Seminar Briefing 21

Interventions that Encourage High-value Nursing Home Care: Lessons for the UK

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The main purpose of this briefing is to offer a health economics perspective on how payment and delivery interventions can encourage high-value nursing home care. It will take the lessons from the US effort to encourage high-value care and apply them to the UK where we have similarly relied on regulation as the key guarantor of quality.

1. Introduction

Although our health care systems are different, the UK and the US share important issues in nursing home care. Both countries devote significant financial resources to it and both have relied on regulation to ensure quality of care. Neither country, however, delivers high-quality long-term care. Each may benefit from sharing lessons about which approaches have been most and least successful. In this seminar, I examine some of the market-based approaches now being adopted in the US.

Figure 1 shows long-term care spending as a percentage of GDP in the OECD in 2008 and 2009. Usually in tables about health care spending the US is on the high end of spending, but here the US is in the middle at about one percent of GDP. The UK was not included in these statistics until 2013, but would be at about 1.78 percent, close to Iceland and France.

Figure 1. Public and Private LTC Expenditure in the OECD, 2008 and 2050
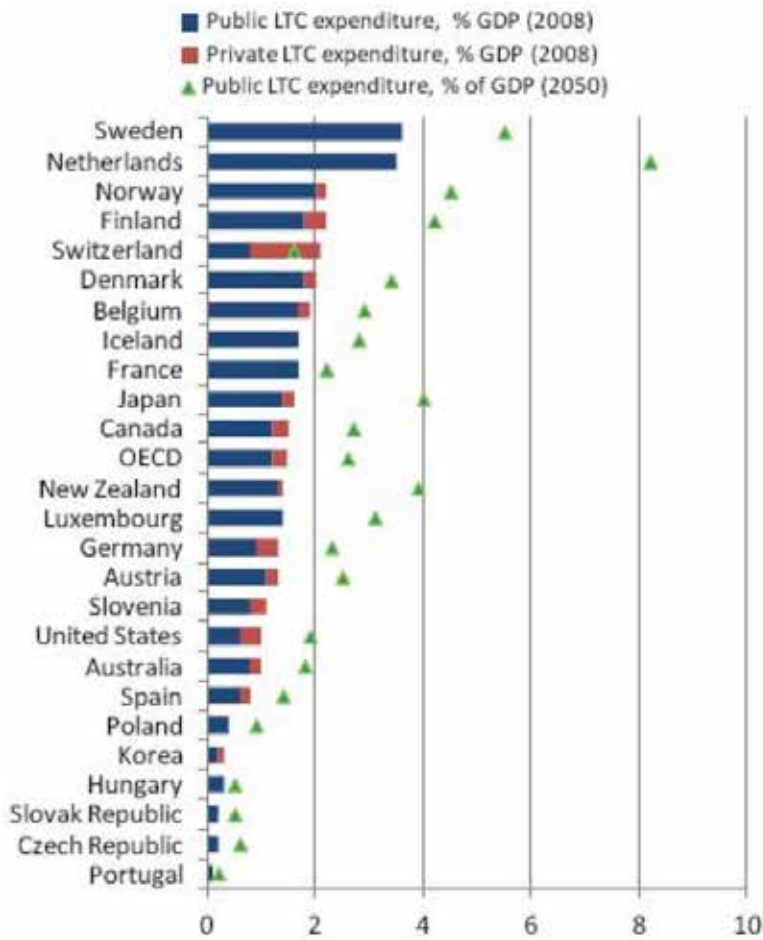
The figure shows public long-term care expenditure in blue and private expenditure in red. Countries with publicly funded systems are at the highest end of the spending spectrum, for example Sweden and The Netherlands. The US is a blended system. Spending has been contained by relying heavily on informal care provision by family members and friends, as in the UK. In addition, to qualify for government assistance under the Medicaid programme, individuals must first exhaust most of their personal financial resources (see next section).

The green triangles in Figure 1 represent projected public long-term care spending as a percentage of GDP in 2050. Virtually every country faces large increases as the baby boomer generation ages; projections for private expenditures, which also will increase dramatically, are not shown here.

2. Background: The US Nursing Home Care Market

The market for nursing home care in the US is large; over $150 billion 2015. The likelihood of any individual experiencing nursing home care is substantial. Of those currently at age 25, 27 percent are likely to use nursing home care during their lifetimes. Of those currently at age 65, 46 percent will use nursing home care during their lifetimes. Today, at any given time, around 1.4 million individuals in the US are living in one of about 15,600 nursing homes (CMS, 2015). To put this number in context, there are more nursing homes than Starbucks coffee shops in the US, and those seem to be on nearly every corner.

