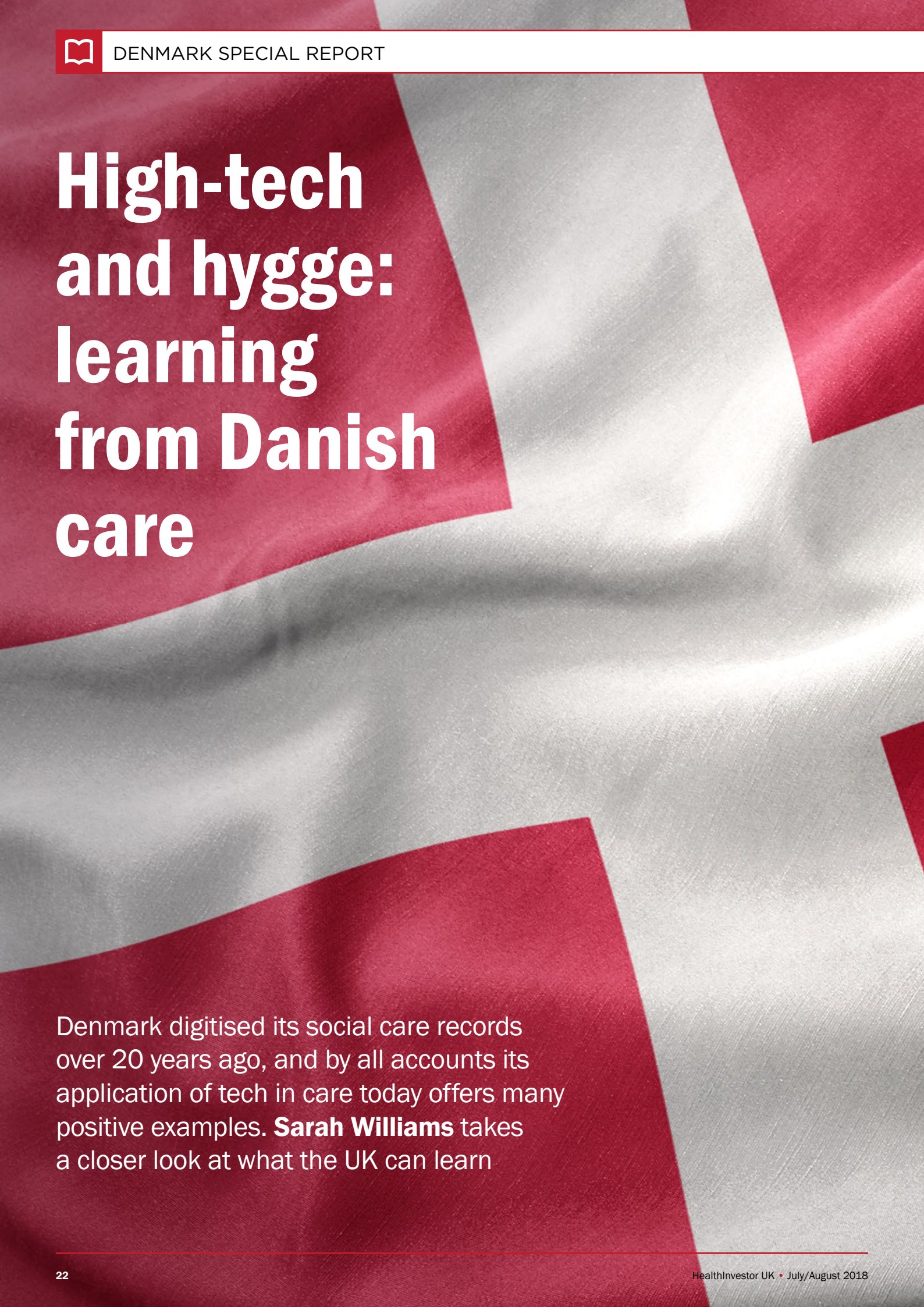
High-tech and hygge: learning from Danish care



Denmark digitised its social care records over 20 years ago, and by all accounts its application of tech in care today offers many positive examples. **Sarah Williams** takes a closer look at what the UK can learn

Something innovative is happening in the state of Denmark. In fact it's been happening for some time. The country first developed standards for digitising its health and care data, an initiative known as MedCom, in 1994. Jointly owned by the Danish Ministry of Health, the Danish regions and local government, the platform coordinates the use of electronic communication and information sharing in the healthcare sector to support continuity of care between different practitioners, from GPs to physiotherapists and dieticians. Today, digital resources include a common health portal, Sundhed.dk, launched in 2013 to create a single entrance to the health service for citizens and health professionals, with links to a common medicine card, 'FMK' that allows both parties access to information concerning an individual's current and recent medication history.

