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No quick fix for long term care

The UK prime minister wants free personal care for those with "critical" needs, but the proposed legislation is deeply flawed and hopelessly under-costed, finds **Sam Lister**

The shortfalls in long term care for elderly people are, to quote a health minister addressing the House of Commons, "perhaps the most baffling problem in the whole of the health service."[1] The minister went on to suggest that the solution "lies rather in the home than in the hospital," where a structured system of general practitioner, health visitor, and carer should ensure that people with long term sickness are looked after in their homes rather than being added to the lists of people who are institutionalised. "I think that the House will agree that, ideally, we should try to keep people as long as possible in their own homes."

It could have been Gordon Brown or Andy Burnham, England's health secretary, speaking in parliament this week. In fact, it was Iain Macleod, Winston Churchill's health minister, addressing a debate on the aged sick in December 1953.[1] When Mr Burnham observes that home care for chronically ill people is a nettle that has not been grasped properly in decades, it is something of an understatement.

Between the Scottish Executive's introduction of free care in 2003-4 and 2007-8, the annual cost doubled to £256m, far above initial estimates

No one would question that the provision of quality medical and domiciliary support for people with long term needs, paid for in a way that does not bankrupt them, should be a basic social aspiration. As the *BMJ* observed six months after the Macleod debate, the "wretchedness of many decrepit old men and women is unworthy of a civilised society."[2] The editorial referenced research from Scotland, carried out just before the formation of the NHS in 1948. Of 300 people being treated at home in Glasgow—for conditions ranging from heart disease and cerebral haemorrhage to diabetes, cancer, and "senility"—more than a quarter had no help apart from the occasional ministrations of a district nurse.[3] The *BMJ* called for a stronger lead from government.

False start

More than half a century later, ministers seemed finally to be getting to grips with funding long term care. A green paper published last summer set out various combinations of personal contribution, insurance, and state financing. It included proposals for prevention services to help people stay independent, including "re-ablement" support—helping people hone skills needed for their daily care. The paper was put out to a four month consultation as part of what ministers boldly suggested would be the foundations of a "national care service" to sit alongside the NHS.

Then two months later Gordon Brown interjected with a party conference pledge to give free personal care at home for all those with critical needs. For an issue that has been pored over for years, here was a solution that was so quick fix, so loosely calculated, that its last minute devisers can have been thinking only of the "free care" newspaper headlines the following day.

The flaws in what is now travelling through parliament as the Personal Care at Home Bill are deep and numerous. On a basic procedural level, it flies in the face of a public consultation that was supposed to inform the legislation: the bill rides roughshod over the green paper (entitled, with unintended irony, *Shaping the Future of Care Together)*, which explicitly rules out a system of taxpayer financed free care.

In content it is also problematic. The bill aims to help a total of 400 000 people: 270 000 will receive free personal care at home and a further 130 000 will get re-ablement help. The government estimates that of the 270 000 who will get free care, about 166 000 already receive it through means testing, leaving about 100 000 new claimants. These will comprise those who currently pay for their entire care or make a contribution, get informal care, might move from a nursing home to their own home, or have an unmet need. By any stretch this is a wildly optimistic underestimate. If one part of the new national care service is offering free care, you can bet that all-comers will try to take advantage of it.

This brings us to the problem of who qualifies. Assessment will fall to local authorities, with an as yet unspecified but essential medical appraisal of appropriate treatment costs. At present people with critical need are defined as requiring significant help with four activities of daily living—such as eating, washing, going to the lavatory, and dressing. A consultation on how the bill will be regulated, including how applicants are assessed and re-ablement provisions chosen (from the installation of hand rails to the use of physiotherapists and dieticians) is due to finish at the end of February.

Cost questions

Then there is the most egregious flaw of the lot: cost. The critical need assessments alone will require a small army of social workers, but that is not the half of it. The government puts the annual cost at £670m (€762m; $1bn), of which £420m has to come from existing Department of Health budgets. This, ministers say, can be met with cuts to advertising and communications, management consultants, administration costs, and a £60m saving in "re-prioritised R&D spending outside the ring-fence"—for which read: cuts to areas of clinical research that won't cause too public a fuss.

Local authorities face an equally punitive raid on their budgets. They must provide the remaining £250m a year from efficiency savings, which council leaders warn will mean tax rises and cuts to frontline services such as social work, leisure centres, libraries, and road maintenance.

