

The Academy of Nutrition and Dietetics Quality, Standards, and Interoperability Team Process Improvement Action Plan Worksheet

Note: This is not meant to be a comprehensive and unique action plan. Instead, it is meant to be a customizable guide as the team sees it necessary to fit the needs.

This Action Plan is based on the Lean Six Sigma framework, and other process improvement techniques, to guide effective solutions. In general, we will use the following structure.

General Structure of Process Improvement



These are not mandatory steps but following them will support your process improvement project into goal completion.

The first suggested step is to determine if there are no other obvious solutions to the identified problem. If the problem can be resolved in a quick manner, involving only one department, then that is considered a “just-do-it” project, and should be done separately.

If there are no obvious quick solutions, follow the accompanying sections in this workplan, in the order specified.

Section I: Define the Project

Start by identifying the 5W's (what, where, when, who, why). This will help develop the business case to be presented to the leadership for approval. The table below can be used to define the 5W's of the process improvement project being proposed.

W	Defined	Your W Answer
WHAT	What is happening currently compared to what should be happening already?	
WHERE	Where is this taking place?	
WHEN	When does the project process start and end?	
WHO	Who is affected? Be thorough. Are staff affected as well? How?	
WHY	Why is this project important? Why should leadership care about this project? How does it link to the Organization's strategic plan, mission, vision. Is there a potential financial benefit? Be honest.	

In addition, develop the goal/aim of the project. This information will be used to produce the problem statement later in this section.

Item	Response
What is the Project's Goal/Aim? *	
Is the Goal/Aim...?	☐ Specific ☐ Measurable ☐ Actionable/Attainable ☐ Realistic ☐ Time Defined
When should the implementation process start?	
When is the desired implementation completion? (Usually ≥ 6 months)	
What data will be collected to evaluate if the goal/aim was achieved?	

A little on data:

Data is key to proving the benefit of the project. It does not need to be financial. Start by evaluating what data you will need to collect to support project approval or prove the benefits of the project being proposed. Here are some questions that may guide what data and information will need to be collected:

- What is the value of this project to the organization?
- What data can relate to that value?
- Can that data be collected?
- What data can you collect to quantify the benefit of this project?
- Can it improve reimbursement?
- Will quality of care or customer service improve?
- Can it improve quality measure results?
- Can it decrease time spent doing a process?

Some examples of data that can collected:

- Cost related to the care being addressed
- Current reimbursement for the care being addressed
- Time spent in a task and/or process
- Number of patients referred
- Number of patients assessed
- Number of patients with iatrogenic malnutrition
- Number of patients with iatrogenic wounds

Below is an example of data to be collected for the Malnutrition Care Score.

Item*	Answer	Analysis
a. Total number of RD/RDNs on staff (not including PRN staff)		Percentage of RD/RDNs that have completed NFPE training = $(b \div a) 100 = (___\div___) 100 = _____\%$ Percentage of trained RD/RDNs up to date on competencies = $(c \div b) 100 = (___\div___) 100 = _____\%$
b. Number of RD/RDNs that have completed NFPE training		
c. Number of RD/RDNs with an up-to-date yearly competency review including NFPE evaluation		
d. Number of RD/RDNs using AAIM to diagnose malnutrition		
e. Number of patients admitted in the last CY		Percentage of trained RD/RDNs that use AAIM criteria to diagnose malnutrition = $(d \div a) 100 = (___\div___) 100 = _____\%$ Percentage of patients admitted in last CY that have a nutrition risk screening documented = $(f \div e) 100 = (___\div___) 100 = _____\%$ Percentage of patients admitted in last CY that have an RD malnutrition diagnosis documented = $(j \div e) 100 = (___\div___) 100 = _____\%$ Percentage of patients admitted in last CY that have a medical malnutrition diagnosis documented = $(h \div e) 100 = (___\div___) 100 = _____\%$
f. Number of patients with a completed nutrition risk screening in the last CY		
g. Number of patients with an At-Risk nutrition risk screening result in the last CY		
h. Number of patients with a malnutrition medical diagnosis by a physician or eligible clinician		
i. Number of Nutrition Assessments with a Malnutrition Diagnosis in PES		
j. Number of Nutrition Assessments with a Malnutrition Diagnosis and a Nutrition Care Plan that directly addresses malnutrition		
k. If RD/RDN chart audits are regularly completed, what is the average score?		

*Make sure you ask your IT/EHR staff for reports on the above data d-f and possibly g depending on how your EHR is built.

RD/RDN – Registered Dietitian/Registered Dietitian Nutritionist | NFPE - Nutrition Focused Physical Exam

AAIM – The Academy/ASPEN Indicators to diagnose Malnutrition criteria | CY – Calendar Year | EHR – Electronic Health Record

Additional items to define for implementation of MCS:

- What malnutrition risk screening tool does the hospital/institution use?
- How does the RD/RDN team diagnose malnutrition? What tool do they use?
- What are the policies related that affect the steps of malnutrition screening, identification, diagnosis, and treatment?

Next Steps:

Once all this information is decided, use the information and data collected to develop a problem statement.

Define the Problem Statement	
Is the Problem Statement:	☐ Clear ☐ Succinct
Can the Problem Statement:	☐ Serve as the compass for the project?
Does the Problem Statement:	☐ Include current data of what the problem is? ☐ Include what part of the process will the project begin and end at? ☐ Include who (professions, Departments) will be affected, or not, by the project?

Keep in mind, you may need edit all the above once the project team and champions are identified.

Here is an example of a problem statement for a MCS implementation project:

“The prevalence of malnutrition among hospitalized patients is of significant concern because of its impact on patient outcomes and increased healthcare costs. Despite having all the necessary steps in place for evidence-based malnutrition care, the process is not well documented, and the interdisciplinary team often lacks the tools for efficient communication. This is evidenced by xx% of patients admitted in the hospital with a positive nutrition risk screening, with xx% being assessed by RD, and xx% of those identified with severe or moderate malnutrition being diagnosed by a physician. This project aims to address these gaps utilizing an interdisciplinary team to develop the best practice steps for the facility while implementing the Malnutrition Care Score (MCS). Through MCS implementation, the facility will improve quality of malnutrition care, while also meeting food insecurity and health equity reporting criteria via improved documentation.”

