

Seminar Briefing 20

Research

Delivering an Outcomes-based NHS: Creating the Right Conditions

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Contents

	Page
1. Experience as Prologue	1
2. Developing an Outcomes-Centred Approach in the NHS	2
3. Defining an Outcome and an Outcomes Framework	5
4. Contracts	7
5. Everything Changes	7
6. Results: Bedfordshire MSK Project	8
7. Conclusion	9
8. References	9

1. Experience as Prologue

To provide some context to the rest of the presentation, it may help to know more about my experience leading up to the founding of COBIC. I began my career as a clinician, but quite soon became involved in the International Study of Infarct Survival (ISIS) project. This compared the effect of aspirin and streptokinase on survival. It showed that aspirin was as powerful during a heart attack as streptokinase, and that they worked in different ways so that giving both had an additive effect. The medical profession was so excited about streptokinase, however, that aspirin was neglected and given only about 50 percent of the time—despite costing virtually nothing and requiring no expertise or equipment to administer. This experience influenced my decision to move into public health.

In the mid-1990s, the health care quality movement began to emerge and gain attention. Don Berwick, a pioneer in implementing quality of care practice in hospital settings, emphasized the importance of context. Consultations and treatment outcomes, he argued, are affected by the quality of the organisation and systems within which care takes place (see, for example, Berwick, 1996). The disconnect between holistic, systemic approach and what the NHS was doing in practice became very clear when I served as chief executive of the Milton Keynes Primary Care Trust. I rather naively believed my job was to turn taxpayers' money into better health and higher quality services. But the system kept focusing on the parts, ignoring the whole, and money was committed in ways that made flexibility or reasoned change difficult, if not impossible.

Commissioning seemed to have lost touch with the objective of system that provides health care: to represent both taxpayers and service users, understanding what they want from their investment in

health care, not what the systems thinks they want, or should want. Based on a reliable reading of the user's perspective, priorities would be set and resources allocated. All this would be done in such a way that taxpayers and service users could hold the system accountable.

As an experiment at Milton Keynes PCT, we decided to commission our substance abuse services, which were very fragmented, jointly with the local health authority. To do this, we talked with a range of those involved, from service users, to the local police. We quickly developed a description of desired outcomes that bore virtually no relationship to our contracts. As result, we completely reassessed our spending, identifying waste and cancelling contracts that were not producing appropriate outcomes. We asked for input in defining outcomes. Contracts that aimed at our desired outcomes were for more than just one year. In the end, we contracted with a charity that helped changed the service from white-coat dominated to one that met the needs of service users and the wider community.

We then began to repeat that process for other services. At this point in history, however, the NHS system again changed and were clustered out of existence. Our successors kept the outcomes orientation, although measures were fairly weak. However, the effort showed that improvement could be realised by combining and coordinating services based on a defined outcome.

Change at this time within the NHS was beginning to occur that included a multi-year perspective and some form of capitated payment based on outcomes. It became apparent, however, that working to create change from outside the NHS might allow for more flexibility and a greater long-term impact. That led to the creation of COBIC (Capitated Outcomes Based Incentivised Care), which offers specialised consulting services to turn the idea of outcomes-based care into practical reality (COBIC, 2016).

2. Developing an Outcomes-Centred Approach in the NHS

One of our first steps was to look outside the UK to understand what we could learn from experience in other countries. Table 1 summarises some of the evidence that shows that combinations of capitation and outcome appeared produce positive results. Of course, some of the specifics or details of the systems are different than in the UK, but the similarities were greater than the differences. Waste was one focus, but waste in a broader context than only misuse. As a 2001 US Institute of Medicine report notes, misuse, underuse and overuse all create waste (IOM, 2001).

Looking specifically in the NHS, we identified the causes of waste, poor quality and poor outcomes as misaligned incentives, disregard for public values and user preferences, fragmented service provision, poor use of data and evidence, and lack of constructive clinical engagement. Perhaps most important of these is incentives; the NHS the incentive framework makes positive change a challenge.