What is more concerning is these cost implications work on the premise that the government knows its maths. The almost unanimous agreement is that the basic calculation of £670m is hopelessly wrong. A collective of English council care directors put the annual bill at more than £1bn, with care rates likely to be double the

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government's £100 a week estimate (which was based on people with "high needs" receiving less than seven hours of care).[4] While the Government raised its own questions about some of the counter-calculations, the concerns are not dissipating and prompted a furious confrontation between party leaders in Parliament last week.

Scotland provides some compelling evidence of care pitfalls. In 1999 the Royal Commission on Long Term Care recommended the introduction of free personal care in the United Kingdom.[5] A minority report opposing the proposal was produced by two members of the panel, Lords Lipsey and Joffe. English ministers opted for the minority view, but Scotland, recently devolved, sided with the commission.[6]

Between the Scottish Executive's introduction of free care in 2003-4 and 2007-8, the annual cost doubled to £256m, far above initial estimates, and the number of claimants jumped by 36% to nearly 45 000. Research by the University of Strathclyde suggests that, on this basis, costs in England will treble in real terms from £580m in year one to £1.73bn five years later.[7] And all this at a time of severe stretch in the UK economy.

The Scottish experience has highlighted unforeseen consequences that may also befall England. Those people getting small amounts of home help—such as cleaning and getting groceries—had those services squeezed to pay for free care. The Strathclyde work identified a 24% fall in the past two years, despite the rising elderly population.

Serious concerns have also been raised over how the policy may encourage people to put finances before appropriate treatment; those who need nursing home care, which has to be paid for, may stay away. Worse still, many in residential homes may feel pressured to leave them as a saving for their families. A further issue jars. With poorer people in England already getting means tested free care at home, the bulk of the additional spend will benefit the better off.

Electioneering

And yet for all these flaws, the bill has passed through the House of Commons and is now being debated in the House of Lords. Here it has met with more robust inquisition, from the likes of Lord Lipsey, Lord Warner, who served as a health minister, and Lord Turnbull, the former cabinet secretary and head of the civil service. That peers from the governing Labour party are most critical says much of the "dividing line" politics that Mr Brown is using to try to drive the bill through—if you don't support the legislation, you are against providing care for a person in their home.

The tactic is underhand, but effective on the eve of a general election that the prime minister wants to fight on home care and elderly people. (There have also been recent pledges for dialysis, chemotherapy, and cancer nursing at home.) For all the claims and counter-claims, including the Conservatives cartoonish take on the Green Paper option of an £20 000 inheritance levy, or "death tax," opposition parties have been loath to take parliamentary action. The Conservatives, who are expected to form the next government, have only gone as far as to abstain from a vote in the Lords and to sugges they will push for amendments—such as a wider re-ablement programme—to broaden the legislation. Further policies will spring from a year long review of care for elderly people to be led by former party leader Iain Duncan-Smith. The Tory manifesto will also include its own headline grabbing conference promise—an £8000 care insurance payment at age 65—which is as ill conceived as Labour's efforts.

When the Care Quality Commission this week called for radical, fundamental changes in health and social care delivery, it steered clear of a political bunfight, but its message was clear. The introduction of more integrated services, independent living, and care at home will bring social, clinical and economic benefits (not least a £2bn potential saving on unnecessary, repeat hospitalisation): it is an imperative to be treated with little short of epoch-shaping respect.

This demands a thorough interrogation of the bill and all its shortfalls. As Lord Lipsey observed of the impact of Mr Brown's announcement on the green paper, it amounts to "an admiral firing an Exocet into his own flagship."[8] Those bold enough to contest the quick fix deserve credit. As Iain Macleod observed in 1953, all agree that personal care at home is a good thing. The fundamental problem is not the principle but the policy.