Section II: Leadership Support and Building Your Team

After the project has been defined further, request a meeting with direct leadership and seek support. If they are on board, follow their recommendation on if it is needed to approach executive leadership. If so, ask what the best way is to approach them. No matter what, make sure to follow these recommendations below whether with direct leadership, and executive leadership if needed:

- Be ready with a proposal/report with actual data collected, the problem statement, the benefits expected for the project, and anything else you believe is needed. Do keep it succinct.
- Answer questions honestly and thoroughly.
- Listen to opinions - Some may alert you to potential obstacles.
- Ask questions – communication preference, limits, budget, etc.

The next sections apply **once the project is approved**.

Section III: Build Your Team and Finalize the Project Definition

Think about the people that have shown interest in the project. Talk to them and evaluate their interest. Who has the time to support the project and what role can they take?

To support efficiency and communication, try to keep the project team small, ideally with no more than 10 members.

When defining stakeholders, keep the following in mind:

- **Project Team:** Those intricately involved in the process can identify the current processes and agree with the critical importance of malnutrition identification and diagnosis. They are responsible for data collection and ensure work is assigned and completed. They should be available to meet often and may require administrative approval(s). Prioritize those that are key and able to provide hands-on, active support.
- **Champion:** Break down barriers, promote education
- **Supporter:** Enthusiastic about nutrition, agreeable to measure implementation

Role	Name	Level of Support	Communication Method	Communication Completed (Date)	Accepted?
Project Lead		☐ Project Team Champion ☐ Champion Team ☐ Other support	☐ Email ☐ Phone ☐ Presentation ☐ Elevator Pitch		☐ Yes ☐ No
Executive		☐ Project Team Champion ☐ Champion Team ☐ Other support	☐ Email ☐ Phone ☐ Presentation ☐ Elevator Pitch		☐ Yes ☐ No
RD/RN		☐ Project Team Champion ☐ Champion Team ☐ Other support	☐ Email ☐ Phone ☐ Presentation ☐ Elevator Pitch		☐ Yes ☐ No
Nursing		☐ Project Team Champion ☐ Champion Team ☐ Other support	☐ Email ☐ Phone ☐ Presentation ☐ Elevator Pitch		☐ Yes ☐ No
IT		☐ Project Team Champion ☐ Champion Team ☐ Other support	☐ Email ☐ Phone ☐ Presentation ☐ Elevator Pitch		☐ Yes ☐ No
Physician		☐ Project Team Champion ☐ Champion Team ☐ Other support	☐ Email ☐ Phone ☐ Presentation ☐ Elevator Pitch		☐ Yes ☐ No
EHR		☐ Project Team Champion ☐ Champion Team ☐ Other support	☐ Email ☐ Phone ☐ Presentation ☐ Elevator Pitch		☐ Yes ☐ No
Other		☐ Project Team Champion ☐ Champion Team ☐ Other support	☐ Email ☐ Phone ☐ Presentation ☐ Elevator Pitch		☐ Yes ☐ No
Other		☐ Project Team Champion ☐ Champion Team ☐ Other support	☐ Email ☐ Phone ☐ Presentation ☐ Elevator Pitch		☐ Yes ☐ No

*Assign a scribe from project team to take notes at all the meetings. This role can be assigned to different people throughout the project.

Project Scribe: _____

Alternative Project Scribe: _____

Define the meeting frequency, date, and times. This will be affected by the amount of work needed, the response time of other departments, the team size and availability. Send calendar invites to ensure team member availability.

First Meeting Will Be On: _____

Meeting frequency: _____

Next Step:

Think if there is any additional approval needed to support the project. Are there other department leaders affected, or has direct management to the team members approved their participation, if needed? If no other approval is needed, this box can be left blank.

Name	Position	Order of Approval Needed	Communication Done

Lastly, review the definition of the project and ensure all team members are on board.
Keep in mind that any major changes to the project will require leadership pre-approval.

