ABSTRACT TITLE: Process Improvement in a Physiotherapy Outpatient Setting
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PURPOSE: To determine how processes could be improved in a physiotherapy outpatient setting

RELEVANCE: The requirement to do more with less has led health professionals to look to the potential of process improvement methodologies. These methodologies have not been used extensively in physiotherapy (PT).

METHODS: Baseline data was collected prior to study commencement and a literature review carried out. Following this the three stages of applying the process improvement methodology took place; process mapping, semi-structured interviews and focus group.

SUBJECTS: 10 participants (PTs and clerical staff) were involved in the process mapping observation, 3 key informants were involved in the semi-structured interviews (PTs with experience of process improvement methodologies or IT implementation) and 8 participants were involved in the focus group (PTs, clerical and IT).

RESULTS: From the literature review process improvement based on the principles of Lean Thinking was identified as an appropriate methodology for use in the physiotherapy outpatient setting. Staff involvement was identified as a key success factor. This can be encouraged through presentation of baseline data that demonstrates that improvement is needed. Monitoring of this data and other data collected e.g. through process mapping, can also demonstrate that any change is indeed an improvement. Clear identification and communication of potential benefits and a focus on "what's in it for me?" are also crucial for staff engagement. Potential benefits were highlighted through case studies and included quality aspects such as more time with patients, timely care and access to information for clinical decisions.

Baseline data, which included department throughput, paper costs and file retrieval, was first presented in tables. The subsequent application of the process improvement methodology highlighted which process should be improved and how this could be done. Process maps were presented with descriptive statistics outlined. Qualitative data from the observation stage was presented in a narrative below the maps. Qualitative data from semi-structured interviews and the focus group were analysed and key suggestions for process improvement were presented diagrammatically in a Venn diagram. There was substantial overlap in the suggested improvements in the various stages and many involved changes to or more extensive use of the current IT systems; changes to the text messaging system, on-line triage and self-registration.

A key learning point was the impact that IT staff participating in the focus group had in terms of their objective questioning of process steps and their suggestions for improvement. Their involvement has improved collaboration between the two departments.

Of note, some suggested improvements have taken place or are underway and this has had an immediate impact on the baseline data with waiting times reduced to zero in the first 3 months and the elimination of printing 5,500 front sheets per annum.

CONCLUSION: A process improvement methodology based on the principles of Lean Thinking is an appropriate methodology for use in the physiotherapy outpatient setting. This methodology is a simple, yet structured means of identifying how processes should be improved. Data for measurement and staff involvement are crucial.

Key words: Lean Thinking, Information Technology, Physiotherapy