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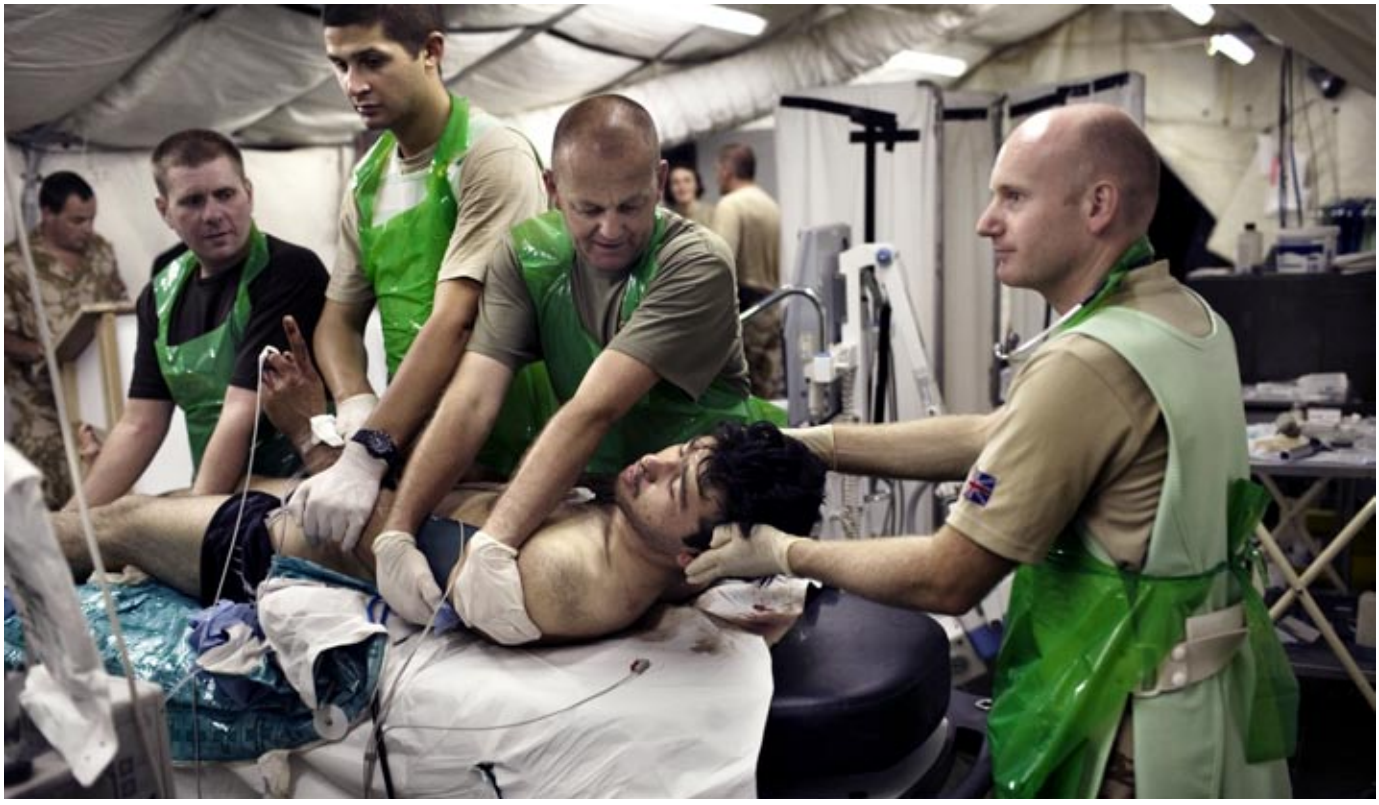

MARCO DI LAURO/GETTY IMAGES

The field hospital in Camp Bastion, the British base in Helmand Province in Afghanistan, is designed with trauma patients in mind

Doctors on the front line

Images of dead soldiers returning from Afghanistan are frequently in the media, but there would be many more if it were not for the expert medical treatment casualties receive. **Helen Macdonald** reports

Multinational forces fighting the Taliban in Afghanistan are experiencing escalating rates of devastating injury and death caused by homemade roadside bombs (improvised explosive devices). The tactic is also putting increased pressure on the military doctors working there.

Colonel Hodgetts, defence professor of emergency medicine for the College of Emergency Medicine, the body that sets UK training standards and administers examinations in the specialty, has served in war zones every year for the past 10 years. "The severity of the trauma now is worse than anything I have seen," he says. The improvised devices cause injuries by multiple mechanisms, he explains. The blast can rip limbs off, and penetrating injuries result from pieces of the bomb or its contents (such as nails) or from environmental debris such as stones, wood, or even other injured people. Mechanical trauma can occur if the victim is thrown by the blast, and burns are also common. As well as physical damage, the psychological injuries can be severe.

The combat environment, injury pattern, and emphasis on pre-hospital management make military medicine and the care delivered to injured soldiers different from that in civilian hospitals. Surgeon Lieutenant Lara Herbert is a junior doctor in emergency medicine. She returned from an operational tour with the joint force medical group in Helmand Province, Afghanistan, in April 2009, working in a front line hospital. Trainees such as Surg Lt Herbert are the first doctors to see casualties, but by the time soldiers reached her, a defined chain of care had already begun.

Care at the blast

"All soldiers receive mandatory training in battlefield first aid prior to deployment," explains Surg Lt Herbert. This means care starts immediately. Each soldier carries field dressings, morphine, and a combat application tourniquet, which is designed for one handed self application to minimise blood loss. Able casualties must help themselves until the area is secure enough to get them out.