Section IV: SWOT Analysis

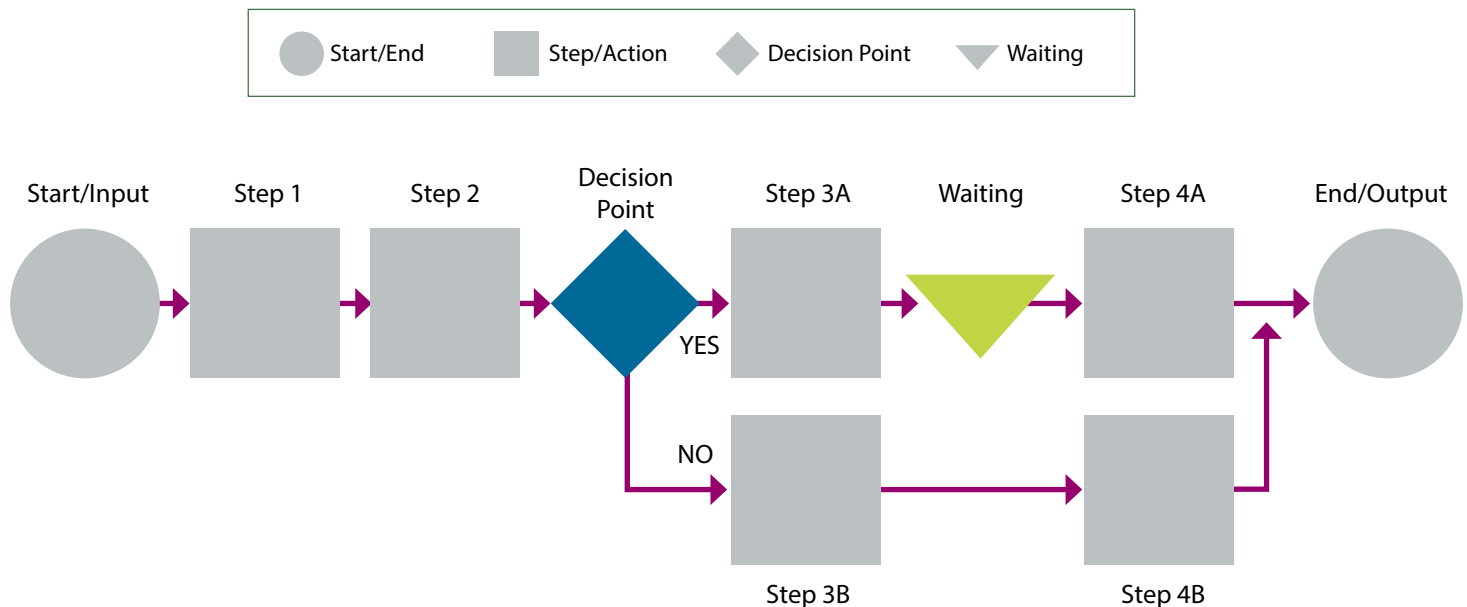
- **Strengths:** An attribute or process of their Hospital/Institution that can positively impact the implementation process.
- **Weaknesses:** An attribute or process of the Hospital/Institution that can negatively impact the implementation process and needs to be addressed, if possible, for the project to be successful.
- **Opportunities:** At outcome of existing strengths and weaknesses, along with any external attributes that will support the project. These are also weaknesses for improvement or areas that were not identified in the first two phases of analysis.
- **Threats:** An external factor outside the span of control, which could negatively impact project success. These are typically acknowledged to provide a plan to overcome each one.

At this time, evaluate the data from the SWOT analysis. This analysis will provide key information on items the team will need to consider when making decisions on items to break down barriers. Make sure the scribe includes the result of this discussion in the meeting minutes or notes.

Section V: Current state (process steps) and goal state (ideal process steps)

With the team, list or map the current process steps that relate to the project. Thoroughly think about all steps, large or small, that are affected by the project. After completing the current steps, develop a process map that describes the goal processes that the team would like to see happen (think in a perfect world case).

The following graphic shows symbols that can be used to develop the process maps.



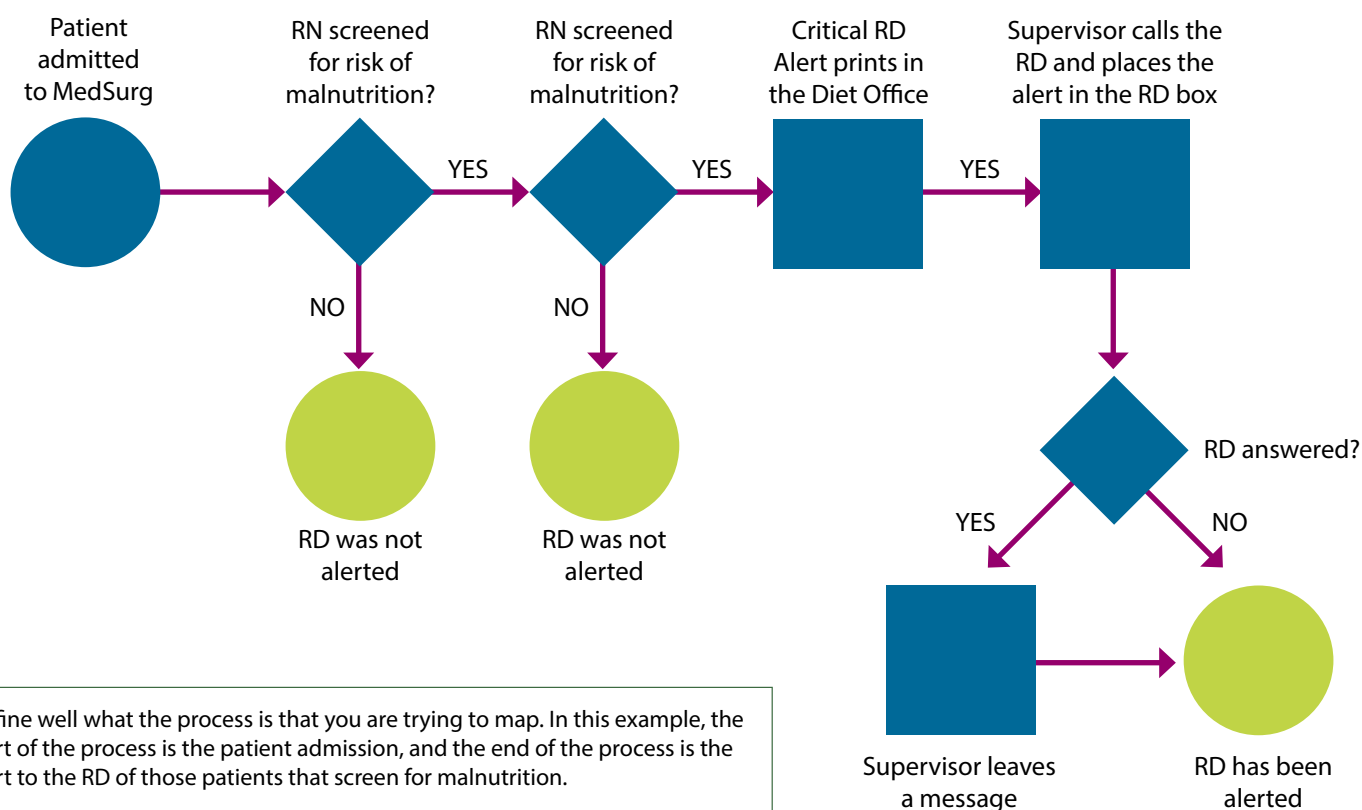
Some examples of items to consider when developing your current process maps if implementing the Malnutrition Care Score, include all the steps that affect the malnutrition diagnosis and care of the patient.
For example:

- Malnutrition risk screening
- Documentation of screening, assessment, diagnosis, and care plan
- Location of the documentation
- Communication method between healthcare disciplines

Here is an example of a simple process map for clinical alerts to Registered Dietitians.

