



Streamlining Process of Document Imaging

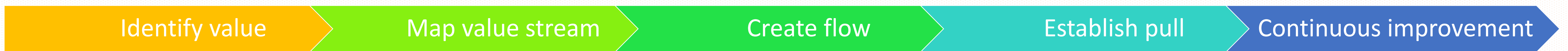
Introduction and Background

The landscape of managing medical records may have evolved over the years but the primary role of HIMS being the custodian of the hardcopy medical records still remains. Such was the case when we are required to assist in transiting the documents either to hardcopy or softcopy of a system that will be decommissioned in relatively short notice. HIMS was tasked to manage 50,127 endoscopy reports and to make them available to the clinicians either as hardcopy documents by filing & retrieval or as softcopy by scanning them.

Methodology

The methodology uses the Lean and PDSA method to streamline the process. This involves reviewing the various steps involved from logistic to digitalizing.

We discussed with the stakeholders on the various options. Varying from purely hardcopy filing and retrieval to hybrid model (combination of hardcopy records management and softcopy digitalization) to purely softcopy digitalization i.e. scanning the documents and published to Scanned Medical Records (SMR)



Determination of value

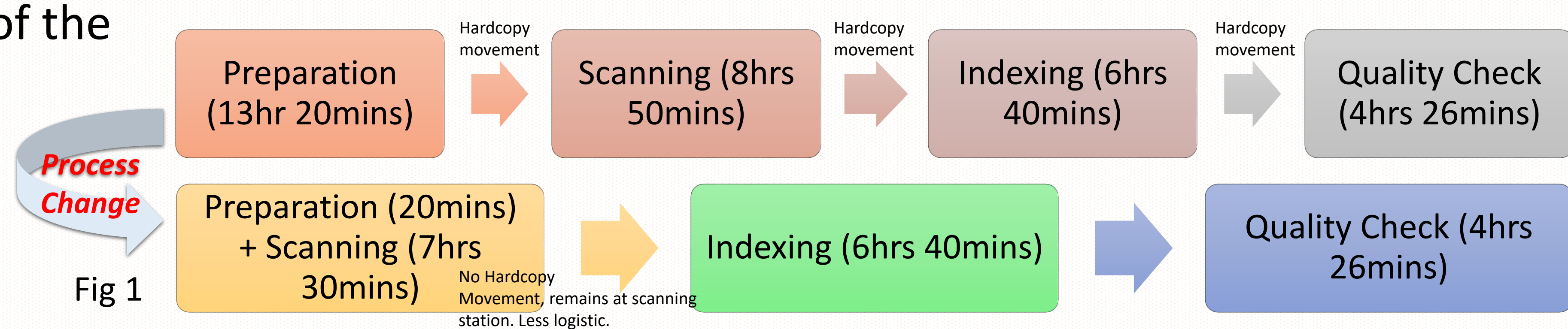
It was determined that in view of time and resources, the solution of scanning the printed documents is adopted. This is based on evaluating the time taken and manpower resource for physical retrieval of hardcopy medical records and weighing in on the value of making the relevant documents available for clinician. This adoption would save estimated 81% of the resources.

Value Chain Analysis

The processes and interrelationships in the workflow were analysed through Value Chain Analysis (Fig 1). The basic process of scanning is as such. As our medical records are very diverse, the process of preparation, scanning and indexing of documents are done by one and the quality checking is done by another. For a batch of 800 documents, the time taken for the workflow is as follows:

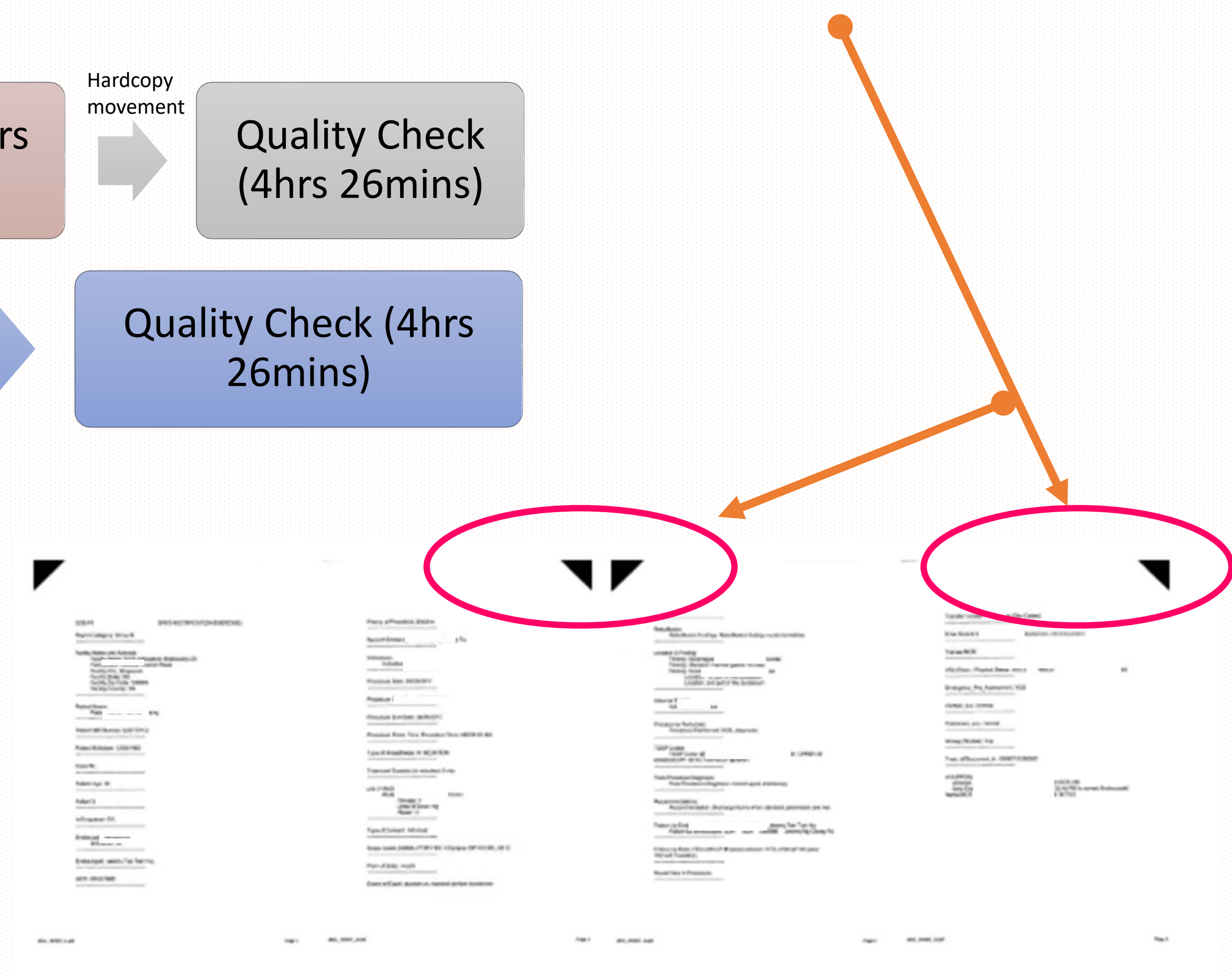
Process refined with LEAN Principles

The processes went through continuous refinement on the value of the activities including streamlining the preparation and scanning to designated staff and indexing based on softcopy instead of hardcopy. And actually "cutting corners" of documents to remove the stapler and shorten the preparation time.



Outcome – Strategy and Success Story

With the implementation of change in preparation procedure and streamlining the consolidation of the tasks of preparation and scanning, there is an estimated time savings of **39%** from start of scanning to final publish of documents into SMR. Intangible benefit – lesser hardcopy movement, lesser manpower physical labour.



Conclusion and Learning Point

This streamline works well with standard documents with fixed indexes and minimal differences between the types of documents and information. Varied document type and sizes will limit the speed of publishing the documents online.