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Lean beyond waste

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APPENDICES

APPENDIX A
Interview questions, translated from the Dutch questions used in the interviews.

General Questions	1a. How many years' experience do you have in using Lean methods? 1b. Did you attend courses or training sessions? If yes, which and could you briefly elaborate on their content? 1c. How would you describe your knowledge of Lean? 1d. Compared to other laboratory employees in a similar function, how would you describe yourself: as a beginner, an advanced user or an expert on Lean methods? 2. Could you briefly describe what Lean means according to you? 3. In your view, what kind of throughput time effects would Lean have on working in the lab? 4. Could you provide a practical example of a throughput time effect of Lean in the lab? 5. If we consider the past six years, could you list the top three events / changes that, according to you, have influenced throughput times in the laboratory? A changed process is an example of such an event. Events with either positive or negative effects on throughput time are welcome.
Questions related to event I	6. Using the graph, I would like you to try and explain the changes in average throughput times. As you can see, throughput times decrease sharply at the beginning of 2008. Which event(s) do you think caused this? 7. Why does this event (these events) lead to improvement, i.e. what was not there before but was present afterwards? 8. When we study the graph, we see that both

	positive and negative samples are influenced to different degrees. Do you have an explanation for this difference? 9. Do you have any further comments on this first change?
Questions related to event II	We will now continue with the second major change in average throughput times which we would also like to explore. As you can see, throughput times increased sharply at the beginning of 2010. This is especially true for positive samples, negative samples seem relatively unaffected. 10. Which event(s) do you think caused this? 11. Why does this event (these events) lead to improvement, i.e. what was not there before but was present afterwards? 12. When we study the graph, we see that both positive and negative samples are influenced to different degrees. Do you have an explanation for this difference? 13. Do you have any further comments on this second change?
	14. Are there any questions I should have asked earlier, or something you would like to add?

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APPENDIX B

Interview:

Reason	Question
Establishing interviewees experience with Lean ideas, and the laboratory.	What is your job in this laboratory?
	How long have you been working in the laboratory?
	Did you receive Lean training, if so which?
	How many years of Lean experience do you have?
Understanding of the common idea on Lean, and its main aspects.	Could you describe what you understand by Lean management?
Understanding of knowledge on indicators that should prove Lean successful.	Could you indicate when you would consider a Lean improvement to be successful?
Understanding of the visibility of Lean results over time.	Based on your knowledge, what effect has Lean had on the laboratory over the years?
Providing interviewees with an opportunity to add information.	Would you like to add information or do you feel a specific question should have been asked?

APPENDIX C

Questions have been translated from the original questions in Dutch.

General questions	What is your function within the hospital? Can you describe the work activities performed in your department?
Questions related to variability	In general, how does variability influence your daily activities? To what extent does variability influence the quality of care given by a <profession>? To what extent does this variability

	influence the time spent on a patient by a <profession>? To what extent does this variability influence the flow of patients? To what extent is this variability predictable for a <profession>? How do you cope with this variability for a <profession>? Is there anything that you have experienced which we have not discussed related to this variability?
Questions related to time buffer	In general, how do you experience the time buffer in your department? Which sources are the basis for the need of a time buffer? To what extent does a patient have to wait? To what extent does the time buffer influence the quality of care given by a <profession>? To what extent does the time buffer influence the flow of patients? How could the time buffer be reduced for the <profession>?
Questions related to capacity buffer	In general, how do you experience the capacity buffer for the shared resource? (question for physiotherapists) Which sources are the basis for the need of a capacity buffer? To what extent does the capacity buffer influence the quality of care given by

	<profession>? To what extent does the capacity buffer influence the flow of patients? How could the capacity buffer be reduced for the <profession>?
Closing questions	Are there sources of variability that you have experienced which we have not yet discussed? Are there any important questions regarding Lean Applications that we have missed?

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