**Artificial Intelligence Validation Template**

*Testing algorithm accuracy on local data before clinical deployment*

*This document has been collated by the Scottish Radiology Transformation Programme (SRTP) AI Steering Group as a best endeavours approach, based on current experience and available information, to assist NHS Boards in piloting radiology AI solutions, should they wish to use it. The content within this form has not been formally consulted and may be updated, as and when new versions become known, or work is commissioned to provide a more formal approach to AI use within NHSScotland.*

## This validation is a process of determining the algorithm accuracy by testing the model with an external, real-world, local testing data set. It will assess model accuracy, safety and bias reporting.

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| --- | --- |
| Project Title |  |
| Validation Date |  |
| Author |  |
| Responsible Clinician |  |
| Approved by |  |
| Approved date |  |
| Name of AI Vendor and product |  |
| Target clinical problem and target population |  |
| Validation objectives and measurement points |  |
| Basis and process for validation ground truth |  |
| Cohort selection method, rationale and volume (Ensure it is representative and, randomised. Consider including underrepresented and specialist groups) |  |
| Model thresholds |  |
| Type of validation  * Diagnostic Case control * Diagnostic Cohort study * Standard data sets * Retrospective/prospective |  |

|  |  |
| --- | --- |
| Measured product performance Confusion matrix, AUC, ROC, sensitivity, specificity, F1, recall, precision, PPV, NPV, MSE, MAE, etc as applicable. |  |
| Model biases |  |
| Evidence of bias and safety monitoring and control? |  |
| Validation summary |  |
| Issues encountered |  |
| Recommendation  Suitable for clinical testing  Suitable for clinical testing following modification (please state changes needed)  Suitable for restricted clinical testing (please state restrictions for use)  Not suitable for clinical testing (please list any red flags |  |