

LEAN – The 8 Sources of Waste

Source	Definition	Examples
Defects	<i>Work that contains errors in the product or process or lacks something of value causing rework.</i>	Recording incorrect health card number; missing a billing code; lack of standardization of EMR's; messages sent to wrong provider; wrong patient information (e.g. phone numbers, etc.); faxes from pharmacy with wrong or missing information; IT issues; reports filed in wrong part of chart; messages/information sent to wrong provider; forgetting to fill a prescription during visit; data in the wrong field.
Overproduction	<i>Doing more than is needed or duplicating what is already done.</i>	Carrying out standard tests on every patient; annual physicals; paps more frequently than q 3 yrs; seeing pts more frequently than necessary if chronic condition well controlled; provider repeating what was done by RN or other team members; not reviewing and reducing recall period for some patients; doing face to face visit when phone call could have been used; charting the same thing in different places; duplication of messages; pre-ops; more than one provider asking patient same questions during same visit; patient being seen by diabetic educator, chiroprapist and MD and doing same things; excess copies of files; double charting – paper and electronic.
Waiting	<i>Delays until the next step, idle time created when people, information, equipment and materials not readily available.</i>	Delays between checking in and seeing provider; waiting for test results; referral waits; supplies not in room when needed; waiting for late or no show patients, waiting for EMR to load; interruptions during visits; waiting for IT; searching for handouts or forms; patients waiting for residents to consult with providers; waiting for results that could have been pulled prior to visit.
Non Utilized Human Potential	<i>People not working to full scope of practice.</i>	Physician doing work an RN could do; not using RN or NP to full scope of practice; not knowing who can do what; not using IHP's to full potential; not having at least one person on team with enhanced knowledge of EMR; lack of clarity on the roles that multiple providers/team members can provide to complex patients; not using community partners.
Transportation	<i>Movement of materials not required.</i>	Moving equipment from room to room (e.g. BP); getting hard copies to right place; moving staff from site to site; prescriptions and forms being printed in another room.
Inventory	<i>Excess of anything.</i>	Excess medications to store and possibly will expire, hoarding supplies, printing too many forms causing possible redundancy, under stocked or missing items in rooms.
Motion	<i>Movement of people that does not add value.</i>	Long walk from waiting room to exam room; moving patients from room to room; physician leaving the room for supplies or equipment.
Extra or Over Processing	<i>Activities that do not add value to the patient from their perspective.</i>	Requesting repeat info from patients; double charting; physicals instead of preventive care; too many clicks in EMR; software that doesn't communicate to other software; lab reports received electronically and by paper; seeing patients more frequently than necessary.

LEAN Based Tool to Assess Areas for Improvement in Efficiency

Defects - <i>Work that contains errors or lacks something of value causing rework</i>	Rarely Occurs	Source of Frustration
• Recording incorrect health card number		
• Missed billing code		
• Lack of standardization of EMR's		
• Messages sent to wrong provider		
• Wrong patient information (e.g. phone numbers, health card #)		
• Faxes from pharmacy with wrong or missing information		
• IT issues		
• Reports filed in wrong part of chart		
• Messages/information sent to wrong provider		
• Message/information not sent		
• Forgetting to fill a prescription during visit		
• Data in the wrong field		

Overproduction - <i>Doing more than is needed or duplicating what is already done</i>	Rarely Occurs	Source of Frustration
• Carrying out standard tests on every patient		
• Annual physicals rather than prevention		
• Paps more frequently than every 3 yrs		
• Seeing patients more frequently than necessary if chronic condition well controlled		
• Provider repeating what was done by RN or other team members		
• Not reviewing and reducing recall period for some patients		
• Doing face to face visit when phone call could have been used		
• Charting the same thing in different places		
• Duplication of messages		
• Automatically doing pre-ops that may not be needed		
• More than one provider asking patient same questions during visit		
• Patient seen by diabetic educator, chiropractist and MD and all doing same things		
• Excess copies of files		
• Double charting – paper and electronic		
• Both RN and Provider review chart to see if enough meds until next appointment		

Waiting - <i>Delays until the next step, idle time created when people, information, equipment and materials not readily available</i>	Rarely Occurs	Source of Frustration
• Delays between checking in and seeing provider		
• Waiting for test results		
• Waiting for referrals		
• Supplies not in room when needed		
• Waiting for late or no show patients		
• Waiting for EMR to load and other IT issues		
• Interruptions during visit		
• Searching for handouts, pamphlets or forms;		
• Patients waiting for residents to consult with providers		
• Waiting for results that could have been pulled and reviewed prior to visit		
• Provider waiting for patient to be roomed and prepared		

Non Utilized Human Potential - <i>People not working to full scope of practice</i>	Rarely Occurs	Source of Frustration
• Physician doing work an RN could do		
• Not using RN or NP to full scope of practice		
• Not knowing/understanding who can do what		
• Not using Inter Health Professionals (IHPs) to full potential		
• Not having at least one person on team with enhanced knowledge of EMR		
• Lack of role clarity between providers/team members in the delivery of care to complex patients		
• Not using community partners		

Transportation - <i>Movement of materials not required</i>	Rarely Occurs	Source of Frustration
<ul style="list-style-type: none"> • Moving equipment from room to room (e.g. BP) • Getting hard copies to right place moving from desk to desk • Moving staff from site to site • Prescriptions and forms being printed in another room 		

Inventory - <i>Excess of anything</i>	Rarely Occurs	Source of Frustration
<ul style="list-style-type: none"> • Excess medications to store with possibility of expiring • Hoarding/overstocking supplies • Printing too many forms that may become redundant prior to use • Under stocked or missing items in rooms 		

Motion - <i>Movement of people that does not add value</i>	Rarely Occurs	Source of Frustration
<ul style="list-style-type: none"> • Long walk from waiting room to exam room • Moving patients from room to room multiple times • Physician leaving the room for supplies, forms or equipment 		

Extra or Over Processing - <i>Activities that do not add value, from the patient perspective</i>	Rarely Occurs	Source of Frustration
<ul style="list-style-type: none"> • Asking for repeat information from patients • Double charting-putting same info in more than one place in chart • Physicals instead of preventive care • Too many clicks in EMR • Software that doesn't communicate to other software- creates duplication of work • Lab reports received electronically and by paper • Seeing patients more frequently than necessary • Referring patients to more than one specialist at same time • Unclear or incomplete documentation • Incomplete referral information to specialist 		