Table 1. International Evidence on the Effects of an Outcomes-Based Approach

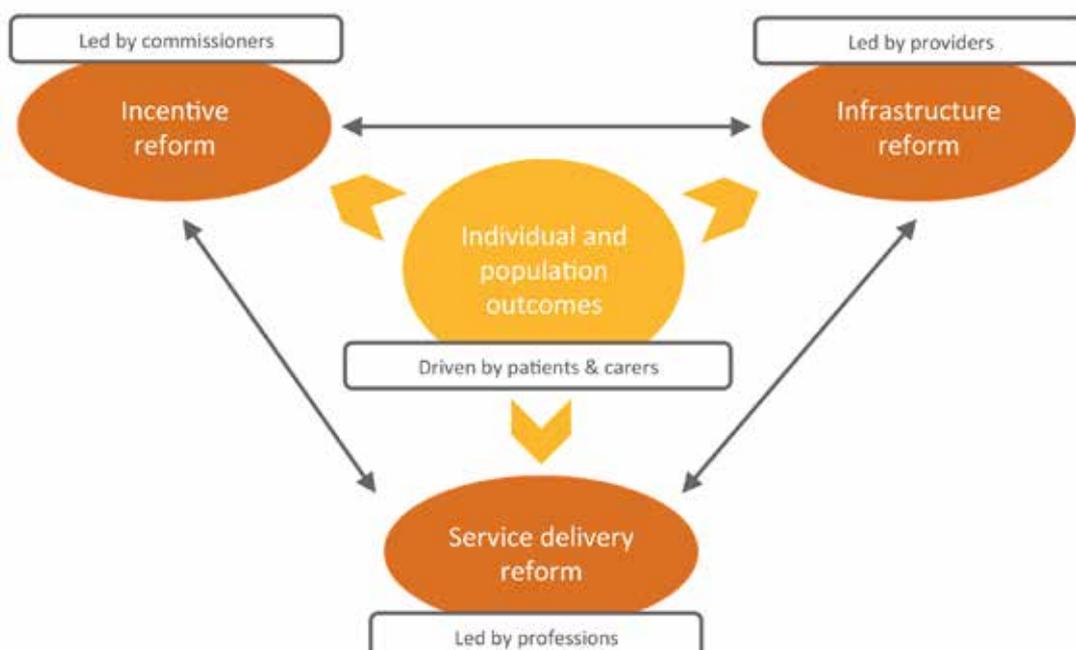
Evidence from similar approaches, both nationally and internationally, highlights the potential financial and non-financial benefits achievable through a capitated outcomes-based approach

Selected whole system case study	Measured benefits (case study specific)*							Key method(s) driving integration
	Improved health outcomes	Overall cost savings (where quantified)	Reduced acute activity	Reduced emergency admissions	Reduced bed days and/or LoS	Reduced rate of institutionalisation	Improved patient experience	
Milton Keynes COBIC, UK	●	15- 20% reduction in spend					●	Capitation + Outcome measures
La Ribera model, Valencia	●	25% reduction in spend	●	●	●	●	●	Capitation + Outcome measures
PACE, US	●	5-15% saving per capita	●	●	●	●	●	Capitation
Vittorio Veneto Study, Italy	●	1,125 Lire savings per capita	●		●	●		Integrated provision
Roverto Study, Italy	●	29% saving per capita	●		●			Integrated provision
Geisinger, US	●	Not quantified	●	●	●			Outcome measures
Beacon Health, US	●	Not quantified	●	●	●		●	Capitation
Veterans Health Administration, US	●	Not quantified	●	●	●			Capitation + Outcome measures
Torbay Care Trust, UK		Not quantified	●	●	●	●	●	Integrated provision

* The specific benefits measured between each case study included varies greatly; therefore, this table simply highlights where benefits have been measured in relation to each case study. Gaps in evidence, therefore, do not necessarily indicate the non-existence of various benefits; rather, gaps in evidence more commonly shows that specific benefits have not been measured within particular evidence analysis.