Out on patrol, a few soldiers in each platoon (about 30 people) will have done more detailed first aid training and are called team medics. For every three platoons (a company) there are a few combat medical technicians or medical assistants. These soldiers are trained in battlefield advanced trauma life support to standards similar to those of civilian ambulance crew. They carry a medical bag containing packets of haemostatic drugs, adapted

dressings, intravenous and intraosseous cannulas, fluid, simple airways and bags, chest seals, decompression needles, morphine, and splints.

At the core of battlefield life support is the acronym cABC—a modification of the ABC (airways, breathing, and circulation) model of assessment. The "c" was added two years ago, when it emerged that catastrophic bleeding was an important cause of death in injured soldiers. Now, control of catastrophic bleeding is the first priority for everyone managing military trauma patients.

If it is not possible or safe to move a casualty quickly medics move on from assessment and start treatment on the ground—for example, giving fluid to treat low blood pressure. Managing blood pressure in this environment is difficult and has to be guided by the radial pulse. Fluid is given in 250 ml boluses when the radial pulse disappears (a sign that the systolic blood pressure is <90 mm Hg). If the radial pulse returns, fluids are stopped.

Front line doctors

Surg Lt Herbert ran a basic medical facility in a forward operating base, a semi-permanent base from which soldiers go out on operations. The medical aims are to provide emergency care and treatment of everyday medical problems, and the facility typically includes a trauma area big enough for two casualties and an isolation tent in case there is an outbreak of infectious disease.

When a casualty arrives, the doctor reassesses the patient, reviews treatments that have already been given, and starts more sophisticated management. Surg Lt Herbert's trauma tent contained oxygen, a defibrillator, a suction machine, chest drains, cannulas, spinal boards, neck collars, and splints. She often worked alone because her medics were out on patrol with the soldiers. "I trained the chefs to be medical scribes and to communicate medical updates to command." Other soldiers would wait ready to help when needed—for example, by holding up a bag of fluids, or lifting casualties."

When the fighting was heavy, "I could hardly hear myself think because the gunfire was so loud," says Surg Lt Herbert. This made even routine assessment, such as auscultating a chest, difficult.

Calling the helicopter

In Helmand Province casualties are flown to the field hospital at Camp Bastion. Here the aim is to stabilise the casualty and restore normal physiology. The decision whether to call or cancel a helicopter involves weighing up the needs of the casualty, those of casualties elsewhere, and risk to the helicopter staff.

The helicopter is staffed by a medical emergency response team comprising a senior anaesthetist, a paramedic, a nurse, and soldiers for protection, and it typically takes 20 to 60 minutes for them to reach the forward operating bases.

There is a standardised format to call the helicopter. It is called the nine liner and includes the soldier's identification number, triage category, and information about the mechanism, injury, signs and symptoms, and treatment given (MIST).

MIST also forms the basis of handover to the medical emergency response team. "It has to be focused and succinct because time is limited and it is difficult to hear a report over the noise of the helicopter engine," explains Surg Lt Herbert.

Field hospital

The hospital at Camp Bastion is designed with trauma patients in mind. Emergency, intensive care, and surgical areas are connected, and the patient is assessed jointly by consultants from all three departments. If multiple casualties are expected, extra staff from other wards are called to help—blurring and flexibility of roles is more common than in civilian hospitals.

Much of the process of care here has been developed by evidence. Colonel Hodgetts founded a theatre trauma registry in 1997. It has meticulously recorded information about each injured soldier from Iraq and Afghanistan since 2003.

MARCO DI LAURO/GETTY IMAGES

All soldiers receive mandatory training in battlefield first aid prior to deployment

Data recorded include the injury, armour, interventions, and the process and staff involved in a soldier's care from the prehospital stage, through a military field hospital, and back to hospital in the United Kingdom or elsewhere. In the field hospital, the trauma nurse coordinator collects the data. If a soldier dies information is gathered from the postmortem examination. Data from the registry have informed changes that have improved survival such as introducing catastrophic bleeding into the life support routine, changes in armour design, and assessment of efficacy of haemostatics and tourniquets.

From the doors of the emergency department waiting triage staff will watch the casualties being unloaded from the helicopter into ambulances, and prepare to search casualties for weapons before they enter the building. Inside the department preparations for their arrival will be underway too, particularly if a serious injury is expected or suspected.

For seriously injured soldiers, the aim is to correct a lethal triad of deranged physiology—hypothermia, coagulopathy, and acidosis. In winter, outdoor temperatures in Afghanistan can reach −10°C, and by the time soldiers reach the hospital they may have been outside and injured for well over an hour. The department is therefore always heated to 30°C. Prepared trolleys are lined with a heated mattress and x ray plates, for immediate digital images of the chest and pelvis. A level one infuser machine sits at the bedside, ready to mechanically squeeze warmed bags of O negative blood into the casualty's veins.

