Hypothetical efficiencies

The case of the missing evidence

A critical analysis by John Lister of the document drawn up for NHS London by McKinsey consulting

The document commonly referred to as the McKinsey "report," drawn up for NHS London last year, turns out, now it has finally been released, not to be a report at all, but 159 PowerPoint-style slides, containing a series of statistics and assertions, with no connecting narrative or deeper evaluation of any of its proposals. If presented as an undergraduate research project it would be rejected for inadequate referencing, an absence of any clear methodological approach, and a lack of any coherent conclusions.

Given the far-reaching implications of some of the proposals for the quality of patient care, the working conditions of NHS staff and the long term future of some areas of the NHS, this lack of any form of critique or risk-assessment, and lack of any sense of which suggestions are being seriously proposed and which are not is a serious weakness.

Headed "Delivering the Healthcare for London Strategy Affordability", the larger document published by NHS London is described as "back up materials", and was first produced in June and updated in November 2009.

The first page is a Disclaimer which insists that it contains only "examples" for each PCT, Trust or other health body "to explore according to their local context and situation":

"In no case does this document reflect a set of imposed directions/actions which the SHA is 'telling you to take'."

However it is already clear that PCTs across London have been working on the basis of these proposals, and more detailed plans at local level have already been drawn up. Unless the new government intervenes, some of these policies will continue to be the basis for "efficiency" measures, with potentially negative impact on the quality and availability of patient care.

The first few pages rehearse the proposals set out in 2007 by Lord Darzi's document 'A Framework for Action', including the plan for polyclinics or polysystems, which prove to be central to a number of the later proposals ("projected savings [£1.473 billion] primarily driven by improved care out of hospital supported by implementation of polysystems" p11).

Page 9 lists some of the key changes under two column headings – "proposals to improve quality" and "levers to reduce costs of care". The second of these includes:

• "reduced 'double running costs' through single point of access to urgent care [i.e. rundown and closure of A&E units, replaced by primary care provision in polyclinics – JL]

- "reduced costs of clinical staff through improved utilisation and role substitution from doctors to nurses/AHPs" [although nowhere has there been any discussion of recruitment, retention and training needs to ensure that sufficient staff at appropriate levels will be available to implement this – JL]
- "reduced costs of overheads (receptionists, premises) through improved utilisation [this appears based on the unrealistic projections in the Darzi report for staffing of admin and management of polyclinics, and the document goes on to propose (p144) an 80% reduction in clerical and admin support in polyclinics to save £145-£195m in London, axing 6,300 jobs (p144) JL)
- "Decommissioning of some services" [it is later made clear that this means a system of rationing, excluding a range of treatments currently available through the NHS, and posing patients with the "choice" of going private for things like varicose vein, hernia or even joint replacements, or going without – JL]
- "increased scale, efficiency and quality from centralisation contributes to expected tariff reductions" [the assumption that the reconfigured services will generate savings is not proven, and the tariff reductions are set to apply year after year regardless of the financial situation of the Trusts – JL].

Polysystems

The "report" goes on to discuss the roll-out of the polysystem progamme, with seven opened in April 2009, and plans to deliver 87% of the planned network of 150 by 2016/17 (although this includes 50 "undated plans" – p14). It admits that the existing polyclinics are not yet working on the scale required by the plans:

"While some polyclinics have opened, the current moderate shifts of care out of acute have not yet transformed out of hospital care.

Current projects (eg stroke, trauma) have not yet been 'cash releasing' and instead appear to be leading to 'additive costs' rather than reconfigurations." (p15)

Hospital admissions have not begun to drop as expect, some HfL projects have not yet had much impact and PCTs have adopted an "incremental" rather than radical approach: "The capabilities to support large scale change are not yet in place".

"Significantly the core principles (and expected savings) of polysystems have proven difficult to achieve, with more focus on buildings than the changes to care and behaviours" (p15)

Strangely these points are illustrated by out of date hospital statistics from before the Darzi project was implemented (p16).