It quickly became clear that what was needed was not just a change in approaches to commissioning, but a more fundamental change with outcomes in the centre. Figure 1 depicts this graphically. It requires us to be explicit about outcomes, rather than fiddle with details that may or may not produce results. Also integral to this design are patients and carers, whose preferences and needs define outcomes.

Figure 1. Systems Approach: The COBIC Triangle



Face-to-face discussions with users—patients and carers—can be particularly useful in pointing efforts in the right direction, not just ensuring legitimacy. Such discussions allow us to understand what outcomes matter and why. Take substance abuse as an example. We discovered that what service users want is stay in their jobs, stay in their houses and live longer—perhaps quite different from what “the system” would have assumed, or imposed. With older people, the objective is to stay independent, which in turn requires melding health and social care in a way the NHS has not done, or done well, historically.

On the surface, this sounds entirely reasonable and should be easy. These are outcomes, however, that cannot be delivered by one institution alone. Asking the system to deliver such outcomes requires relationships decidedly different from the way it has operated to date. This, in turn, requires a new way of thinking and a willingness to take risks by changing how the parts of the system interact and, in effect, making each part dependent on the other for achieving the desired outcome. To say that this is a major readjustment is an understatement. One gratifying result, however, is that such change can allow many professionals—clinicians and others—to do what they intended to do when they entered the NHS in the first place, which is help people live a better life.

What becomes obvious quite quickly is that sustainable change can begin at any point in the triangle in figure 1—we have examples from around the country. Sustainable change at scale is not possible, however, unless all points are included, i.e. the entire system.

This approach is entirely consistent with the NHS Five Year Forward View, which envisions the primary outcomes of care as promoting wellbeing and independence. To achieve this, the plan advocates breaking down traditional barriers between primary and secondary care, between health and social care, between mental health and physical health care (NHS England, et al., 2014). What COBIC’s approach offers is a process that can allow the ambitions of the Five Year Forward View to be realised.

Generating reform using the COBIC cluster (see figure 1) includes six elements: (1) defined population and scope, (2) desired outcomes associated with indicators, (3) service model redesign, (4) financial analysis and defined budget, (5) agreed contract form and duration, describing incentives and risks, and (6) readied and prepared service providers. With respect to the second, note that we use the word “indicator” rather than “measure” because very few outcomes can be measured with precision. For example, if an older person’s goal is to be independent, it is far easier, and more useful, to express progress with indicators than to quantify the degree of independence with a measure. Defining the budget, number four, requires considering both affordability and cost, which are two different constructs. Contracts need not only to be set, element five, but also monitored.

The COBIC approach has been adopted for services in a number of places across England. Health Authorities or Trusts at first contracted for small service areas, such as substance misuse or sexual health services, then moved on to relatively well-defined single services, such as musculoskeletal care. Some then moved on to larger populations, for example, mental health care, or care for older people with groups defined by age or frailty or long term conditions. One or two places—Somerset and Northumberland, for example—included whole populations. What is perhaps remarkable is that the areas that led in experimenting with approach were not those one might expect, not Oxford or Cambridge, but Milton Keynes, Bedfordshire, Yeovil, Richmond, Bexley, Sussex, and more. These areas deserve recognition for being willing take the risk to improve their services.

In discussions with potential clients, we engage in in-depth discussions to define the scope of the contract and determine what can be expected to work in that particular setting. Questions we ask are intended to describing the problem; establish the size or scale of the project; determine what is pragmatic; and understand the attitude and willingness of co-commissioners towards the project. We also recommend that incentives be based on capitation as much as possible because it is simpler operationally. These discussions, which occur over time, are essential in developing an approach that works. Some clients may discover they are more risk-averse than they realized and so want a smaller project; others will decide the project must be larger to have a substantial impact. The ultimate decision is a joint decision.

