

Improvement Cymru Academy Toolkit Guide



6/4/2 -1 Model

Introduction

The 6/4/2-1 process is a model that is used within the National Health Service (NHS) within surgical planning and endoscopy planning however the tool can be useful in other areas of healthcare. This model aims to streamline scheduling and improve efficiency in healthcare services. The process works by:

Six weeks before a clinic/surgical session: All staff declare leave plans (this includes any type of planned leave, including annual leave and study leave).

Four Weeks before clinic/surgical session: Clinical/Surgical lists are arranged for sign off.

Two Weeks before clinic/surgical session: Clinical/Surgical lists are reviewed.

Minus One week after clinic/surgical session: Reflection of the clinic/surgery lists and lessons learned for improvements.

Rationale

There are several benefits of using the 6/4/2-1 improvement process:

1. Increase Value and efficiency for patients and staff.
2. Enhance safe and reliable care.
3. Increase Team performance and staff Wellbeing.

Background

The 6/4/2 model was first documented in 2018 for healthcare improvement. Since then, the model has been successfully used in several areas to enhance operational efficiency in the wider NHS and within NHS Wales, particularly in theatres. In NHS England, Guys and Thomas NHS Foundation Trust used the '6-4-2' model and in under two years they were able to identify and make use of over 27,000 operating hours that would have not been otherwise used (*Wise, 2019*). This also increased efficiency, safety, reliability of care as well as increased increase team performance.

When to use

Although 6/4/2 -1 has been cited within a theatre environment to improve efficiency, 6/4/2 -1 can be applied in several healthcare settings to improve flow and maximise clinic lists. Therefore, the principles of 6/4/2 -1 can be applied at outpatient settings for clinic lists, in theatres and for diagnostic tests and treatment procedures.

How to use

There are several steps to follow when using the 6/4/2 -1 process:

Step One: Session Allocation

Staff involved with the clinic/surgical lists are expected to declare their leave six weeks on a proactive basis in advance of the clinic/surgical schedule. This is to ensure that there is adequate coverage when there is staff on annual leave, and it prevents last-minute scheduling conflicts and allows for efficient resource allocation. Staff need to be familiar with leave policies to ensure that they will need to declare their annual leave 6 weeks before the list to allow them to make plans and declare their leave 'on time' (6 weeks before).

Typically, in week 6 and 5 there will be a review to discuss and plan all backfilled sessions. The review will include staffing establishments and rosters and there will be an opportunity at this point to escalate any risks or challenges.

Step Two: Communications with Stakeholders 4 weeks before theatre/clinic lists.

Typically, in week 4 and 3 there will be a review of outstanding backfill, risk assessments, any actions taken, and final actions will need to be set. There needs to be a discussion about any staffing and equipment and possibly infection control risks when working in theatres such as decontamination risks. There will also be a review of any escalations and actions. This will enable you to promote a proactive approach to risk assessment and problem solving. By addressing these issues now, the theatre/clinic list will run more smoothly and will reduce stress on the day for staff. Stress is a known cause of human error and therefore by taking a proactive approach it will improve human factors that will overall increase the safety and

reliability of the theatre/clinic list. (See our Human Factors Toolkit Guide here for more information).

Step Three: Review theatre/clinic lists 4 weeks before theatre/clinic lists.

In weeks 2 and 1, any unfilled backfill will be closed and staff will be stood down. If there are staff that have been stood down, then they should be allocated to other duties such as service improvement and training. Locking lists down one week before surgery/clinic ensures stability and this will help you iron out any last-minute changes that could potentially disrupt the clinical/surgical list schedule ensuring a positive experience for patients and staff. There will be a review of the closed sessions to be discussed at the 6/4/2/-1 meetings.

Step Four: Reflecting one week after the clinic/theatre list.

Once you have tested this idea over an agreed amount of time, it is important to reflect. Reflection can help you identify what went well and what could be even better next time. You can do this through quantitative data and qualitative data (See our Data Collection Toolkit Guide [here](#) for more information). By using data, you and your team can make informed, evidence-based decisions. Setting time aside to reflect as a team fosters a culture of improvement and a culture of learning which is important to improve the quality and safety of services in Wales. (See our Culture of Continuous Improvement Toolkit Guide [here](#) for more information). It is important to not only reflect on what happened physically, but it is also important to reflect on psychologically e.g. how staff and patients felt? Ask questions like – did the team cohere well? There are several reflective models you can use to help with this. See our Reflective Models Toolkit Guide [here](#) for more information.

Step Five: Implementation, Scale and Spread.

If you have made an improvement using the 6/4/2 -1 process, then it is time to embed this into business as usual (see our Implementation Toolkit Guide [here](#) for more information). Firstly, because this will be the latest guidance on managing a

theatre/managing a clinic list, this will need to be incorporated into the standard operating procedure (SOP) (See our Standardisation Toolkit Guide [here](#) for more information). Measurement is still important after testing. Data collection could happen on a less frequent basis unless there is a reason for more frequent data collection e.g. if the change is not being sustained. You may want to think about providing staff training and support if this is required and the resource implications e.g. would you need new forms, equipment, additional staff etc... Are there any other areas where you could scale the 6/4/2 -1 process? You will also need to consider knowledge mobilisation and what platforms you can use to spread information on your improvement success. This could be team meetings, writing journal articles, presenting at conferences, and asking the communications team in your organisation to spread information about what you have achieved (see our Spread and Scale Toolkit Guide [here](#) for more information).

Helpful Tips

To ensure that staff declare their leave six weeks prior to a clinic list, you could send out some communications (e.g. via e-mail, noticeboard, meetings etc...). Look at our Change Management Toolkit Guide [here](#) and our Human Side of Improvement Toolkit Guide [here](#) for more information to help you manage the social dimension of change.

What Next?

Collect some data on your theatre/clinic lists. Are all the slots on the list filled? Do you start on time? Do you finish on time? Is there an opportunity for you to use 6/4/2-1 to improve efficiency of your clinic or theatre?

Further Reading

Wise, J. (2019). Improve Scheduling to perform an extra 291000 elective operations a year, trusts are told. British Medical Journal. Available at:

<https://www.bmj.com/content/364/bmj.l540> (Accessed 29 Jul 2024)

Four Eyes Insight. (No Date). Improving Theatre Operational Productivity with the NHS 6-4-2 model. Available at: <https://www.foureyesinsight.com/articles/improving->

[theatre-operational-productivity-with-the-nhs-6-4-2-model/#:~:text=According%20to%20the%20NHS%20improvement%20hub%2C%20Productive%20Operating,use%20of%20theatre%20time%20and%20overall%20staff%20experience](#) (Accessed 29 Jul 2024)