Before exploring the characteristics of the nursing home market in the US, it is important to understand that that nursing home residents generally receive coverage from two programmes that operate side-by-side: Medicare and Medicaid. Medicare is a well-financed federal programme that is a comparatively generous payer. Eligibility is based solely on age (65 and over) although the programme does cover a few populations with disabilities regardless of age. What Medicare covers is determined at the federal level. Benefits are essentially the same nationwide with some variation based on an individual's coverage choices.

Medicaid is a jointly-funded state-federal programme, available regardless of age, that is neither as well financed nor as generous as Medicare. Eligibility is based on an asset threshold, which includes both savings and income. Medicaid covers costs only after part of a 65+ individual's monthly social security payment and/or private pension is spent on health care, including a nursing home. To be eligible for Medicaid, savings and other assets held by individuals 65+ must be "spent down" to the Medicaid asset threshold. Some assets are exempt: home ownership, for example. In practice, the road to Medicaid eligibility is relatively short in the US and most elderly individuals rely on Medicaid particularly for nursing home stays. Although federal rules impose some requirements, the specifics of coverage under Medicaid can and do vary by state. The more prosperous states typically offer more generous benefits. Some individuals 65 and older may be "dual eligibles" and receive both Medicare and Medicaid; each programme pays for different aspects of care.

The nursing home market in the US consists of two distinct patient segments. The first includes chronically ill, long-stay residents. Typically, these individuals need assistance with the activities of daily living, such as bathing and dressing, or they have dementia, complex medical conditions, chronic illness, or a combination of these. They likely will remain in a nursing home for the rest of their lives. A similar set of individuals populates nursing homes in the UK.

Although long-term nursing home residents may pay out-of-pocket, i.e. privately, Medicaid pays for most nursing home care in the US: about half of all expenditures on nursing home care and about 70 percent of all bed days (Grabowski and Gruber, 2007). Private long-term care insurance accounts for a relatively small portion of such spending.

The second segment of the US nursing home market consists of short-stay post-acute patients and is increasingly important. Such care is provided to older adults who experience health problems that require a substantial period of recovery and, often, rehabilitation services—for example, a broken hip, a stroke, or a joint replacement. Medicare pays for no more than 100 days of in-hospital care for any one illness. If institutionalized care is needed after that, the Medicare recipient is discharged to a skilled nursing facility where long-stay Medicaid patients also may reside.

Importantly, the alternatives to nursing home care in the US are increasing in number and popularity, particularly for those who can afford to pay most costs privately. This includes "assisted living". Offered by licensed facilities, this typically includes housing and some services such as meal preparation and housekeeping, and varying degrees of health services. Medicaid pays for about 10 percent of all assisted living costs, but that portion varies from one state to another. Home and community-based care services also are available to those who do not require institutional care and have sufficient resources to take advantage of those options. Some states also may provide for community nursing services to allow the individual to remain at home.

3. The Issue of Low-value Nursing Home Care

In both the US and UK systems, expenditures on nursing home care are substantial. Figure 2 shows the projected growth in US nursing home expenditures from public programmes alone over the next several years. Medicare, which pays for short-stay post-acute care is in green, Medicaid in blue, and the total in red. In 2008, the first of the baby boomer generation reached age 65. As that generation ages, total expenditures on nursing home care are expected to skyrocket.

Figure 2. Expenditures on Nursing Home Care in the US
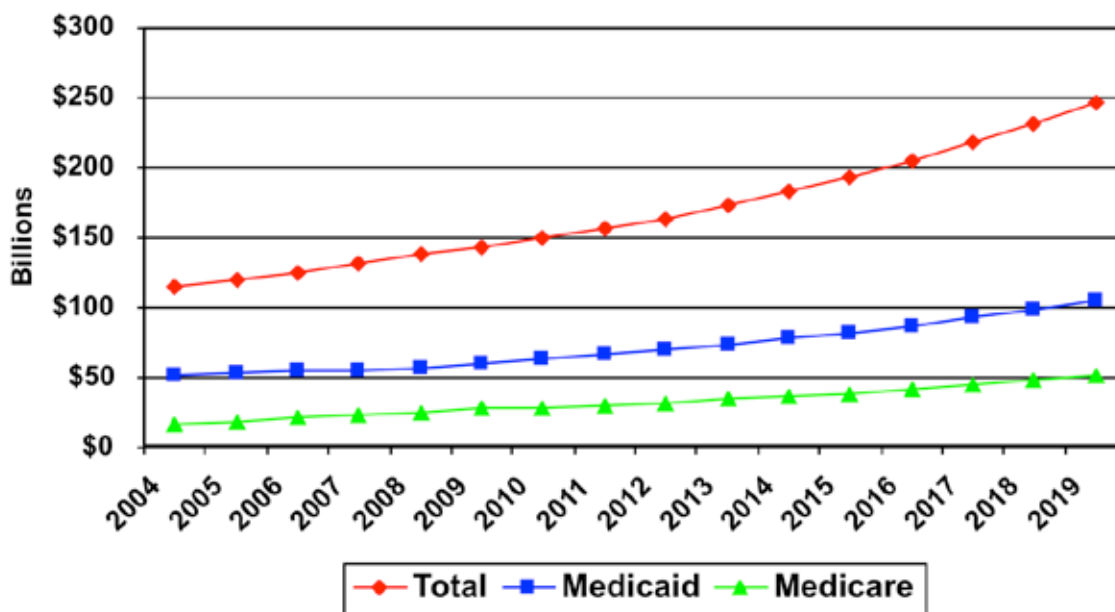
Source: Author's calculations using US National Health Expenditures data (CMS, 2017b)