What works best appears to be projects that encompass populations of substantial size, e.g. the frail elderly, healthy adults, or children. These likely will be more effective and easier to manage than smaller slices that inevitably will overlap with other areas—e.g. care for hip- or knee-surgery patients. Experience is not yet sufficient to prove this one way or the other, however.

3. Defining an Outcome and an Outcomes Framework

We have used the definition of a health outcome developed by the International Consortium for Health Outcome Measurement: “The results people care about most ... including functional improvement and the ability to live normal, productive lives.” (ICHOM. 2016). This moves away from the usual question of “What’s the matter?” to “What matters to you?” Figure 2 depicts this, starting with people’s concerns, moving to their goals, and then connecting these to an outcomes indicator.

Figure 2. Outcomes Domains, Goals and Indicators

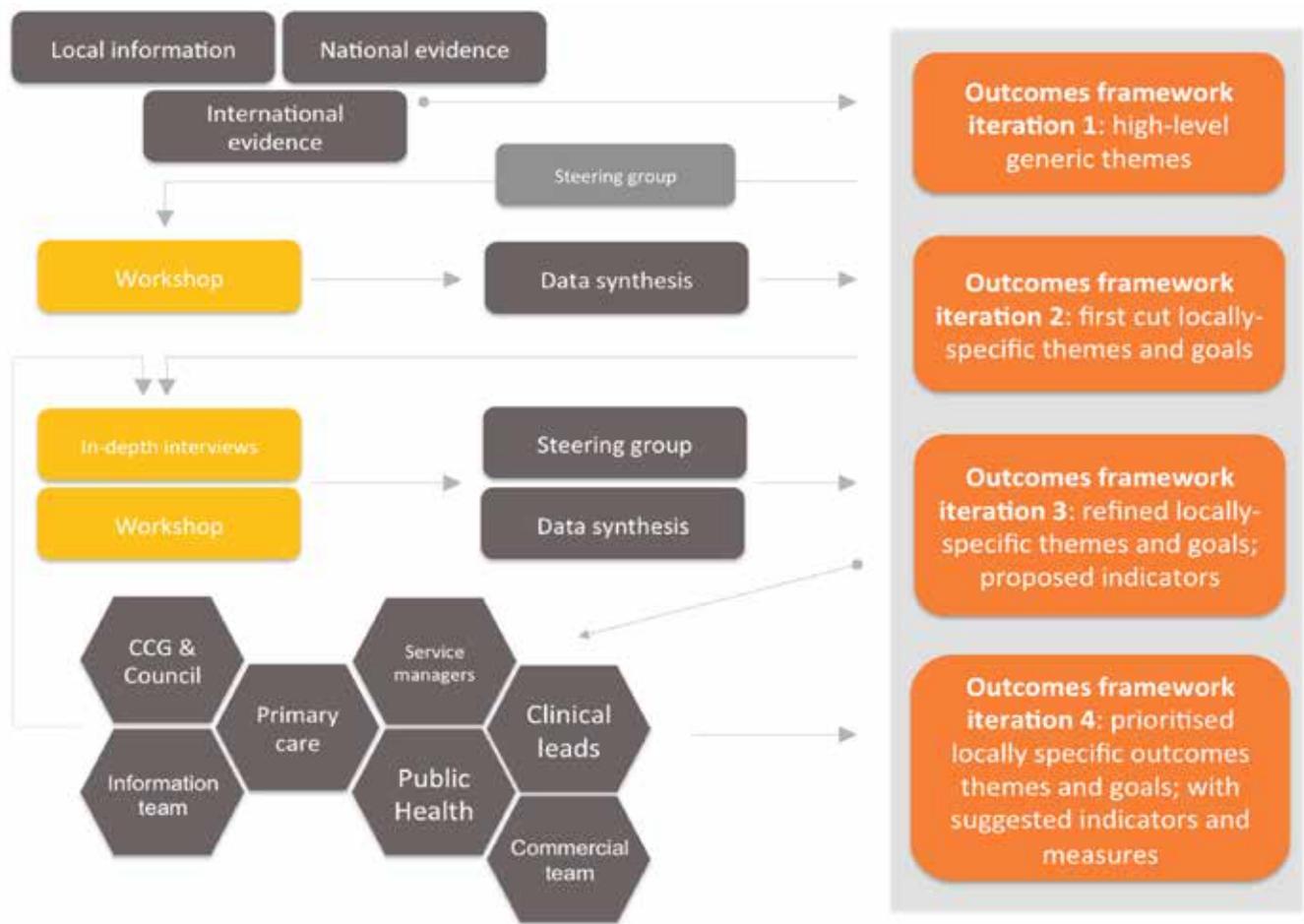
Outcome Domain	Outcome Goal	Outcome Indicator
<i>I want to remain well</i>	I want help to stay active	Injuries due to falls in people aged 65 and over
	I want to do the things that are important to me	Social care-related quality of life
<i>I want to be as independent as I can, and stay at home for as long as possible</i>	I have help to take care of myself, when I need it	Proportion of people who use services who have control over their daily life
	I am supported to recover as quickly as possible, and get back to the best level of health that I can	Emergency readmissions within 30 days of discharge from hospital for those aged 65 and over.
		Proportion of people aged 65 and over who were still at home 91 days after discharge from hospital into reablement/rehabilitation services.
<i>I want to have a positive experience of care</i>	I am listened to, and treated with kindness, dignity and respect	Proportion of people that felt they were treated with dignity and respect
	I want all aspects of my needs and care considered together, including my emotional needs	Proportion of patients and carers who report that they felt those involved in treating and caring for them worked well together to give them the best possible care and support

