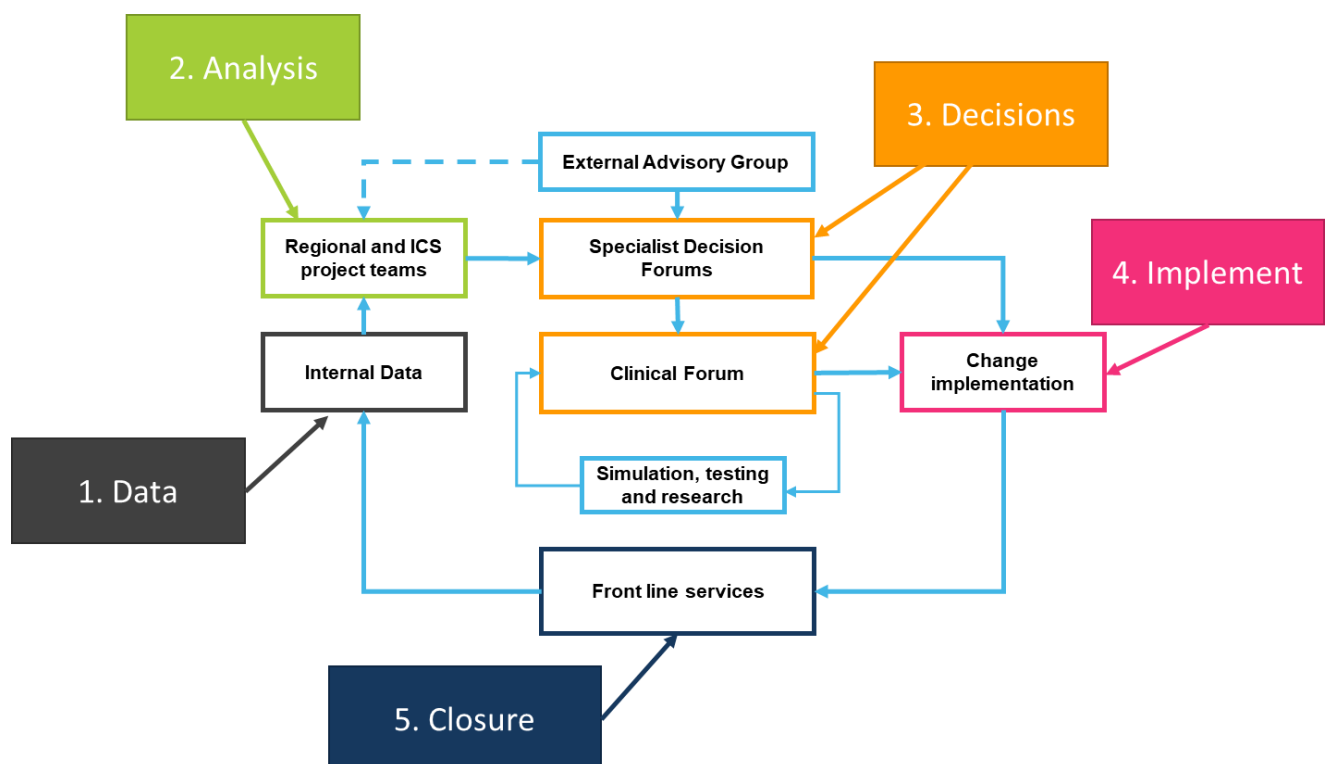


Learning Health Systems

For patient, staff and wider NHS benefit, learning health systems are committed to learning fast and acting fast across all dimensions: clinical, operational, and staff wellbeing. Central to the approach is a culture and ethos that is committed to making well-informed decisions and monitoring the impact of those decisions, adjusting the approach as required.

A learning system is put in place to do five things: create a rich data stream, analyse and test insights, make decisions, rapidly implement those decisions, and close the loop by checking reliability and effectiveness of that implementation.



1. **Data collection:** Internally sourced data both from routine data collection and more bespoke qualitative insights, alongside external insights from research and other clinical communities.
2. **Analysis:** Triangulation of the different data sources allows insights to be set in context and reviewed from different lenses and acknowledges interdependencies. Critical to analysis is to identify problems that need to be addressed and triaging them, both in terms of the nature of the change (from quick fixes to more systemic change) and with regards to the decision authority that should act on that change.
3. **Decision-making:** The relevant decision-making group reviews the outputs of the analysis and proposals for change and either agrees them for immediate intervention or sets up further task and finish groups, testing cycles or analysis. Critical to this is clarity on who can authorise change and ensuring it is a multi-disciplinary, transparent, and collaborative process.

4. **Implementation into action:** Rapid implementation reinforces the system with the need for tangible change and system wide impact.
5. **Closure: checking reliability and effectiveness:** For some changes, an audit of the success of the implementation will be straight forward. For others, the change may need to be further refined and altered, or robust evaluation required. Active checking that the change has addressed the original insight, and is acceptable to the staff, patients, and or the system clarifies when closure has been achieved. In the event that the change has not achieved the desired impact, further iterations and adjustment of the interventions will likely be required