Despite rising expenditures, the quality of care in nursing homes is low. An extensive literature documents this and research continues to both define the problem and search for solutions. Much of the research has been done in academia, but government organisations also continue to focus on the problem, including Congress's Government Accountability Office (GAO, 2007). The independent Institute of Medicine prepared an early influential report for the government (IOM, 1986) and has continued to be active in this area (IOM,

A compelling narrative about the challenges nursing home care presents is recounted by my late colleague Bob Kane and his sister Joan West in It Shouldn't be This Way: The Failure of Long-term Care (Kane and West, 2005). The book details the experience of their own mother as she progressed from living independently to living and dying at age 87 in a nursing home. At every stage, the long-term care system failed them, even though as a geriatrician Bob was more knowledgeable than most about the long-term care system. Mrs. Kane also had the advantage of some private resources and the close involvement of Joan in her care. She still received alarmingly poor care from the system—which is not actually a "system", but a series of siloed providers. Unfortunately, many such stories are repeated over and over again in the US.

Although some strong models of high quality nursing care certainly exist in the US, the number of poor providers is far greater. This in turn has created a situation in the US that also exists in the UK: the practice of transferring individuals from a nursing home to the emergency department, ultimately resulting in a hospital stay.

Figure 3. Potentially Avoidable Nursing Home Hospitalisations in the US and States Participating in CMS Demonstration Project
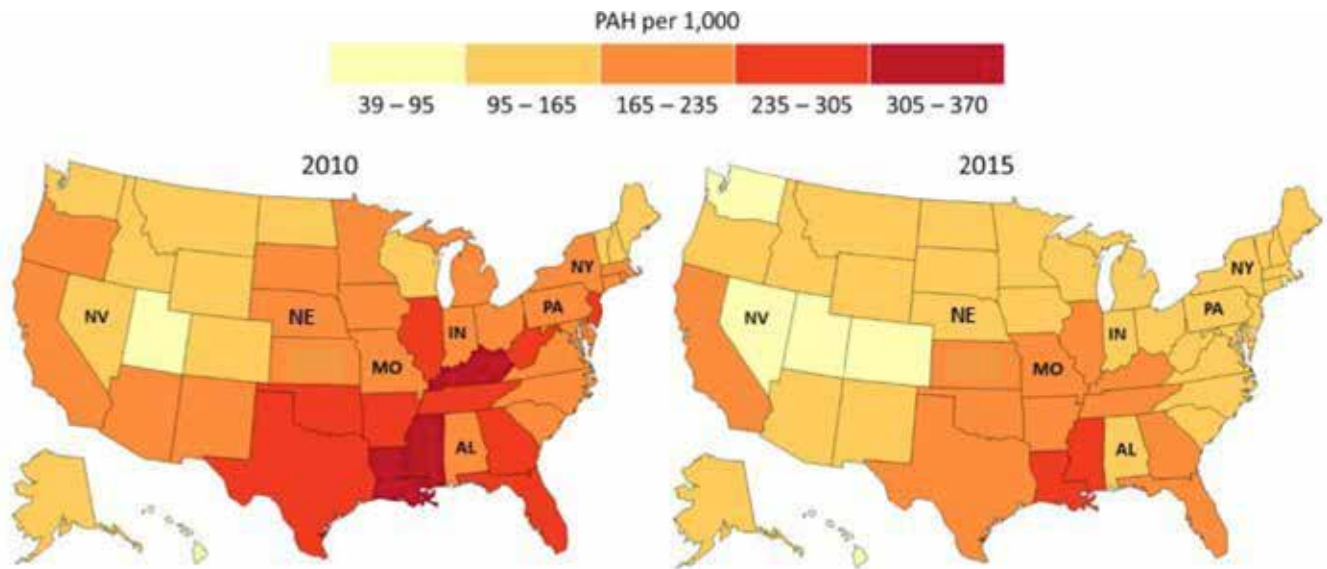
Source: Brennan and Engelhardt, 2017

In the US, the rate of nursing home transfers to hospitals varies across the states. Figure 3 shows an improvement over time in some states. It also identifies states that participated in a project with the Centers for Medicare and Medicaid Services (CMS) that was intended to better define the problem. This tracked a series of conditions, such as a fever or pneumonia, which should not result in a hospitalisation, but often do (CMS, 2017a). A resident in a nursing home at 7:00 PM on a Wednesday whose fever spikes should be treatable on site by a nurse, but all too often the nursing home prefers to transfer the individual to the local hospital. This is poor care and a highly inefficient use of resources that shifts costs from the long-term care system to the broader health care system. The problem is not limited to the US: the UK experience is similar, as is that in many other European countries and Canada.