Goal attainment is important to people, e.g. living independently or having a meaningful job, but these may not be what we expect. When we held discussions with people with severe mental illnesses, they were shocked to discover that their life expectancy was about 20 years less than the average for their peer group. Their goal is to live just as long, not surprisingly. The mentally ill die from the same diseases as their peers—cancer and heart disease and stroke—just at an earlier age because the system is not looking after them properly.

Another revealing comment people with mental illness made was that they felt their ambition for their own role in society is greater than that of the people providing the care. A meaningful job would, for them, be a good outcome, for example. Shifting care to meet such goals can be done. Oxford mental health services, for example, works closely with Remploy and has inverted the actual design of the service. It is an impressive cultural change.

Some of the work of developing an outcomes framework can be done at a distance, but direct interaction is crucial in building the relationships that are essential to success. Figure 3 shows the process that we have found optimum, at least for our work. The process we have developed draws on local, national and international experience and evidence, and emphasises engagement. It's both technical and social. If done properly, the result is buy-in across the community that also resonates with those providing the services.

Figure 3. Process for Developing an Outcomes Framework



Data collection for the indicators is a challenge, although progress is being made. About a third to a half are collected now; of the remainder, about a half can be collected or analysed, but the denominator may need adjusting. The other half, however, does require setting up new collection mechanisms, particularly for patient-reported outcomes and experience measures. An important aspect of data collection grows out of conversations about the service model. For example, if it is based on care planning that includes attaining an individual's goals, then additional options are available for building in data collection.

4. Contracts

Even with strong buy-in, providing the right financial incentives is critical and changing incentives works best when the process is gradual. For example, for a five year contract, incentives for the first year may not be closely tied to outcome indicators, or only a small percentage of incentives may be tied to them. This changes over time as confidence in them increases; indicators also may be tweaked as the result of experience. Flexibility, adjustment and gradual change, then, are important and will affect determination of the length of a contract.

Longer term contracts offer several advantages: transaction costs are lower, providers have more financial security, return on investment is likely to be better, and the results of efforts aimed at prevention will be much easier to discern. Up-front investments, essential to successful implementation, can pose a challenge. NHS capital is scarce; finding partners to help with finance is important, whether that be other sources in the services sector or outside finance from, say, charities or the for-profit sector.