A Process Map Example

RD gets alerts for patients at risk of malnutrition in a small rural Kansas Hospital

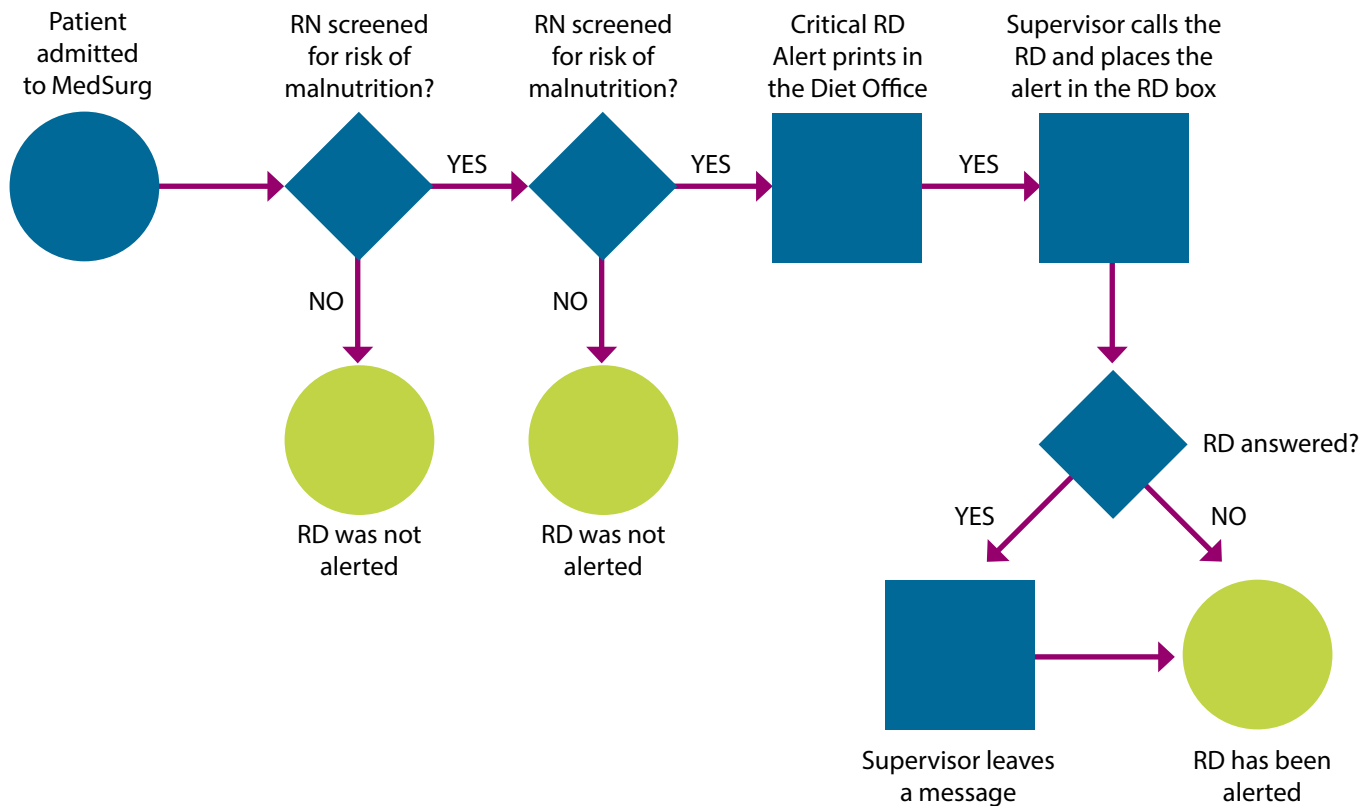


Define well what the process is that you are trying to map. In this example, the start of the process is the patient admission, and the end of the process is the alert to the RD of those patients that screen for malnutrition.

This next example will show you the goal map for the process stipulated above.

