HIT lists: tackling the surgery backlog

High intensity theatre lists are an innovative way of boosting the number of patients seen for non-emergency surgery.

High intensity theatre (HIT) lists are an efficient new way to maximise numbers of patients treated to help reduce backlogs in non-emergency surgery. HIT lists focus on one type of procedure at a time, usually take place at weekends when there is more theatre capacity, and require careful planning to select suitable patients. Nurses play a key role in multidisciplinary HIT teams, taking the lead on, among other things, pre-assessment of patients and staffing of theatres.

What do HIT lists do differently?
Unlike conventional theatre lists, where patients are operated on consecutively in one theatre, HIT lists use two theatres and three teams of anaesthetic, surgical and nursing theatre staff simultaneously, to minimise the turnaround time between cases.

Patients are prepared in advance and the surgeon can go between cases without having to wait for the next patient, allowing for many more surgeries in the same time period. For example, at our NHS trust, a HIT list for robotic-assisted radical prostatectomy covered what would typically equate to a week’s surgical patient list in one day.

How did the HIT list project come about?
The inspiration for HIT lists came from a model we used at Guy’s and St Thomas’ NHS Foundation Trust during the pandemic, where we deployed highly specialised teams used to working with each other. Taking a cue from Formula One pit-stop teams, who refine processes for maximum efficiency and minimal turnaround time, we realised we could improve the theatre model to reduce waiting lists.

What have the results of the HIT project been?
Initial data from the pilot programme showed a reduction of 30-50% in waiting lists for certain surgeons, with the capacity to complete one month’s worth of operations in a day for some procedures. The initiative also frees up slots on weekday schedules, enabling patients not suitable for HIT lists to be scheduled earlier on alternative lists. We have completed 35 HIT lists across eight different surgical specialties, including specialised robotic procedures, joint replacements and diagnostic cases.

What role do nurses play in HIT list teams?
As well as pre-assessment of patients and staffing of theatres, nurses lead in coordinating the lists on the day and ensuring a positive patient experience. Patients undergo assessment and preparation before surgery to optimise outcomes, including attending a dedicated HIT list multidisciplinary team clinic that allows more time for patients to ask questions.

What are the challenges or potential risks?
The planning phase of the HIT list is key to its success, so time and commitment is needed at this stage to ensure it goes smoothly on the day.

Theatre access is a consideration: given that HIT lists use two operating theatres simultaneously, access is typically at weekends when theatres are less busy. There are also staffing considerations – each HIT list uses 50% more staff compared with traditional theatre list models, meaning increased staffing costs upfront, although the savings made through increased activity far outweigh these additional costs.

As with all innovations, it takes time to explain to clinical and administration teams how it works, its benefits, to dispel misunderstandings and to encourage people to try new working models.

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Tips for making HIT lists work

» The success of high intensity theatre (HIT) lists lies in seamless multidisciplinary team working, so ensure all teams are involved from the outset with the right mix of skills and expertise, and set aside time for planning and administration.

» Communication with patients is crucial. They may see many specialists in a short period of time and it is important to explain this in advance so they know what to expect, and to talk them through the experience on the day.

» For simultaneous multiple theatre use, try to find a time with good availability – usually weekends.

» Try to consider potential incidents and have a plan for how they should be addressed on the day, including escalation procedures to be followed. Ensure the team is aware of the process.

» Consider having additional equipment/materials available on the day in case of breakdowns.