Outcomes-based contracts, or pay-for-performance, in the NHS are not new. The NHS already uses both Commissioning for Quality and Innovation (CQUIN) and Quality and Outcomes Frameworks. Our efforts are distinguished by adding capitation to the equation. Contracts based on COBIC require better coordination of care across traditional boundaries and, because outcomes are not setting specific, entail accepting responsibility for a population. This is not a trivial change. Viewing health care from a population and outcomes perspective is a skill not yet well developed in England. To date, change begun in coordinating or integrating care; proper population health management is not yet part of the skill set or the culture. Developing and acting on that perspective, however, is essential to investing in programmes that move in the right direction.

The contracts can take different forms. Perhaps the two most common are lead provider contracts and alliance contracts that give disparate providers a common goal and a common incentive. Overall responsibility still rests with the commissioner, which does fit well with the current structure in this country.

Becoming more common is an alternative arrangement whereby the commissioner is the lead provider; responsibility for matching pay to outcomes is contracted out. The contract organisation—sometimes a group of organisations—then creates the supply chain. Often, a provider group such as a community trust or an acute care trust will deliver some services themselves and subcontract for others. At the other end of the extreme are organisations such as Beacon Health that manage and operate the system, but do not have contact with patients. Whatever the arrangement, it is crucial that the lead provider ensure that everyone in the delivery chain has incentives that align with its own incentives and have a stake in the success of the program.

5. Everything Changes

No approach will work, of course, without the cooperation and, ideally, the enthusiasm of clinicians. This shift towards populational responsibility is a major change. It is crucial to encourage ownership by involving clinicians in the planning and development, not just offering a take it or leave it proposition.

This shift to a capitated outcomes-based system means that everything changes: the definition of value; incentives; the distribution of risk and of power; and relationships between providers along the value chain, service users and “the system”, commissioners and providers, and the independent and public sectors. The risk of this change is both greater and different than any the services sector

has faced to date. If this were a journey of exploration, it would be more like David Livingstone looking for the source of the Nile than Ranulph Fiennes headed for the North Pole. Fiennes could plan precisely how to get there and he knew exactly what his destination would be. Livingstone, in contrast, knew the source of the Nile exists, but that finding it would entail considerable trial and error. Not everyone is equipped to be an explorer, but honest discussion and mutual respect can overcome the resistance that inevitably threatens fundamental change.