As a nation of just six million people, and with a taxation system that ensures the state has a healthy budget to play with when it comes to both the provision of healthcare and digital initiatives of this kind (the average Dane pays around 45% income tax), perhaps it's unsurprising that Denmark is well established where the UK still has some way to go. (And where, frankly, it has a lot to prove, following the well-publicised flop of the NHS National Programme for IT.)

But, after an insightful trip to visit care homes in Denmark, hosted by BKR Care Consultancy and Danish care tech company Sekoia, I'm also struck by an apparent openness to incorporating innovation within care, with technology built into design from the ground up. This could be circadian lighting – shown to improve sleep and help manage anxiety – applied throughout public and private spaces (the control panel even has a setting marked: 'hygge'); or acoustic monitoring and underfloor sensors that allow staff to track whether a resident is disturbed in the night. It can even be things as simple as creating welcoming outside spaces, widely visible from inside, or using wooden materials on the ceiling, rather than floors, so that residents can enjoy its therapeutic organic qualities while soft laminate floors are quieter underfoot and easier to clean. Small wooden balls carved onto the surface of hand rails were also used as gentle signposting in corridors to help dementia patients navigate to their rooms. And rather than signing in and out of a locked building, some of the care homes we visited had placed wristbands on residents with the dual function of automatically unlocking their own apartment door and also tracking their movement should they go beyond a certain marked perimeter outside the home.

Of course, it would be a disservice to the UK care sector to pretend that such design innovations – and more – do not exist in some homes here. But, it is interesting that many of the UK contingent with whom I travelled (among them, operators, lenders, advisors, lawyers) were struck by the serenity and calm created in these homes; all underpinned, it seemed, by the twin drivers of technology and – between staff, residents and public – trust.

To give some context, the Danish sector is wholly funded by state pay, although there are some top-up services available (these won't get you a bigger room or a balcony, but you could pay for your apartment to be cleaned daily, for example). While funding is from the state, and the majority (93%) of homes are publicly owned, the remainder are a small number of for-profit or charitable operators. Two of the homes we visited on our trip were publicly run. One, a nursing home in Vejen municipality, was undergoing a renovation, with a new site being built next door and implementing many of the technologies mentioned above into its design, in some cases being trialled with the support of the municipality.

A third site that we visited, Meta Mariehjemmet in ▶

Outside spaces, clearly visible from the inside, are a key design point in Danish care homes

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Gadbjerg, also a nursing home, was independently owned, and arguably had a little more 'personality' than the other two – touches such as a rotating exhibition of art from the local area displayed in the corridor, and available for sale to the public (who in this home, and others, are invited to come and make use of the gym and other communal facilities). But these artistic touches aside, the home looks and feels very much like the others that we visited. After all, certain design features are mandated, such as the presence of a kitchenette in each resident's suite – rarely used perhaps, as meals are provided in the communal dining room, but there to encourage continued independence, to create a homely feel, and for the use of visiting relatives.

More significantly, the income this independently run home receives for its services is the same. The municipality pays around £32,000 annually per place for the care element, with an additional payment for rent and food taking this to around £43,000 in total. (Not a million miles from the income of a lower to mid-market home in the UK.)

Within this, technology is both an initial expenditure, and a driver of efficiency.

As Kristoffer From, chief executive of another Danish software platform, lifestyle management service Liva Healthcare, tells me, the overall approach to technology in health and care comes back to a focus in Denmark today on patient outcomes (as is more established in the US, and seen increasingly in the UK). "They want outcomes, and they want to pay as little as possible for that outcome – meaning how efficiently we can bring it," he says. Liva's contribution in Denmark started around three years ago with eight local health authorities that wanted to use their existing budget for managing chronic diseases to benefit a much higher proportion of patients, by providing preventative services digitally.

For Sekoia, whose product was developed after its founders spent 300 nights observing staff in care homes to better understand their needs, its technology should provide three essential benefits. "Life quality for the resident, staff satisfaction, and the efficiency that you can gain in the care home by working with a digital tool," chief executive Mads Fischer Rasmussen explains. This enables staff to spend less time in the office making notes, and more time engaging with the resident. He quotes the words of a nurse in Odense, an early inspiration to Sekoia's founders, who described how her day "starts at 7am, then I have a string of interruptions, and then I go home".