A&E services

More out of date figures on page 28 also underline the fact that the obsessive focus on diverting patients from A&E is targeting a very small share (5.1%) of London's hospital spending and 2.65% of NHS spending in London. Indeed the 2007-8 figures show that A&E units treated 3.8m patients

(p29), at a cost of £300m – an average of just £79 per case. It seems most improbable that the reconfiguration and roll out of polyclinics will significantly cut this cost.

Projections on page 34 suggest that A&E caseload will grow substantially less than the 42% combined growth expected by 2016/17, the bulk of which is in primary care (80% of the total) and community services (14.8%). These projections suggest that the reconfiguration and expansion of services should be focused on primary care and community health rather than hospitals.

And it is clear from figures on page 39 that there is limited if any evidence to back the controversial claim in the Darzi 2007 report that 50% of A&E caseload could be safely diverted to polyclinics and 10% decommissioned: the only sources cited are HfL feasibility, Polyclinic plans, and projections from four London PCTs. Similar claims are made without any external or peer-reviewed supporting evidence on page 42, where the document also asserts vaguely that:

"A number of follow-up outpatient appointments are not necessary".

The analysis of A&E attenders (p56) is remarkable not only for the antiquity of the statistics used (2005-6) but also the fact that the analysis focuses only on outcomes, without any account taken of the treatment delivered to each patient, or the reason behind the attendance in the first place.

All of the figures and projections on A&E services in this and other NHS London documents have of course subsequently been discredited by the detailed DoH commissioned report by the Primary Care Foundation, which has argued that as few as 10% and a maximum of 30% of A&E attenders could safely be consigned only to primary care, and by the College of Emergency Medicine, which has stated clearly that claims that 60% of A&E attenders could be diverted to primary care are "fiction".

Outpatients

Extravagant claims are made for the percentage of outpatients who could potentially be seen and treated in a primary care setting, based not on external or peer-reviewed evidence but on guesswork from a "clinicians' workshop" run by Sutton & Merton PCT (p53).

The overall conclusion is that 60-80% of London outpatients "could be removed or devolved from hospital outpatients, leaving only 20-40% in the traditional setting". However these figures even if true do not establish a case for diverting patient care away from hospitals, which are established as well known and well-resourced central facilities, respected by patients.

There is no evidence presented to show that services delivered in a primary care setting would be clinically superior, that patients would prefer them to be relocated, or that the resulting fragmented service could be delivered even as efficiently as the current centralised services, or that the new arrangement represents value for money in terms of wasted consultant and doctors' time travelling to smaller clinics.

In fact there is no real evaluation of the financial cost of ensuring that the variety of support services and facilities are available in a multiplicity of smaller clinics, or the staffing implications for services such as X-ray. Page 54 argues for more radiology imaging to be delivered in the community – without discussing any of the cost of equipment and staffing implications either in terms of radiographers or radiologists to report on the findings.

The document goes on to propose a reduction in referrals to outpatient care, even though 18 of London's 31 PCTs are currently below the national average (p65). We are told that "bringing the bottom 40% of London PCTs to national average could reduce outpatient referrals by 4-8%." Bringing 80% to the national top quartile, we are told, "could reduce outpatient referrals by 12-16%". But would it improve patient care, or risk worsening it?

On the following page it is suggested that London's hospitals, more than half of which are already exceeding the national average should reduce the numbers of follow-up appointments. Once again there is a total lack of clinical evidence to support this proposal, or to show that patient care would be improved. There is clearly no consensus over this among clinicians at the present time. (p66)

On diagnostics, the document argues that reducing the numbers of referrals for CT scans, MRI and ultrasound to closer to the England average would reduce diagnostics volume by 7-15%. This is statistically true, and the result might also be a cash saving (explored on page 113). However this does not answer the question of whether there is a clinical case for fewer scans, or show that the tests that are being done are unnecessary.

Strangely, the same document seeks (page 109) to increase CT throughput by 50%-100%, with only the vaguest suggestions as to how this might be done. It also discusses the possible saving of £1m London-wide by bringing outsourced MRI scans back in-house without explaining how the existing private sector contracts could be terminated (p112).