Why is it that the market cannot resolve this problem? The standard economic model of quality competition assumes that prices are set in the market; no barriers exist to entry and exit; consumers are rational, well-informed, and can reliably gauge the quality of the various providers; and the system is well coordinated, without cost spillovers or cost shifting. Both the US and the UK markets fall far short of exhibiting the characteristics of this model.

In practice, pricing in the US market is not free: rates for about 90 percent of bed days are set administratively by either Medicaid or Medicare. Supply also is constrained in many states by archaic "certificate of need" laws that determine the "need" for nursing home beds and so restrain market entry. This system is popular with existing providers, who in effect have a regulated monopoly.

In any country, consumers of nursing home care will fall far short of the "rational" ideal, often experiencing dementia or cognitive impairment, low rates of family involvement, and too few resources. These are the very factors that precipitate entry into a nursing home in the first place; they make shopping for quality unlikely, if not virtually impossible.

The system itself is extremely fragmented; coordination is the exception. This again is true in both the US and the UK. In the US, funding and delivery of services in nursing homes and the rest of health care occur separately. Historically, nursing homes have been paid without regard as to how their actions may affect other providers in the health care system—neither rewarded nor penalised. Incentives that would encourage steps that can avoid hospitalisations are absent. Liability concerns, in fact, strongly encourage shifting care, and thus liability, from the nursing home to the hospital.

To date, the US approach to addressing these problems has been regulation. The US nursing home sector is said to be the second most regulated sector in the economy, second only to nuclear power. The assumption is that the market cannot work to improve nursing home quality, leaving regulation as the only option. When quality does not improve, regulation increases.

Regulation can be detailed and the sanctions can be severe, ranging from fines to probation to closure. Considerable research has been done on the cost of complying with regulation and its deleterious effect on administrative perspective. Those who manage nursing homes freely admit that staying in business is more about dealing with regulatory issues, government inspections and crises than about exploring innovative options for better care.

4. New Market-based Approaches

The US is beginning to embrace market-based approaches to providing positive incentives for improving care. Three of the most important are:

1. Paying for outcomes rather than paying for the number of days of care, i.e. pay-for-performance.

2. Providing consumers with better information for comparing quality through the use of "report cards" for every nursing home provider; these must be easily accessible online and include comparisons of several dimensions of care.

3. Integrating care by paying not by provider but by service, whether that service is delivered in a nursing homes, another long-term care facility or by types of other health care providers.

4.1. Pay-for-performance as a Quality Incentive

Pay-for-performance (P4P) is a simple idea, but can be difficult to implement effectively. "Performance" must be a quality outcome, not just treatment for an episode of care. Providers can be very adept at "gaming" the system, making workable measures of outcome a continuous challenge. P4P can have other unintended consequences, for example, treatment choices that are based on reimbursement potential and amounts. Effective P4P must adjust for case mix, recognising that nursing homes with sicker patients may appear to have worse outcomes.

An unintended consequence of P4P may be that resources are focused on the particular outcomes measured, possibly leading to less optimum outcomes in other areas not measured. For example,

if providers are accountable for broken bones but not blood pressure, a nursing home may shine in the orthopaedic area but manage blood pressure inadequately.

Finally, P4P measures may in effect reward those nursing homes that already are doing well and penalise those that are not. The facilities best able to meet P4P standards are the best nursing homes at baseline, even before the P4P programme initiation. Disparities in care actually may widen as a result.

The core attributes of a well-designed P4P system are as follows.

1. Provide a clear link between efforts that result in better performance and reward. This may seem both obvious and simple, but measurement can be challenging. For example, risk adjustment may be required and scoring systems can be complex. The link may be clear to the designer of the system, but not clear enough to the nursing home or other providers to provide clear incentives.

2. Reward payments must be both meaningful and immediate enough to provide adequate incentives. A joke in the US is that sometimes the first "P" in P4P systems does not stand for "pay", but for "pennies" when programmes are underfunded. Delayed rewards that appear only months or years in the future are too disconnected from behaviour to be effective.

3. External factors must not be a major determinant of rewards. In other words, the reward must be based on the behaviour of each individual nursing home, not on the efforts of the universe of nursing homes or on the success or failure of competitors.

