

The building backlog of NHS elective cases post Covid-19

Editor

The current Covid-19 pandemic faced by the healthcare system is unprecedented in the modern health care setting. The NHS has been re-tasked to treat a large number of Covid-19 patients, suspending the usual business of elective surgery¹. There is no current estimate to the size of the backlog being generated.

Calculating the scale of the backlog

It is impossible to tell the exact scale of the cancellations ongoing as NHS statistics have ceased to record this data during the current Covid-19 pandemic². However, a rough estimate can be made from comparison of the statistics from 2019 for the same period. Using emergency admissions to calculate non-emergency admissions, the percentage of finished consultant episodes (FCE's) requiring a procedure can produce an estimate of the number of non-emergency admissions with procedure each month (Table 1). This data tallies with the known data of finished admission episodes (FAE's) by admission method. This gives an estimate of between 505 146 - 574 353 admissions per month. Using the data from the hospital admission by specialty and eliminating all non-surgical specialties and paediatric specialties we can see that

there were 4 871 276 admissions that were 'planned' (1 335 565) or 'waiting list' (3 535 711). This gives us an estimate of 405 939 admissions per month for the surgical specialties, with an average bed stay of 4.3 days³. Even if we use a low end estimate of ~400 000 cases per month, this will still lead to a backlog of 1 200 000 cases over a 3-month period.

These patients who wait may have a significant reduction in quality of life. Patients who have had multiple attacks of cholecystitis end up staying in hospital a week longer⁴ whereas those who wait too long for a joint replacement see a significant reduction in benefit⁵. The scale of the backlog should not just be seen as an increased waiting list but a ticking cluster bomb throwing off explosions of poor patient outcomes as time progresses.

Conclusions

Resumption of service to approaching normal will take months if not years and will result in a large backlog of elective cases. Strategies for resumption of work differ between college and specialty with new guidelines being produced on a weekly basis. We estimate across the NHS circa 400 000 procedures are backlogging per month. Resumption of services will be slow and less time efficient than pre-pandemic. Unless the government recognizes this paradigm shift in treatment and responds appropriately the current measures will result in large fines being levied on NHS trusts

and poor outcomes for patients left waiting.

We believe the large backlog of elective cases which will have a real impact on patient care and wellbeing. Ongoing waiting times must be adjusted to provide reasonable expectations to patients and allow critical cases such as cancer diagnostics to proceed in a timely manner. Strategies to reduce waiting times include continued investment in private hospital capacity, expansion of the workforce and increase in conservative management strategies. Finally, a national level response is needed to prevent 'post code lotteries' and could be used to redistribute workload evenly amongst the workforce.

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- 1 Iacobucci G. Covid-19: all non-urgent elective surgery is suspended for at least three months in England. *BMJ* 2020; <https://doi.org/10.1136/bmj.m1106> [Epub ahead of print].

Table 1 Provisional monthly hospital episode statistics: admitted patient care data with addition of non emergency admissions requiring a procedure estimate^{6,3}.

2019	Finished consultant episodes	FCEs with a procedure	% FCEs with a procedure	Ordinary episodes	Day case episodes	Day case episodes with a procedure	% Day case episodes with a procedure	Finished admission episodes	Emergency admissions	Non emergency admission with procedure
Oct 19	1,840,455	1,009,412	54.8%	1,166,818	673,637	600,033	89.1%	1,525,178	565,326	526,438
Sep 19	1,725,979	1,015,939	58.9%	1,105,315	620,664	582,690	93.9%	1,428,181	535,056	525,708
Aug 19	1,713,472	1,012,009	59.1%	1,108,339	605,133	568,563	94.0%	1,414,682	532,720	520,903
Jul 19	1,846,274	1,101,264	59.6%	1,172,130	674,144	633,149	93.9%	1,526,850	563,945	574,353
Jun 19	1,709,597	1,010,989	59.1%	1,102,241	607,356	571,396	94.1%	1,414,451	531,335	522,240
May 19	1,800,193	1,060,876	58.9%	1,161,064	639,129	601,609	94.1%	1,483,667	560,004	544,326
Apr 19	1,725,301	1,004,293	58.2%	1,121,169	604,132	569,322	94.2%	1,413,927	546,124	505,146

- 2 NHS England. COVID-19 and the production of statistics. 2020; <https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2020/07/COVID-19-and-the-production-of-statistics-2020-07-07.pdf>
- 3 NHS Digital. Hospital Admitted Patient Care and Adult Critical Care Activity. <https://files.digital.nhs.uk/F2/E70669/hosp-epis-stat-admi-summ-rep-2018-19-rep.pdf>
- 4 De Mestral C, Rotstein OD, Laupacis A, Hoch JS, Zagorski B, Alali AS, *et al.* Comparative operative outcomes of early and delayed cholecystectomy for acute cholecystitis: A population-based propensity score analysis. *Ann Surg* 2020; **259**: 10–15.
- 5 Ghomrawi HMK, Mushlin AI, Kang R, Banerjee S, Singh JA, Sharma L *et al.* Examining Timeliness of Total Knee Replacement Among Patients with Knee Osteoarthritis in the U.S.: Results from the OAI and MOST Longitudinal Cohorts. *J Bone Joint Surg Am* 2020; **102**: 468–476.
- 6 NHS Digital. Provisional Monthly Hospital Episode Statistics: Admitted Patient Care data. <https://digital.nhs.uk/data-and-information/publications/statistical/hospital-episode-statistics-for-admitted-patient-care-outpatient-and-accident-and-emergency-data/april-2019---october-2019-m07>