Acute services

The document sets out "possible but challenging" targets to save £2.4bn in acute productivity (p93). These include the huge, unexplained increases in productivity among nurses (21-37%), doctors (9-43%), drugs and devices (22-35%) and a staggering 34-42% saving on overheads – even less likely to materialise in hospitals with costly PFI schemes in which unitary charge payments are index linked and rise each year.

The document asserts with no external evidence that "nurses spend only 41% of their time on patient c are", but offers no system changes that might change that: paperwork, admin and discussion with other nurses are all regarded as outside of the nurses' role (p95), suggesting that the time and motion study had little awareness of the job they do or the need to work as a team.

Claiming that nurse utilisation in London is "below average performance compared to rest of UK" takes no account of the concentration of teaching hospitals or any of the specifics of work in the capital (p97). Reviewing nursing staff levels could, the document claims, "save between £12.6m and £54m" in London (p96), though how this is to be done and the possible consequences in the reduced quality of patient care are not discussed.

In similar fashion the document claims that 9-14% spending on hospital doctors could be "saved" by moving up towards the median level (p98). It goes on to calculate the Trust's average income per consultant, suggesting that a higher income per consultant could allow 43-93 fewer consultants. The rationale for this (based on Laing & Buisson figures) is not explained, nor is it shown why this is an appropriate way to measure staffing levels of consultants.

Page 100 argues that London's acute Trusts have scope to generate "more income per [nurse] FTE", but given the financial squeeze, reducing tariff and the cap on referrals that still applies, it is not clear that0 this is realistic.

Sickness rates in London's hospitals are the second lowest in England and below the national average, but McKinsey apparently want to save more money by reducing the figures further – without explaining how this might be achieved (p101).

The discussion on inpatient beds (pages 114-118) is again theoretical and hypothetical, arguing that London is "not yet at upper quartile levels" without offering any explanation of possible reasons and obstacles in speeding effective discharge of patients and increasing levels of day surgery.

This is the section that sets out the aggressive scenario of a 3-4% per year reduction in the average length of stay, arguing that a 3% reduction could close 5,263 beds and a 4% reduction could close 6,414 beds – the closure of one third of beds quoted by NHS London (p118).

It is clear from the figures that the plan is for an across the board reduction, including elderly care (geriatric) beds and mental health beds, despite the fact that none of the efficiency measures that have been discussed apply to these services, and there is no explanation at all of how systems could be changed to deliver such a large scale reduction in such a short time.

Primary care

The report looks at ways of saving money through reducing payments to GPs. The "core scenario" is to "stop paying duplication of extended hours and out of hours fees" – saving £20m across London (p44). The "aggressive scenario" would pay GPs on a piecework basis at £50 per consultation, and is projected to save £25-£45m across London. Clearly neither has been discussed or agreed with GPs, but in either scenario 50% of the change has to be implemented by next year.

The time and motion people have also made proposals on the way GPs should work, with an "aggressive" scenario suggesting a 6-11% increase in "efficiency" – defined as "patient-facing time" – plus a 15% reduction in prescribing costs (p45). The document claims that "low performing GPs can spend less than 30% of their contracted hours actually seeing patients (p46, p138) – but it does not set out any proposals on how this might be changed.

Instead there are hypothetical projections that "GP productivity improvement could be worth £175m" and that cutting admin time by 30% or 75% by consolidating into a polysystem, GP productivity could be worth up to £420m (p139). Changing the skill mix to hand more services over to nurse practitioners could "save an additional £64-£84m" (p141), though again the issue of patient choice is not discussed.

[The document does not cite any additional evidence, examples of best practice, or any connection between increased "patient facing time" and reduced prescribing. There is an obvious contradiction between GPs achieving more time working with patients and the new government's decision to land them with additional administrative and management tasks as commissioners of services – work currently carried out by PCTs. – JL]

The proposal to cut primary care consultation time by 33% (from a target 12 minutes per patient to just 8) is set out on page 49 – and revisited on page 145, where it is claimed this could "save" £570m. While the authors may have calculated the potential cash saving, they appear to have devoted no attention at all to a risk analysis or considerations of quality from the patient (and GP) point of view.