4. As an important body of economic literature has shown, payment incentives alone do not work to improve health care. Education and guidance on best practice are essential. Improving care presupposes knowledge about how to improve care; a resource not evenly spread across nursing home providers.

5. Minimizing the unintended consequences mentioned above—incentives that can be "gamed" or that result in uneven care—is also a crucial part of a well-designed P4P system.

Two projects in which I have been involved illustrate the successes and failures of P4P in long-term care. The first was a CMS effort, the Nursing Home Value-based Purchasing Demonstration, the largest P4P demonstration done in nursing homes in the US. Unfortunately, this was a dismal failure—and an excellent example of what not to do. An analysis of the project was published in *Health Services Research* last year (Grabowski et al., 2016). The second is an example of a success, an effort in Minnesota known as the Performance-based Incentive Payment Program (PIPP), a variation on P4P. The evaluation of that programme was published in *Health Affairs* in 2013 (Arling et al., 2013).

The CMS demonstration project was a three-state effort that began 1 July 2009 and ended 30 June 2012. Participation required that states volunteer, then nursing homes in those states volunteer. The three states that participated—Arizona, New York and Wisconsin—are different in many respects. CMS had intended that the nursing homes be randomised, but only New York had enough nursing homes involved to allow that. In Arizona, 38 nursing homes volunteered; we used propensity scores to match to 38 other facilities as the comparisons. In New York, 143 nursing homes volunteered

and we randomised 72 of them to receive the payment incentives. In Wisconsin, 61 nursing homes volunteered; we used propensity scores there also.

Rewards covered four domains: staffing, survey inspections, quality measures and hospitalisations. No education or guidance was offered, only payment incentives. Measures were a blend of improvement and absolute performance. Rewards payments were to be received by top-performing nursing homes only if they also achieved cost savings—i.e. the programme was to be "budget neutral".

The four domains in this demonstration are a combination of short-stay and long-stay quality measures. The quality measures included care such as avoiding pressure ulcers and treating pain. The hospitalisation dimension measured avoidable hospitalisation for both short and long stays. Staffing considered the number and type of nurses and nurse's aides as well as employment turnover. The survey inspection was a count of deficiencies.

Performance was calculated by state, i.e. Arizona nursing homes were compared to each other, but not to those in New York or Wisconsin. The top performing nursing homes in each of the states received a reward payment. Unfortunately, the requirement of budget neutrality introduced an important externality. The likelihood of the top performing nursing home in New York receiving a reward payment was based not only on its on performance, but also on cost savings being achieved by the 72 treatment facilities when compared to the 71 control facilities.

The results are not surprising: little change occurred in performance when comparing the treatment and control nursing homes. The results for savings were mixed, as Table 1 shows. Each state was its own base, i.e. Arizona was compared only to Arizona, etc. In Year 1, Arizona showed some slight savings; New York showed none; Wisconsin had substantial savings and received large payouts. In Year 2, Arizona and New York had no savings; and Wisconsin did. In Year 3, no states showed savings.

Table 1. Savings under the Nursing Home Value-based Purchasing Demonstration

	Arizona	New York	Wisconsin
Year 1	Yes	No	Yes
Year 2	No	No	Yes
Year 3	No	No	No

Source: Grabowski et al., 2016

Although the academic researchers were not involved in determining cause, we were intrigued by what might have been responsible for results. In discussions with participants in the states, we discovered that none had made changes as a direct result of the project. In fact, some were not even aware they were part of it. A faith-based nursing home in Wisconsin told us that a candle had been lit every night and prayers said, a performance variable we had not considered but evidently an effective one! We could find no evidence of additional investment in any of the nursing homes in any of the states. The problem was inherent in the design of the model, a point reconsidered below.

We also took a closer look at matching to see what effect that might have had on the observed results. The analysis showed a classic case of regression towards the mean; the propensity score matching in the treatment homes was much higher in Arizona and Wisconsin. In New York, it was much closer on a percentage basis and slightly lower in the treatment homes compared to the controls. In Wisconsin and Arizona, what CMS thought were savings was nothing more than regression towards the mean. CMS thus mistakenly paid performance rewards to some nursing homes that had made no changes at all in response to the demonstration project.

The CMS demonstration was based on a classic P4P model. The Minnesota PIPP was a different design and it achieved different results. Established in 2006, PIPP provided $18 million a year in funding to nursing homes whose programmes were selected. A nursing home chain, a group of nursing homes, or even a single nursing home could apply, almost like applying for a grant. The nursing homes themselves, singly or in groups, were the ones who identified a problem and developed a quality improvement programme for an area of concern to them—e.g. preventing pressure ulcers or hospital transfers or better management of medications. The projects were of one to three years' duration.

The state selected the projects and provided funding, but with a 20 percent delayed payment component. That last payment was made only if project objectives were met. As behavioural economists know, this is a powerful incentive for meeting stated goals.