Mads Fischer Rasmussen, chief executive, Sekoia

Sekoia, then, sets out to create a platform which supports staff to work as a team, to better manage their workload, and record the care they deliver, which can then be fed into a resident's ongoing care plan. This can include recording instructions or even explanatory videos, of how to lift the resident, or whether they like to comb their own hair, for example. And, as we witnessed on our visits to the three homes (where Sekoia is deployed), all of this is achieved while actually engaging with the resident. Rather than staff carrying individual iPads or phones to access the system, it is instead accessible on a larger screen within the resident's room, with another, 'management hub' screen located in a central area for staff. Carers can use a fob to log in to their account and access a resident's notes, ticking off completed tasks, or for example moving non-urgent assigned tasks to a later date if required. But, without needing to log in, the screen in each room is also accessible to the resident in question to access their own personalised services, from

What did some of the other attendees think?

Mala Agarwal, Athena Care Homes managing director

Our visit to Denmark was both educational and enlightening. The calmness and serenity within each care home we visited was evident. The residents looked content and well cared for and the staff appeared happy in their work.

It was very apparent that residents in Denmark are admitted to their chosen care home much earlier than those in the UK who tend to be cared for at home for as long as possible. Accommodation was significantly different with all residents having their own "apartment" which included a living room, bedroom, bathroom and kitchenette. Decor was very clean with clear cut lines throughout.

There appeared to be minimal regulations to adhere to as we do in the UK. With the digital technology in place in each of the care homes, staff have more time to spend with residents.

communicating with family members, to interactive games, or, in the case of Meta Mariehjemmet, their choice of radio channels stored for them. By having the screen in the room, normally mounted on the wall or sitting on the resident's desk, the carer can involve the resident in the process – collaboratively planning their day and diary for the week, choosing their meals, or answering a health questionnaire.

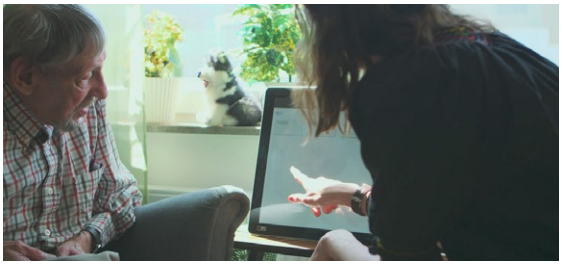
The platform helps staff to better manage their work collectively, because it provides an overview of the daily tasks required for each resident and the home as a whole. If a carer spots, on the interface, that a colleague is falling behind, he or she can step in to help, updating the system to show that the task is now compete. A traffic light system highlights the most urgent or overdue tasks, making it easy to prioritise tasks. This, no doubt, contributes to the peace we experienced in the homes we visited (no calling out from staff locating colleagues, because it is clear from the platform where they are) but also because the system doesn't send push notifications to individuals. Instead it provides an overview of the home, encouraging staff to self-organise and support each other. Trust, of course, and a willingness to help is vital to this, but as Rasmussen points out, it's not a matter of Danes being more conscientious than Brits, but rather having a system that supports and allows them to work in this way.

Indeed, Sekoia is working with nearly 200 care homes to deploy the technology, in Denmark, Sweden, the Netherlands and the UK (six homes).

It's worth highlighting too that while Denmark as a country may have a slightly longer history of technology in health, the same considerations of staff concerns apply. "It's very important that it's a user-friendly system, so that staff who are not that used to technology can still leverage it," Rasmussen says. "It's that perception that they are a bit afraid of technology; but then they see how easy it is to work with, and they gain self-confidence and realise it is there to help." And while the system has more complicated functions available to management staff, particularly for the reporting and analysis of data, it is after all a system designed to be accessible to elderly residents.

In fact, as something that makes a nurse or carer's job easier and reduces staff stress – a priority for Sekoia – technology can also be used as part of the staff proposition, to improve recruitment and retention.

So what can the UK take from the Danish way of doing things? Firstly, let's cover off the fact that Denmark is far from a perfect paradigm of integrated care. As From admits, the problem in Denmark, "as in many countries where you have a very strong public healthcare sector" is that it ▶



Organic materials are applied throughout for their therapeutic qualities

Attendee view:

Bhavna Keane-Rao, founder and director, BKR Care Consultancy

The whole system seems to be based on trust, it's a really big driver, and there doesn't appear to be a blame culture. Whereas in the UK, we tend to monitor, regulate, we get people to sign in and out, and if you don't you get punished, in Denmark it's much more 'come on, let's get it done'. The staff just come in to work and it's that peer group control, so if you didn't turn up that would have an impact on your colleagues and so you turn up to work. We were informed of this in all three care homes we visited.