The one Darzi proposal that is well argued with evidence is on the management of Long Term Conditions (peer-reviewed papers cited on page 58) although whether the projected savings are exaggerated is open to some question (p57).

Polysystems

One actual advance in the document is the first steps towards a more realistic assessment of the staffing needs of a polysystem (p72). It makes clear that unlike Darzi's 2007 Technical Paper the calculations include no space for mental health services (p73). It does argue that 53 rooms would be needed in each polysystem (p74), and calculates the annual running cost at £36.5m per polysystem compared with Darzi's estimated of less than £20m.

One significant difference is the assumption that many more non-clinical staff would be required, with 14 full time admin and clerical staff and 19 receptionists (p80). Even so it is not clear that the number of A&C staff would be sufficient to deliver secretarial support as well as organisational and financial services to the many GPs and other professionals in each polyclinic.

Set-up costs also appear to be low estimates (p88-89ff), assuming a relatively small amount of new building and extensive use of refurbished accommodation (which also assumes the hospital rationalisation is pressed through to free up the necessary buildings).

"Moving to affordability will cumulatively require £0.7-£1.3 billion [by 2016/17]depending on implementation strategy (excluding capital costs" (p91)

Community health services

A similarly vague and hypothetical approach to community services suggests that if all district nurses achieved "median productivity or 10% above" staff numbers could be cut by 11-15% (p47). [Once again there is absolutely no concrete proposal on how the system could be changed to deliver this result or attempt to analyse the reasons for the current apparently uneven performance. And while performance may be improved all round, it is also clear that it is statistically impossible for all nurses to be at or above the "average" – JL]

Page 48 shows how some efficiency measures for nurses can be improved by "employing more admin staff" and reducing management time of lower band staff: but this appears at odds with the overall objective of reducing admin staff.

The document argues that the same level of community services could be delivered with 11-15% less staff, saving £150m, by reducing the variability of district nurses' productivity. How exactly this is to be achieved is not explained: who would do the work that district nurses would have to hand over to somebody else? (p142)

Rationing and exclusions from care

The document looks to save between £25m and £65m across London by decommissioning some forms of treatment, arguing (without any supporting references) that "published evidence" shows some procedures are not clinically indicated. The types of treatment involved include tonsillectomy, back pain injections and fusion, grommets, hernia operations, varicose veins, minor skin surgery, some joint replacements (hip and knee) cataract surgery and wisdom teeth extraction (p63-64).

Many of these result from pain, discomfort or embarrassment, and if the service is not available under the NHS patients will face a "choice" of going private or going without. This could mean a new bonanza for private clinics and hospitals.

The core assumption is that in elective surgery the cutbacks would include 7% of "complex" cases, 8% of "minor procedures" and 8% of treatments for under-17s (p62): the "aggressive" scenario would see a 7% across the board cut in "procedures with no or limited clinical benefit" – again without referring to any clinical consensus or peer-reviewed evidence.

In addition 20%-30% of outpatient activity would be decommissioned as "unnecessary", and 5% of A&E activity which it is claimed could be dealt with by self-care. 10-15% of diagnostic referrals by GPs could also be axed under the "aggressive" scenario.

Miscellaneous

The document also touches on areas outside the immediate scope of NHS London, such as drug prices, supply chain and procurement ("an opportunity estimated at £1.1-£1.9bn" –p125), and the Private Finance Initiative (p134).

Pages 128-133 look at saving huge one-off sums by "freeing up" land and building assets, arguing (p128) that "if all trusts step up to the average of the top quartile £3.3-£8.3bn in assets could be freed up."

Conclusion

Even if the statistics and assumptions are accepted, the lack of external and peer-reviewed clinical evidence ignored, and the potential negative impact on quality of care and patient satisfaction is disregarded, the total absence of any discussion of systems and the process by which such substantial changes might be achieved is enough to raise doubts over the validity this document.

The failure to offer any attempt at evaluation of the relative importance and viability of the various proposals is also another major weakness, not resolved by the general disclaimer seeking to distance McKinsey and NHS London from responsibility for PCTs adopting any of the policies.

Even without knowing how much was spent on this work, it is possible to question whether NHS got value for money.

John Lister, June 11 2010