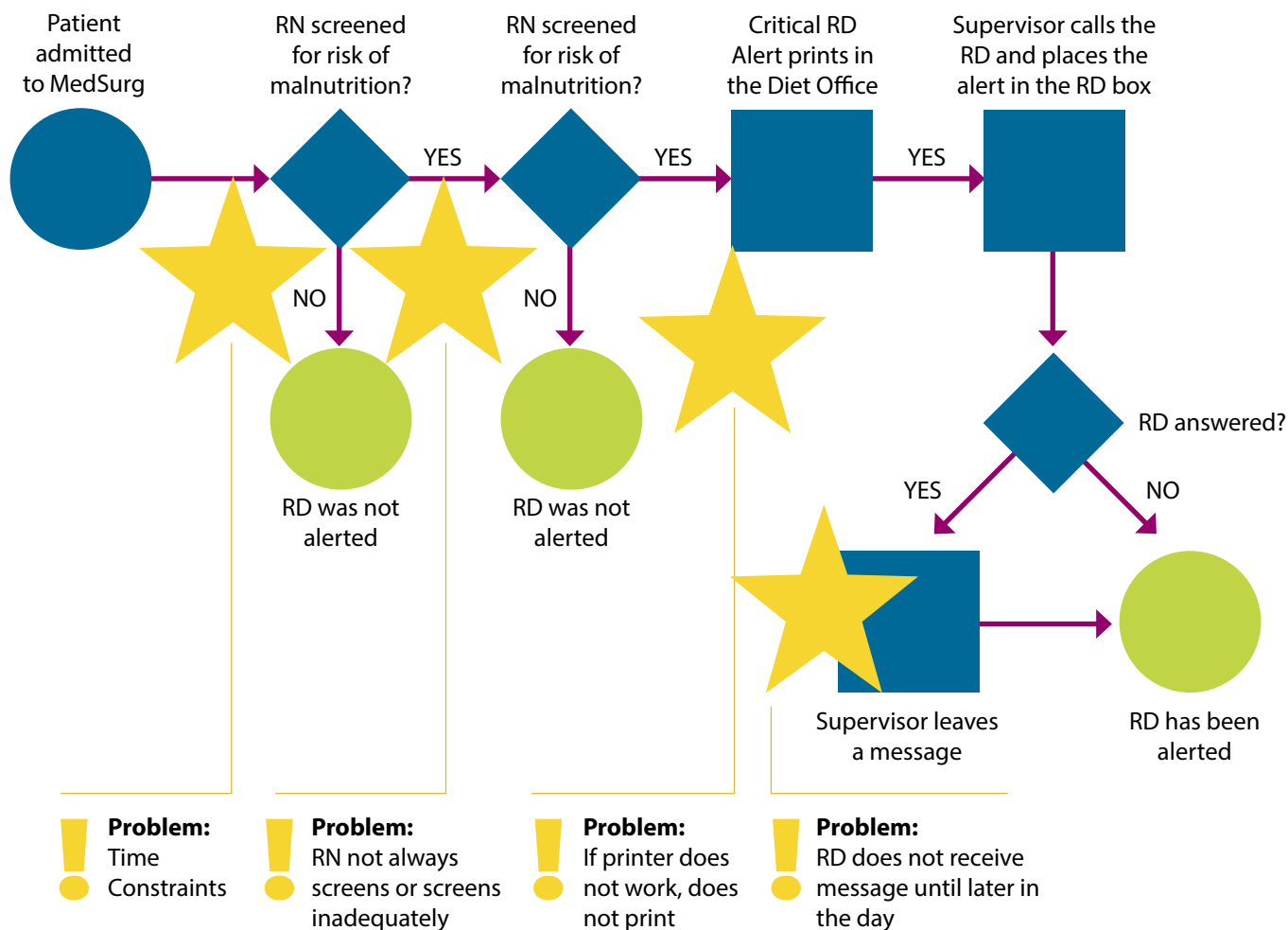
In our example, what are steps that you would consider problematic, wasteful, or key?

RD gets alerts for patients at risk of malnutrition in a small rural Kansas Hospital



When these two maps are put together and discussed, the following shows what the gaps and barriers are (identified with stars).

Here is what we see...



Make sure your maps are accessible to all team members. There is software, like Vizio, that can help build them in electronic format. Power Point or slide show software can be used as well.

Section VI: Define Barriers and Gaps in Processes

Utilizing the results from Section IV, as well as comparing the current state and goal state process maps in Section V, identify the processes that are gaps in service or process needs, barriers that affect directly or indirectly the services. What are those roadblocks that the team can work on improving? Also identify the non-value-added steps. These are processes (including policies) that are wasteful, or create barriers, but are not needed for high quality service to the patient or employee satisfaction. The non-value added are usual first steps to improving processes.

Once identified, discuss further with the Champion Team and Supporters. If the final decision is to update or eliminate processes, seek the respective management support, and develop a plan to address them. If the leadership and staff are on board bridging those gaps and taking down the barriers, then continue to Section VII. However, if you do not have leadership approval, we discourage continuing any further until you are able to achieve such approval.

The best way is to bring Champions on board with the current situation and needs and seek their support in furthering the discussion or processing changes. Remind leadership and/or staff of the benefits of the process improvement project. Find out what their concerns are and address them directly. It is key to include them in the discussion and possible solutions to their concerns. Make sure whatever is decided, it is also honored by the project team.

Some examples of possible roadblocks you can find when implementing the Malnutrition Care Score include:

- There is a need to raise awareness of malnutrition and its implications at the facility
- There is resistance from staff RD/RDNs
- Staff RD/RDNs need NFPE and/or NCP training
- There is a need develop a policy to ensure RD/RDNs maintain competency in NFPE/NCP
- There is a need to develop a policy/standard for chart audits
- There is resistance from the Food and Nutrition Department
- The facility's EHR does not have an NCP template and/or discrete data fields for easy data extrapolation
- There is a need to improve RD/RDN EHR documentation to improve standardization and streamline physician/eligible clinician malnutrition diagnosis documentation.
- There are expected costs to modify the EHR/purchase outside software tools
- There is a need to educate staff on completion and/or importance of nutrition risk screening.
- There is resistance from nursing staff for timely completion of nutrition screening
- There is a need to educate physicians and eligible clinicians regarding the process
- RD/RDNs follow for malnutrition diagnosis and/or how they can use your note for diagnosis.
- There is resistance from physicians and/or eligible clinicians
- There is a need to develop a process with physicians and/or eligible clinicians to alert the provider when there is a Malnutrition diagnosis by the RD/RDN
- There is a need to develop a process with physicians and/or eligible clinicians for the malnutrition diagnosis to be added to the physician's note if they agree
- Policy development is needed to ensure the processes established are official.

Section VII: Root Cause Analysis

A root cause analysis (RCA) has the goal of breaking down a problem to its most fundamental cause. This way, when solutions are identified, you are addressing a problem that can then trickle down into solving multiple problems “downstream”. Think of the root cause as an actionable problem, one that can be addressed and, hopefully, solved.

The process starts with the gaps and barriers identified in Section VI. These are the “stars” in the process maps developed in section V. The goal is to do a deep dive into the basic, or root, causes behind the problems. It is in essence, a structured approach to problem solving that focuses on addressing the underlying causes. Depending on the size of the problem statement and how many processes it covers, there may be several root cause problems. These are the problems that possible solutions will be developed for.