One possible limitation of the Minnesota PIPP was that the nursing homes that had the motivation and capability to apply for funding probably already were among the top performers, not the worst performers. Some analyses were done to tease this out, as Figure 4 shows. In the baseline 2006–2007 period, those who later participated and those who did not performed similarly on a set of quality indicators. Even though the PIPP rewards were based on specific and targeted projects, the participating homes began pulling away in composite quality in the 2008–2010 period, remaining higher in the final period although improving at roughly the same rate. Thus, PIPP results were considerably more positive than the CMS demonstration.

Figure 4. Actual and Fitted Facility Quality Indicator (Q1-100) Scores, by Minnesota Nursing Home Performance-based Incentive Payment Program (PIPP) Project Status, Quarter, and PIPP Funding Round, 2006–2013
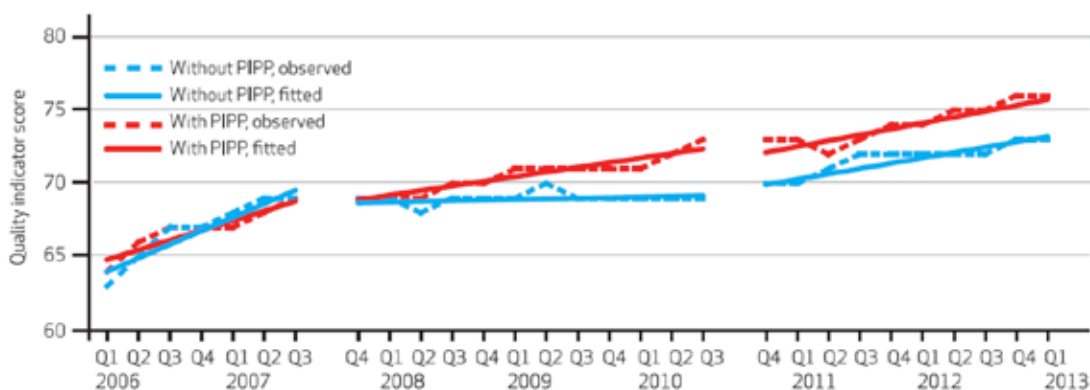
Source: Arling, et al., 2013

CMS's Nursing Home Value-Based Purchasing Demonstration failed on every one of the characteristics of an "idea" P4P system discussed above: a clear link between effort, performance and reward; sizeable reward payments; elimination of external factors; immediate payouts; and education

and guidance. In the interviews, we did with the nursing homes, they stated the link between investment to improve quality and reward was not at all clear. Reward payments, moreover, were small; Wisconsin's were substantial, but CMS reaped much of the savings in each state. The net gain, then, was relatively small in all states, but especially in Arizona. Payout delays were much too long: year two of the demonstration was over before we had rewarded the year one winners. Required savings across the sector introduced externalities. As noted, virtually no education or guidance were available.

In comparison, Minnesota's PIPP did most things right. Outcomes were clear and targeted. Rewards were sizeable and the amount was known in advance. Assessments were based only on the performance of the participant group, not that of other nursing homes. Payment was immediate: 80 percent on initiation of the project. Education and outreach was extensive.

The effect of an infusion of money at the beginning of the programme on the success of PIPP is unclear. Some believe that poor quality is due more to underfunding than to an inability or lack of desire to perform well. PIPP did not test whether the 20 percent hold-back provided an important incentive or if results would have been as good if the entire sum had been paid upfront. To some extent, the use of specific, targeted programmes—and, in this case, the hold-back option—may be as much reality politics as anything else. Medicaid is an underfunded programme; the federal government contributes about half in wealthier states, more in poorer states. But states still must contribute a substantial sum. Many states are experiencing budget shortfalls and a consequent lack the political will to spend more on Medicaid funding for nursing home care, particularly when that may or may not be well spent. With current changes in attitude at the federal level toward Medicaid budgets, the situation may deteriorate further as federal dollars diminish and states must either contribute more or cut some benefits. Against this political and economic background, the advantage of targeted programmes such as the PIPP is that they provide some confidence that funding will produce worthwhile returns—and in this case objectives had not been met, a percentage of the budgeted amount would have been saved.

4.2. Addressing the Information Gap by Using Report Cards

An important aspect of the shortcomings in the market for nursing home care is the characteristics of that group of consumers. Most of them do not resemble what economists consider the "rational" consumer. Cognitive impairment and dementia are common; rates of family involvement vary; and choices may have to be made in an exceptionally short time frame. There may just not be time, ability or inclination to research options thoroughly. In this case, reports cards can fill an important role in providing the information that can improve health care choices. The US is continuing to develop such resources. The Medicare website, medicare.gov, offers comparisons for hospitals, home health care and nursing homes. Providers are graded using a star system.