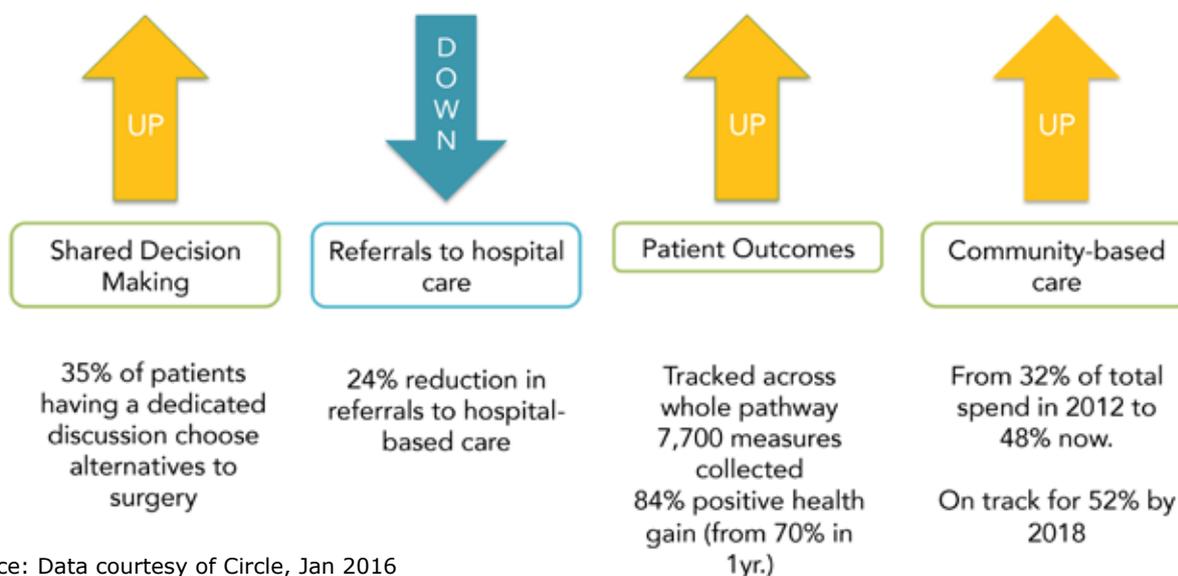
6. Results: Bedfordshire MSK Project

The Bedfordshire Clinical Commissioning Group contracted with Circle in 2013 to provide an integrated service for its musculoskeletal (MSK) patients. The objective was to improve care and outcomes and lower per capita costs—delivering better value through better care. The five year contract for £26m a year included four main “stages” of care: patient support and empowerment; support, education and advice for primary care; community-based MSK service, and use of hospital facilities, but only when needed. It did not include providing primary care because general practice was considered too diffuse to incorporate. Although that made sense for this project, primary care is an important part of the delivery solution and should be integrated into projects of this type in the future.

The core of the plan is triage, based on shared decision making, which is intended to direct patients to the right treatment the first time and to emphasise community care. The process includes a 20 minute appointment with each patient designed to discover what outcomes matter. About 98% of patients engage in this 20 minute consultation.

Figure 4 summarises the results after the first year of the contract. About a third of patients chose less intervention, i.e. an alternative to surgery, when they received comprehensive information about the choices available to them. This is consistent with the literature on shared decision making and so is not unexpected. Referrals to hospital care declined by 25 percent. Patient outcomes, tracked through an appointment, improved from 70 to 84 percent over the past year; data for earlier years were not available for comparison. More care was received in the community, 48 percent of spend, up from 32 percent, and on track to reach 52 percent by 2018. It is rare to see such rapid change in the NHS.

Figure 4. Bedfordshire MSK results



Source: Data courtesy of Circle, Jan 2016

¹All the results reported here about the Bedfordshire MSK project were supplied by Circle.

7. Conclusions

We do know how to improve the NHS. We must define its purpose more explicitly, focusing on improving value as defined by outcomes per unit of resource consumed. That requires measuring outcomes and costs.

Contracts per se do not contain the answers. But the process of creating and monitoring contracts requires the transparency that moves behaviour in the right direction. Incentives create change when all groups involved agree on the same goal and how to work towards it in alignment. Systems need to be (re)organised to handle the problems they face, rather than attempting to accommodate organisation and approaches that have developed largely ad hoc over several decades. From an economic point of view, doing it better many also produce savings. Michael Porter notes that "Our work reveals typical cost reduction opportunities of 20-30%. Many cost reduction opportunities will actually improve outcomes." (Porter, 2016)

The National Audit report published in May 2016 offers an excellent recent example of the type of problem we must address, and soon. This report focuses on discharging older people from hospital who were admitted for acute care (NAO, 2016). It estimates that older people unnecessarily occupy a hospital bed for 2.7 million bed days per year, i.e. they are kept in even after care no longer is needed. Using a conservative figure of £303 per bed day, this costs the NHS £820m gross, according to the report. Alternative health and social care would cost between £120m and £160m, with a net saving to the system of £600m to £700m. More importantly, the alternative care would benefit patients: ten days' of bed rest produces a loss of muscle mass and aerobic capacity equivalent that lost in ten years, according to a Monitor review. This means that the NHS currently is providing 2.7 million bed days that actually may be making people less healthy, and spending net £700m to do it.

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