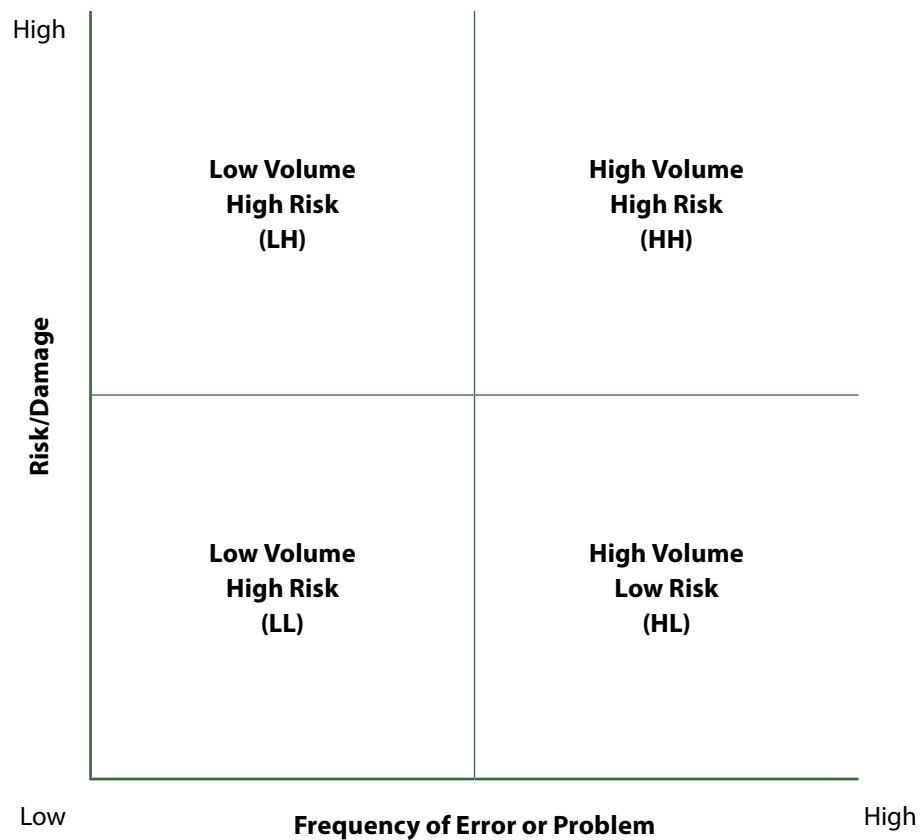
To start the root cause analysis process, list all the gaps and barriers identified in Section VI. There are many structured methods that can be used to do a root cause analysis.

Consider educating the team on the options and select one. Below are some simple options that can be used to identify the causal factors or root cause.

Method	Description*
5 Why's	Simple yet powerful tool. Start with one gap or barrier. Then, for each barrier or gap ask why it occurred. This is the first “why.” Avoid jumping to conclusions or assuming the cause at this stage. Ask “why” again, and again, and again, until there is no further answer to the why. Each subsequent “why” drills deeper into the underlying causes of the previous answer. The last answer is the root cause problem. If the project team is new at process improvement, this method is simple but effective.
Fishbone diagram	Also known as the Ishikawa diagram or cause-and-effect diagram. It is a visual tool used for problem-solving and root cause analysis that uses the idea of a fish skeleton. The “head” of the fish represents the problem being evaluated. The “bones” or branches extending from the spine, are the main categories of potential causes, and the “ribs” are the factors or sub-causes within each category. The main categories typically include people, process, equipment, materials, and environment. When using the fishbone diagram, start by brainstorming with the project team to evaluate potential causes or factors of the problem (“head”) under each category. These categories can be any the team decides. Once all potential causes are identified, analyze, and prioritize them based on relevance and impact. This helps guide the group to the root cause of each problem.
Affinity Diagram	Simple visual process of identifying and grouping themes of problems, barriers, and gaps. Start by listing all gaps and barriers. Then write each of these in sticky notes. It can be done as short phrases or keywords. Currently, the team collaborates in grouping all the sticky notes by like ideas or patterns. This involves looking for commonalities and connections among ideas. Once grouped, it will be visually clear what the basic problems and issues are, and it should be clearer what is the root cause to be addressed. After the groups are formed, then it is important to label each group of problems with a descriptive title or name. Affinity diagrams are best to be used when there is too much chaos in the processes, there are a lot of gaps and barriers to address, and/or brainstorming is needed to evaluate many gaps, barriers, and corresponding solutions.
Fault Tree Analysis (FTA)	Systematic and graphical method used to analyze and assess the potential causes of a particular event or failure. Start by creating a graphical representation, using a tree structure, of the problem, gap, or barrier. At the top of the tree is the “top event,” which represents the undesired outcome you’re investigating. Below the top event, branches or “paths” extend downwards, representing the various potential causes or factors that could lead to the top event. The farther down the branches, the closer to the root cause. Basic events are represented as nodes at the ends of branches in the fault tree. When analyzing the fault tree, to identify the critical paths or combinations of events that could lead to the top event. This involves evaluating the probability and severity of each event, considering their interdependencies and interactions. This is a more complex root cause analysis process, and we only recommend for very complex problems and gaps, that require thorough and deep analysis.

*These are meant to be brief (not comprehensive). If you would like more help, email quality@eatright.org.

For root cause analysis, the team can choose one method, or a combination based on the complexity of the problem, and team member skills and understanding of the methods and processes. If there is many gaps and barriers, and the team needs to prioritize what to address first, it is suggested to utilize a Risk/Frequency Grid to support prioritization of the discussion of solutions. Simply list the gaps and barriers and classify them into a quadrant of the grid below, based on if they are a high or low frequency problem, and a high or low risk problem.



The order of priority to address problems should be: HH > LH > HL > LL. Items in the LL quadrant should only be addressed if the project team has time and interest.