As with some aspects of P4P, however, quality reports cards or grades can have unintended consequences. The accuracy of the reports depends on the accuracy of the measures, which may in some cases fail to present a faithful overall picture of care in a particular facility. Unless risk adjusted, moreover, those facilities with sicker residents may receive less favourable reports because adverse events are more likely, not because care is poorer. Quality of care on dimensions not specifically measured may be lower, as noted above. Finally, over time the highest ranked facilities may completely edge out those that, in practice, are the safety nets and provide care in poor, underserved areas.

To be effective, report cards must satisfy several conditions. First, they must in fact be used by a range of stakeholders—consumers, family members, providers and others. Second, reports must be easy to interpret, i.e. present information about quality clearly and simply. Third, actual quality needs to be the focus. In the US, as elsewhere, quality measures often rely on claims data which unavoidably introduces measurement errors. In addition, as discussed above, case mix adjustments must be made so that nursing homes with sicker patients do not receive poorer quality scores only because of case mix. Lastly, reports card approaches should minimise the unintended consequences noted above.

Figure 5. Timeline of National Nursing Home Quality Comparisons

The Nursing Home Quality Initiative (NHQI) is an excellent example of the challenges of creating reliable report cards for nursing homes. Figure 5 presents a timeline of the assessment tools available from CMS online on medicare.gov. Nursing Home Compare was launched in late 1998 and primarily measured efficiency; some staffing data were added in 2000. In April 2002, the Nursing Home Quality Initiative appeared and began to include more rigorous quality indicators. In November 2002, the effort expanded to include the entire country. Additional indicators and weight loss were added in 2004. Missing from this list, and missing from most reports, are quality of life considerations. A few states do include satisfaction scores, but this is a measurement aspect that so far has received little investment.

Initially, the format for reporting the NHQI quality findings was a long table of statistics for 15 measures that the average person would find difficult to decipher. For example, it included national, state and specific nursing home comparisons of: "percentage of long-stay residents given influenza vaccination during the flu season", "percentage of long-stay residents who spend most of their time in a bed or in a chair "and "percentage of short-stay residents in moderate to severe pain". In December 2008, CMS began presenting the quality results as a five-star composite score rather than as a lengthy table. Consumers find this much easier to use. Although nursing homes complain that it over-simplifies performance enough to be potentially misleading, resistance to the star system appears to be waning.

Some research has been done on whether the NHQI has led to improvement in quality of care in nursing homes. A study by Mukamel and colleagues in 2008 looked at performance data before and after NHQI launched in 2002 for variables such as physical restraints, infection, pain, and activities of daily living (Mukamel et al., 2008). The data were not clear; some progress may have been made because of NHQI, but change may also have been part of a broader evolution in approaches to care. In addition, much of the data were self-reported by nursing homes; changes in data collection methods in the home might account for some of the change.

One of the key difficulties Mukamel faced in attributing change to the NHQI was the lack of a control group. The three studies summarised in Table 2 adopted varying approaches to including controls. Lu used report cards available in some states before the NHQI. Town and I compared the six NHQI pilot states to those not in the pilot programme. Werner and colleagues published a series of papers that, by design, examined only post-acute care.

Table 2. Comparison Group Studies

Study	Comparison group	Effect on quality	No reporting on some quality measures
Lu (2012)	Pre-NHQI state report cards	No effect (long-stay)	Decrease
Grabowski and Town (2011)	Pilot vs. Nonpilot states	No effect (long-stay)	NA
Werner et al. (2009a, 2009b, 2012)	Small vs. large PAC facilities	Increase (PAC)	Decrease

Not surprisingly, the Grabowski and Town research showed no effect on long-stay quality as measured. Werner's focus on post-acute measures did show some results. This might in part be because the post-acute group of consumers tends to be wealthier and the care facilities are more demand responsive. Post-acute measures also are fewer and a consumer might find the NHQI information more useful in making a choice. The research suggested some improvement in post-acute care, but some facilities still failed to report on some measures. That seems like a no-win situation: little improvement, but the unintended consequence of failure to report.

NHQI's first efforts, then, fail the test of a good report card: they were not well-utilised by stakeholders and they were not easy to interpret. Whether they accurately reflected quality is difficult to determine, but experts in quality measurement think not. Finally, the Lu and Werner studies suggest that the NHQI did not minimise unintended consequences.

The five-star rating system appeared in late 2008 and still is in use today. Five stars is much above average performance, four is above average, three is average, two is below average and one is much below average. Stars rate performance both overall and separately on health inspections, nursing home staffing and quality measures.