Blood is the fluid of choice. Although pressure or a combat application tourniquet might have stopped the bleeding, the blood needs to be replaced. If an amputee is expected a shock pack is got ready. This contains four bags of O negative packed red blood cells and four bags of fresh frozen plasma, which are transfused alternately.

If the casualty requires further fluids, the massive transfusion protocol kicks in and a wider range of blood products are transfused to prevent imbalances developing. Packed red blood cells and fresh frozen plasma are interspersed with platelets, cryoprecipitates, and recombinant factor VIIa to tackle coagulopathy. Two nurses run the machine, which can push a unit of blood through in 90 seconds.

Colonel Hodgetts explains that such aggressive blood resuscitation and control of coagulopathy is a recent development. "We use thromboelastography. This is a new application of existing technology more commonly used in liver surgery. The tip of the machine oscillates in a blood sample measuring tension as the blood clots. We use pattern recognition to interpret the readings and then adjust the delivery of platelets, cryoprecipitate, plasma, and tranexamic acid."

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The emergency consultant is in charge of assessing patients on arrival and stands at the foot of the bed. There may be 20 other professionals working on the patient, including consultant anaesthetists.

Casualties can be transferred from the emergency department to the operating theatre in 10 minutes, although increasingly they are going straight to theatre. "In the last six months we have added the 'right turn resuscitation' approach," says Colonel Hodgetts. "This is taking seriously injured soldiers with poor vital signs directly from the helicopter to the operating theatre (a right hand turn when you enter the department). The emergency team assemble alongside the operating theatre team and do their assessment with the patient on the operating table."

Surgery in this setting is damage control. The aim is to restore normal physiology, rather than anatomy, and to get the casualty to intensive care. Consultant general and orthopaedic surgeons can work on a patient simultaneously or move between patients if there are several casualties.

"Aggressive resuscitation means that people are getting to intensive care in better shape, and might be waking up after bilateral amputations—horrific life threatening injuries—within a few hours."

Back to the UK

If soldiers will not be able to return to active duty, they are flown to the Royal Centre for Defence Medicine in Birmingham. The need for beds and for stabilised injured soldiers to receive definitive surgery means that most patients fly within hours.

Many have full body computed tomography before the flight to screen for undiagnosed injuries such as spinal fractures, bowel perforation, or foreign bodies. The rise in improvised explosive devices and multiple injuries makes this increasingly important.

Doctors in Camp Bastion have weekly phone calls with those in Birmingham and at Headley Court, the rehabilitation centre. This provides feedback and advice for the doctors in Afghanistan and advance warning on new cases for those in the UK.

Standards of care

Surgeon Lieutenant Commander Daniel Henning, currently a specialist registrar in Derriford Hospital, Plymouth, has recently audited care in Afghanistan during his deployment. He looked at various aspects of trauma care including prehospital staff, consultant presence in the resuscitation room and the operating theatre, and timing of computed tomography using recommendations from the UK's National Confidential Enquiry into Patient Outcome and Death report *Trauma: Who Cares?* as the standard.[1]

"The audit highlighted excellent examples of medical care—from the presence of personnel skilled in advanced airways management in the pre-hospital arena to 100% presence of consultants in emergency medicine and anaesthesia during trauma resuscitation." says Surg Lt Cdr Henning. "I honestly believe that the care we provide is exemplary."

But working in a war zone takes its toll. "It's a fast paced deployment and seeing severely injured casualties in such concentration affects even the most battle hardened." Officers are commonly deployed for two months and "while your boots are on the ground you are on call. To be honest you never truly relax.

"It is very sobering to see casualties coming through the door wearing the same uniform as you. While writing notes of the trauma resuscitation of severely injured soldiers, I never got used to seeing a date of birth in the 1990s."

Lessons for the NHS

Colonel Hodgetts hopes clinical experience from Afghanistan will help to develop civilian trauma care. "There will be nowhere in the UK managing trauma patients in the way we are managing them in Bastion. Figures from April 2006 to July 2008 show that out of 296 trauma survivors, 75 were clinically unexpected survivors."

In part he attributes this to consultant led care and team work. "In the NHS you might say that trauma care led by an all consultant team is not sustainable. But that is not to say that we shouldn't aspire to it. Seniority saves lives. As defence professors in Birmingham we are constantly horizon scanning and pushing the boundaries of care. We share problems. We don't think in specialty domains. What we have in Bastion is a critical care hub. Everyone functions as a single team."

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