Next Step: Once the root causes are identified, the next step is to brainstorm and implement solutions that address these underlying issues directly. Use the table below to list the problems, their direct cause, and the root cause.

Problem	Direct Cause	Root Cause

Section VIII: Establish Possible Solutions

This is the time to get the team together and find all the potential solutions to all the gaps and barriers. It is important the solutions address the root cause of the problem to the best of the team’s ability. Solutions may involve changes in processes, systems, training, or other relevant areas. Not all solutions will be tested, and this is why it is important to evaluate thoroughly all solutions and how it addresses the root causes.

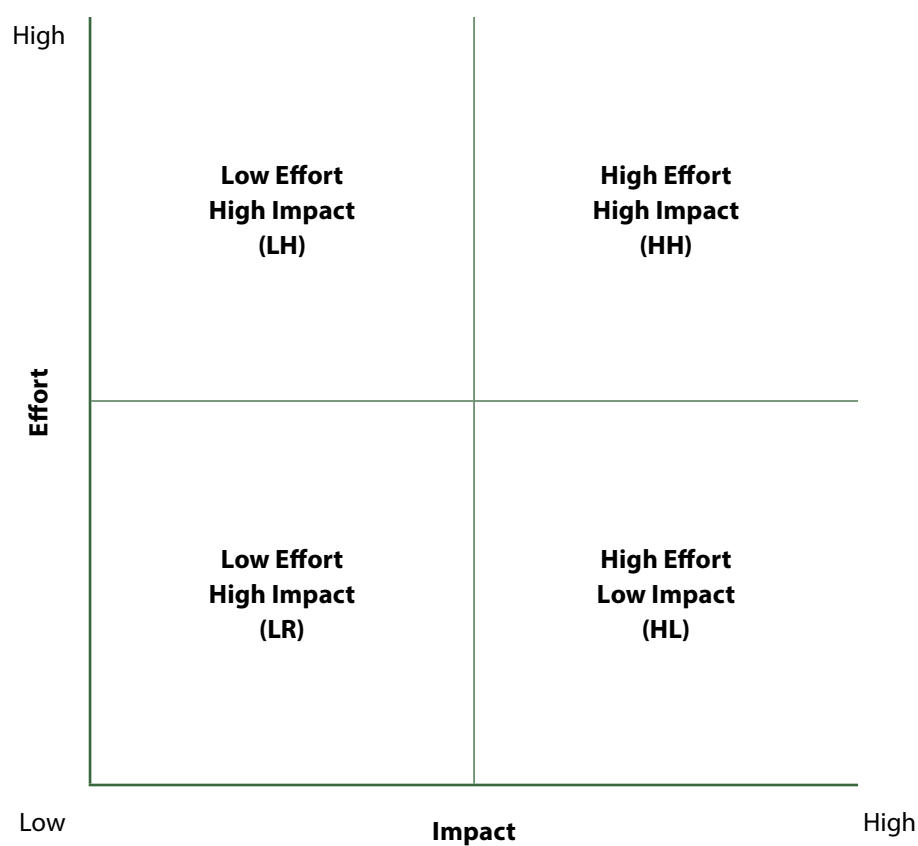
Some questions that can be asked when evaluating possible solutions include:

- Does it address the root cause?
- Is it measurable? (this is important as it helps the team prove if it is effective)
- Can it be implemented? In other words, is it realistic.
- Can it be tested?
- Were the process owner and/or experts in the subject consulted?

When brainstorming all possible solutions and use the “If We... Then We Expect To...” framework as shown below.

If We...	Then We Expect To...

If the team can articulate many solutions, especially for each root cause, a way to evaluate and prioritize the solutions to test is by using the Impact Versus Effort Grid. Basically, all that is needed is to classify the solutions based on their impact and the effort it will take to implement. Below is the grid for your use.



The order of priority for testing the solutions is different than when looking at problems and is as follows: LH > HH > LR > HL. Items in the HL quadrant should only be studied if the project team has time and interest.

Section IX: Test Solutions, Track Progress, and Collect Data

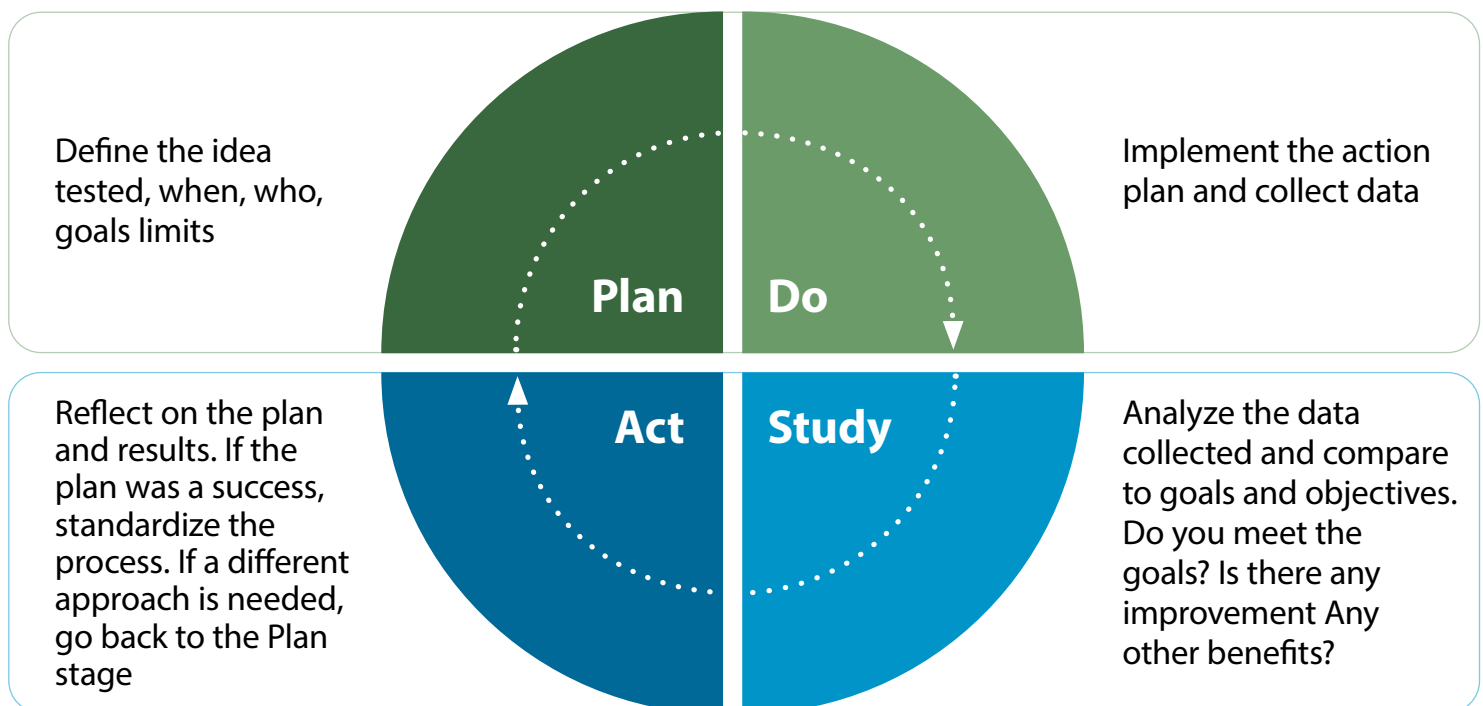
When considering how the possible solution will be tested, have the following in mind, is it a simple solution? Or do you need a formal study process to implement and evaluate effectiveness? The following two processes are applicable to the possible solutions.