The star system comes closer to meeting the standards of a good report card. It is being used—traffic on the website is substantial—and the stars make the results easy to interpret. However, stakeholders continue to argue that the stars do not accurately reflect quality. In addition, as noted, the system has produced unintended consequences, including an apparent widening in disparities across socioeconomic groups. A study in which I participated, published in *Health Affairs* in 2015, found that the five-star report card in fact has had this effect. Medicaid recipients are most likely to be in one-star, lower quality homes while Medicare and private-pay consumers are more likely to be in the higher-ranking facilities (Konetzka et al., 2015).

4.3. Redesigning the System

The goal at the system level is to develop and apply a model of nursing home financing and delivery that is person-centred, achieves a high level of quality, is efficient, and coordinates well with other parts of the health care system. The extent of fragmentation in the overall health care system probably is more pronounced in the US than elsewhere. So, for example, if I am an 80-year-old nursing home resident who qualifies for Medicaid, my nursing home care expenses are being paid for by Medicaid, but the rest my health care is being paid for by Medicare. Despite both being the responsibility of CMS, these two programmes are entirely separate and cost-shifting from one to the other is common. As I mentioned, Medicare is eager to move acute care patients out of hospitals, where costs are higher, and into shorter-stay nursing homes. Sometimes people are moved too early, resulting in outcomes that require additional care. Determining which care might minimise costs for each individual, and provide a high quality of care, rarely is a strong enough focus. As a result, an individual may bounce around the system receiving care that is coordinated poorly, if at all, from physicians, hospitals, nursing homes, home health care agencies, and hospices. Payer responsibility varies; each is responsible for care only in its own silo and each has its own set of deliverables.

A favourite quote on mine is that "every system is perfectly designed to get the results it gets". The US nursing home system, the long-term care system, is perfectly designed to achieve higher total costs and worse health outcomes. That is indeed what is happening. The current system provides perverse incentives to shift costs, for example, by inappropriately hospitalising nursing home residents. Virtually absent are incentives to deliver high quality care in a lower cost setting or to coordinate and integrate care across settings. The latter is not rare: most countries, including the UK, are deficient in effectively integrating care.

Efforts to integrate services do exist in the US. At the federal level, the Program of All-inclusive Care for the Elderly (PACE) is a federal joint Medicare-Medicaid programme intended to coordinate outpatient care to minimise nursing home stays. This programme covers what are termed "dual eligibles", i.e. individuals eligible for Medicare who also are eligible for Medicaid. Various states also have coordination programmes for this population. The objective is to blend the health care financing from Medicare with the long-term care financing from Medicaid to bundle care, helping the individual find services in lower cost settings while managing and coordinating care across settings—home, nursing home, hospital, physician, etc.

The progress of these initiatives is a mix of good news and bad news. The bad news is that it has been difficult to convince individuals to enrol because they prefer the benefits they have under Medicare and Medicaid separately. Even individuals who are passively (automatically) enrolled prefer not to be part of an integrated model, as recent research shows. A study I recently published with colleagues looked at eight states. In those states as of October 2016, only 26.7 percent of qualified dual-eligibles were enrolled in PACE. The reasons are not entirely clear, although administrative complexity and both demand- and supply-side barriers appeared to underlie decision to opt out or disenrol (Grabowski et al., 2017).

The good news is that rigorous evaluations of the Minnesota programme and the PACE programme show outcomes that are either better or no worse, although at higher costs. Higher spending is acceptable, for an economist, as long as benefits accrue from that additional spending. However, these programmes often have been sold politically as win-win: improving outcomes and lowering spending.

5. Lessons for the UK

Despite the differences in our systems, the US experience does have some lessons for the UK. First, in both countries, nursing home quality will continue to be a policy challenge. Each of us is spending substantial sums yet still producing unacceptably poor outcomes overall. Second, further regulation is not the answer. Although regulation is unlikely to be eased substantially in either country anytime soon, introducing market-based incentives can improve results even with regulations in place.

In both countries, it is essential we develop a better understanding of why nursing home care is not of higher quality as a basis for developing effective policy responses. Low payment as a cause of lower quality may be addressed through P4P, but incomplete information may be best addressed through report cards. In the US, evidence about the value of P4P and report cards is mixed. What is clear is that design matters for both as the abysmal failure of the Nursing Home Value-based Purchasing Demonstration proved.

Coordination of care at the system, or national, level is essential for both the effective coordination of care and the best use of financial resources. Long-term care must be integrated with other types of care, and it must be much better understood. To date, long-term care has been an "ugly stepsister" that has not only been underfunded, but also been the focus of far too little research. Effectively solving a problem requires an accurate understanding of the problem first, an effort to which both the US and UK can contribute.

6. References

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About the Office of Health Economics

Founded in 1962, the OHE's terms of reference are to:

- commission and undertake research on the economics of health and health care

- collect and analyse health and health care data for the UK and other countries, and

- disseminate the results of this work and stimulate discussion of them and their policy implications

The OHE's work is supported by research grants and consultancy revenues from a wide range of UK and international sources.

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