, identify what works and then encourage the spread of good ideas.

The public sector is notoriously bad at fostering innovation. It does happen, but "innovators often succeed despite, not because of, dominant structures and systems" [19]. Complex issues demand local innovations and solutions, and across the public sector there is a need to understand how to encourage this.

What Works Network

Identifying and spreading good practice is something that the UK-wide What Works Network has been established to address. This is a group of organisations that are interested in the identification and dissemination of what works in their different fields. There are seven What Works Centres working on health and social care, crime reduction, educational attainment, early intervention, well-being, ageing better, local economic growth. What Works Scotland and the Public Policy Institute for Wales (PPIW) are part of the What Works Network. The PPIW is overseeing a programme of research into what works in tackling poverty. Each is taking a slightly different approach but the concept is loosely based on the National Institute for Health and Care Excellence (NICE) model – systematically reviewing the evidence and seeking to encourage the uptake of interventions that work and stopping using those that don't.

The what works challenge

There are two big issues the work of the Network highlights. Firstly, the quality of evaluation needs to be improved. Very few programmes and interventions are evaluated in a way that enables a robust assessment of their relative worth. This is not such an issue for clinical practice, where scientific methods are the norm, but is true of healthcare reform.

A recent review of care coordination noted "the lack of evaluation in this area means there is scant evidence to support a positive association between better care coordination and improved patient experiences, care outcomes, and financial efficiencies"[20]. The authors' assessment that "the business of monitoring and measuring outcomes … does not appear to be strongly valued" in the NHS holds true for the public sector as a whole, and not just in the UK.

There is reason to believe that this is set to change. The What Works Network is part of a wider international movement of individuals and organisation interested in improving the generation and use of evidence. Building a stronger evidence base, requires action at all levels, from central government to the practitioner, and across sectors. We need to embed reflective practice and evaluation.

The second issue is an age-old problem – how to get best practice to spread across a system. We have a reasonably good understanding of the factors that help or hinder the spread of innovation[21, 22] But, we are a long way from knowing how to translate this into a set of methods or practices that consistently work. Given the challenges being faced, the current pace of dissemination is worrying.

As the chair of NICE, Professor David Haslam, has said: "It takes … about 16 years for a really good idea to move from being proven to being taken up by everybody." [23]

Again, there is renewed interest in this, with the Education Endowment Foundation (one of the What Works centres) conducting trials to see how to best disseminate its findings to practitioners. And NESTA is doing interesting work looking at how innovations get adopted[24].

Achieving systemic change

The second big challenge, and opportunity, is, we believe, achieving system-wide change. Thinking about demand for a service inevitably leads to thinking about the connections between services and wider society and about culture change; both organisational and societal. The issues facing public health are a good example of this.

Tackling diet, physical activity, smoking, and alcohol and substance misuse will all require actions from individuals and from organisations across the public sector, and will require a cultural shift across society. How do we deliver this?

There are guides to action, but no clear recipe for success. Some of the factors that will be important are:

Leadership: delivering systemic change in an environment where power is diffuse requires a vision, a compelling narrative, and community leadership to manage the change process;

Creating the right performance framework: to ensure that the focus is on value and outcomes but also to enable comparison and aggregation at national level;

Tackling barriers to state-to-state collaboration: addressing the behavioural and structural factors that make joined-up service provision the exception rather than the norm. A key part of this will be addressing the asymmetry in accounting for costs and benefits, for example the costs of an intervention are met through one budget, while the benefits are realised in another[25].

There is an important role for central government too. Although it cannot control the system, it has at its disposal multiple levers which can, in theory, help to encourage transformation. Ensuring coherence and coordination across these will be crucial. But devolving power and autonomy will be necessary to enable innovation.

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