Just Do It (JDI):

- When the solution is obvious to all team members, it can be simply implemented.
- Make sure all team members and affected staff agree with the solution being addressed as a JDI.
- This does not need a formal study process, it simply is done, as the name says.

PDSA (Plan, Do, Study, Act) Cycle:

- A shorthand for testing a change. Process develops a plan to test the change (Plan), carries out the test (Do), observes and learns from the consequences (Study), and determines what modifications should be made to the test (Act).



Next Step:

Meet with the Project Team to complete columns in this table. Develop a plan, meeting schedule, etc. to address all the items needed below.

Impact vs. Effort Grid Classification	Solutions to Test	Date to be Collected	Due Date	Assigned To	How?	Completion Date
☐ LH ☐ HH ☐ LL ☐ HL					☐ PDSA ☐ JDI	
☐ LH ☐ HH ☐ LL ☐ HL					☐ PDSA ☐ JDI	
☐ LH ☐ HH ☐ LL ☐ HL					☐ PDSA ☐ JDI	

At this time, plan with the team the next steps and what are the expectations on deadlines, and completion. Then, allow the team members to test the solutions, making sure data is collected to ensure the solution solves the root cause. See Appendix A for a suggested template of a PDSA Cycle. When developing new processes, it is encouraged to include a step that will ensure, if beneficial, the process is adopted by staff. There are many ways to accomplish this, including policies, developing standards of work, standard operating procedures, education, visual reminders, follow-ups, amongst others. Ultimately, any solution will require a change for someone. When communicating change, consider different tools:

- Face-to-face training
- Short videos for mandatory education
- Communication boards
- Handouts
- Posters or flyers

See Appendix B for a Training Plan Template.

Section X: Apply the Final Solution (s)

As with any change, processes can easily revert to what the previous steps were, even when the new processes are more efficient. It is critical to ensure that when solutions are reached and approved by leadership, these are implemented long-term. Once the solutions are tested as beneficial, it is important to develop processes to ensure these are final and will be adopted by all staff. Keep track of the implemented solutions to ensure they are effective in preventing the problem from recurring. Adjustments may be needed based on ongoing monitoring and feedback. Length of time to track will depend on the project, team members, and how effectively solutions are adopted.

Section XI: Collect Additional Data and Finalize the Project

Once all solutions are applied and final, this is the conclusion of the testing process. But in order to prove the effectiveness of the work, it is important to collect again the same data collected in Section I. Once collected, it is key to effectively communicate results of the changes to leadership and/or stakeholders.

Next Step: Insights Analysis (Optional)

Before the project team concludes their work, take the time to do an insight analysis. This is a summary of the insights gained from the project. Answer the following questions and discuss the responses amongst the team.

What went well?	
What did not go well?	
What were the lessons learned?	
What items were not addressed in this project that you would like to consider for a future project? (Parking Lot of Ideas)	

Congratulations, you have completed this Process Improvement Action Plan!

Any questions can be sent to Academy’s Quality, Standards, and Interoperability Team via quality@eatright.org.

Appendix A – PDSA Cycle Template

This method provides a guide through steps that will test a solution for a problem, issue, or barrier. Consider that the test may require more than one PDSA cycle development. It is possible that, after your first PDSA cycle, there are other changes that could be implemented to improve the solution to the problem. This will need to be tested again with the use of a second PDSA cycle. Due to the nature of this project, consider PDSA cycles of short duration.

What is the Aim of this PDSA cycle?

Plan:

I plan to (concise statement of what you plan to do, include the end-user population, timeline, and how you expect to measure success):

I hope this produces (measurement or outcome that you hope to achieve):

Steps to execute (write the steps or process change that you are going to test in this cycle, including

Do:

Step	Description	Assigned To	Target Completion Date

What did you observe? (write down observations you have, and measurements taken, during the implementation)

Study:

What did you learn?

Did you meet your measurement goal?

Act:

What did you conclude from this cycle?

Did the aim get accomplished?

If the aim is accomplished, is it able to be maintained? If not, what will you do in the next PDSA cycle that includes maintenance?

If the aim did not get accomplished, is there anything else or different that could be tested in the next PDSA cycle?

Appendix B – Training Plan Template for all Project Training

[illegible]