While we're too far down the road to dilute our regulation now, I think what we can learn from Denmark is the use of technology: care homes being built with IT already in place, such as underfloor sensors. The Sekoia system for example is very simplified for the user, but the background technology is much more complicated. It's about how you make sure that the systems are easy to use for residents as well as the staff.

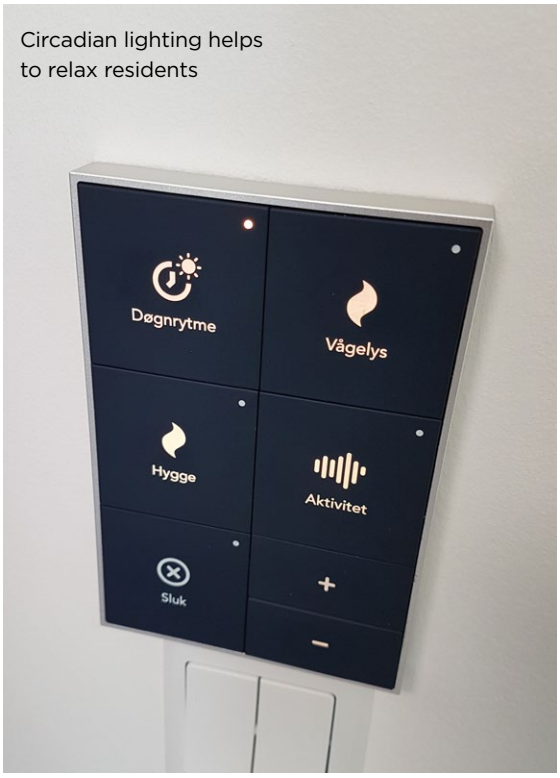
"divides into silos" of care. Because municipalities have the preventive responsibility, hospitals and regions have responsibility for actually delivering treatment (and both are paid for their contribution), and then the GP acts as a third party to direct patients to the right place, there can be a problem of the right incentives being lacking for the system to function as a whole, he says.

In care too, significantly, the Danish system relies on more self-regulation than the UK, with a lower level of scrutiny than seen in the UK (as we go around, our party spots several incidents that wouldn't fly in the risk-averse UK); again, trust prevails. But while there is no question of the UK retreating to a lesser degree of regulation, instead, the use of a system like Sekoia could support UK staff to comply with this framework more efficiently.

As UK commissioning, too, becomes more outcomes-focused, technology as a facilitator can be embraced in care as part of the essential infrastructure, not only in the high-end market, but (as the comparable income of Danish homes suggests) potentially in public-run homes too. After all, with the newly announced health and social care secretary Matt Hancock known to be an advocate of technology, perhaps there is a glimmer of hope that – if nothing else – investment in technology may play a role in government's long-term vision for social care.

The market in Denmark too, could be set to evolve. Rasmussen recognises the potential for the sector to develop beyond its public-pay base to offer more choice to residents with the means and inclination. As Bhavna Keane-Rao of BKR Care Consultancy puts it: "Give it a few more years, and people will want a bit more. They don't have luxury end care homes now, but I think it's a matter of time before they do." ■

Circadian lighting helps to relax residents



Attendee view:

Vincent Buscemi, Bevan Brittan partner and head of independent health and social care

The facilities we visited did not look, feel, smell or sound like typical care homes in England; the use of design techniques and the integration of digital and other technologies such as lighting, acoustics, and silent alarms, made for a relaxed and welcoming environment. The emphasis on independence and the empowerment of the individual as a core philosophy in the delivery of care-giving, together with the lack of an obvious staff–side hierarchy facilitated a calm, well-managed environment, where everyone worked as a team and took immense pride in what they were doing.

I was impressed by the fact that the homes were truly integrated into the communities in which they were located. The ability for members of the community to come and go freely and to use the facilities at the home such as the gardens and gyms, together with the freedom afforded to the residents to move throughout the buildings and grounds, suggested a culture based on mutual trust and respect.

Attendee view:

Mandip Bhogal, Knight Frank associate – healthcare

It was fascinating to see a harmonised care model in Demand, driven by a predominantly publicly-funded system, providing a level playing field for their residents. The UK care home system is very fragmented in comparison. It was also encouraging to see how investment in technology is at the forefront, having digitalised their social care data in 1995 whilst we are still in the process of doing so. I would like to see some technological advances in our UK care homes similar to those witnessed in Denmark, such as floor sensors to track resident movements/falls, lighting to stimulate circadian rhythm, digital care-planning systems etc. We are seeing some advances here in the UK, albeit mainly in homes that are predominately self-funded.