



Project Risk Planning and Management

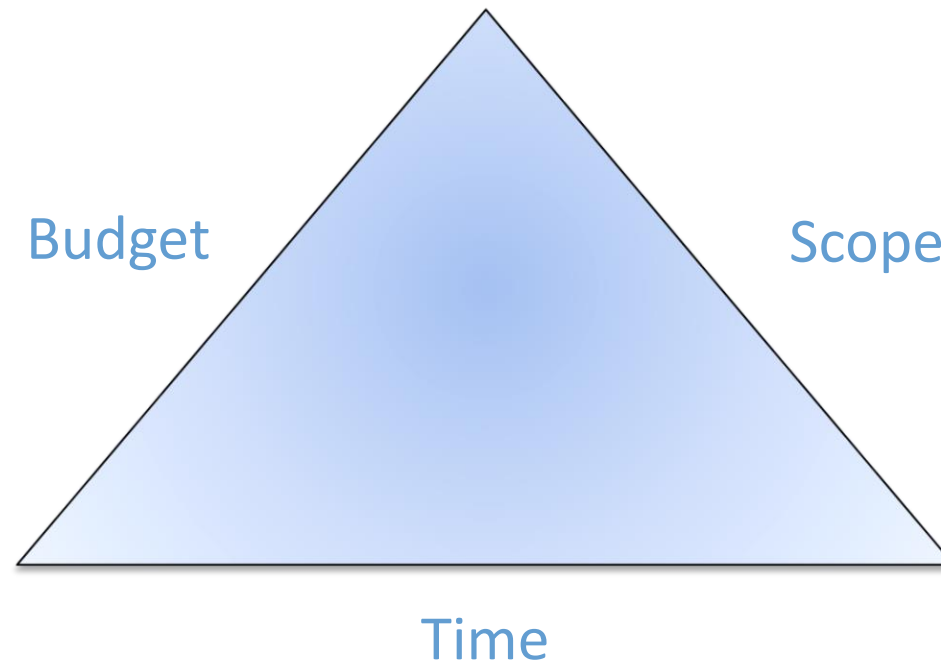
Beyond Transformation:
Standardizing Dental Services
Technical Assistance Program

Webinar Objectives

- Review SWOT Analysis and FMEA
 - Tools for anticipating and proactively preparing for risks and issues
- Introduce the Risks and Issues Log
 - Tool for documenting and addressing issues as they arise during a project

The Triple Constraint

Project management has the goal of meeting this “triple constraint” in an environment of uncertainty.



Source: CLI: Len Finocchio, 2015

What is Risk?

- “Risk is when an uncertain event or condition can occur and have an effect on the project outcome. ”
- 2 Types:
 - Anticipated
 - Not Anticipated
- Impacts project timelines, costs, scope and scale, and quality of outcomes

Source: <https://www.projectmanager.com/training/what-is-project-risk>

Common Project Risks and Challenges

- **Team/Staff**
 - Staff turnover, missing key roles, not completing tasks, burnout
- **Project**
 - Project assumptions aren't holding true; challenges with scaling up project
- **Project Management**
 - Meeting frequency, communications
- **Data**
 - Data validity, can't generate electronic reports
- **Patient/Client Engagement**
 - Receptivity to changes, participation in programs
- **External Issues**
 - Competing priorities, staff juggling multiple projects, budget approvals

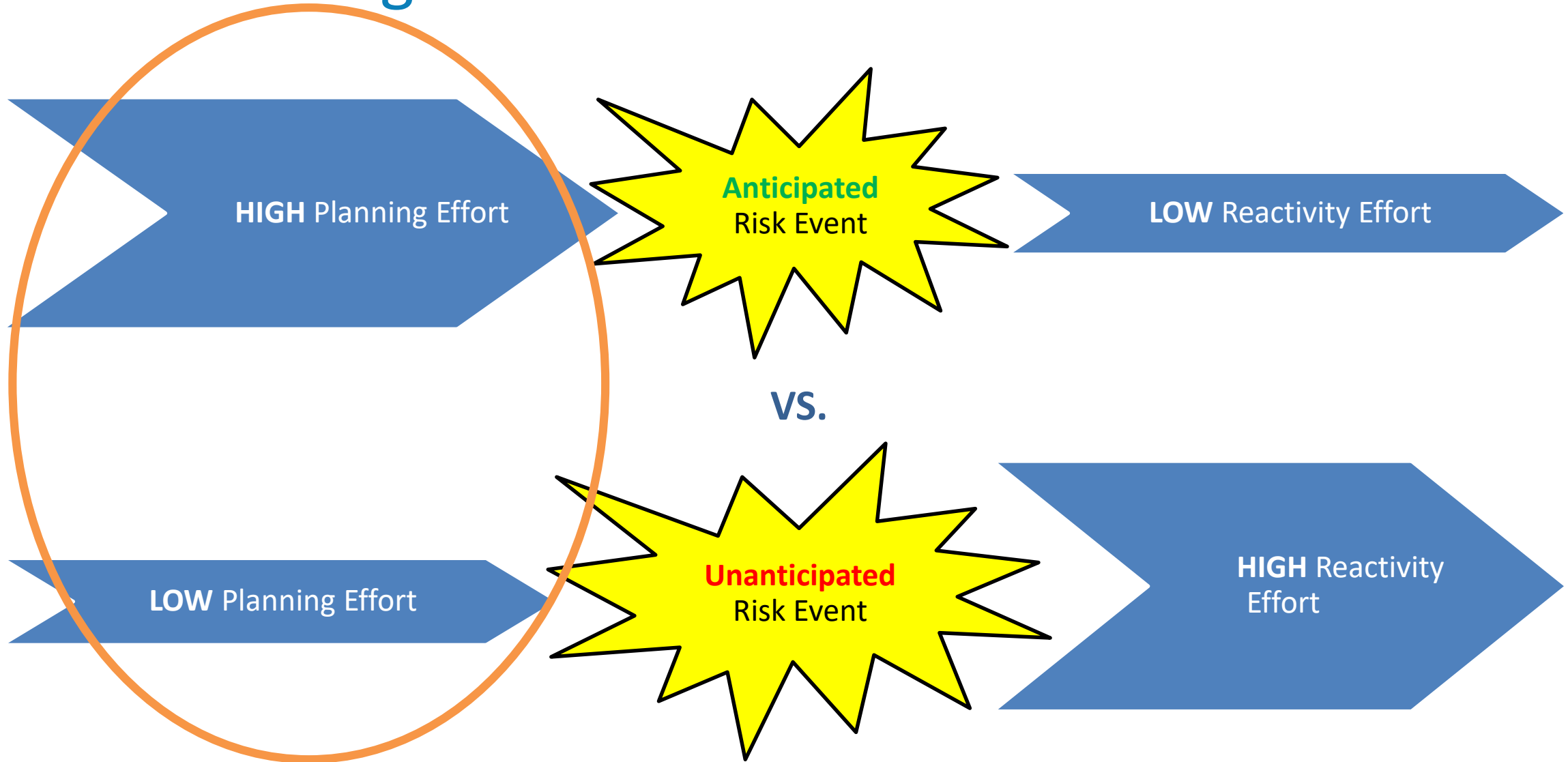
Risk Planning



VS.



Risk Planning

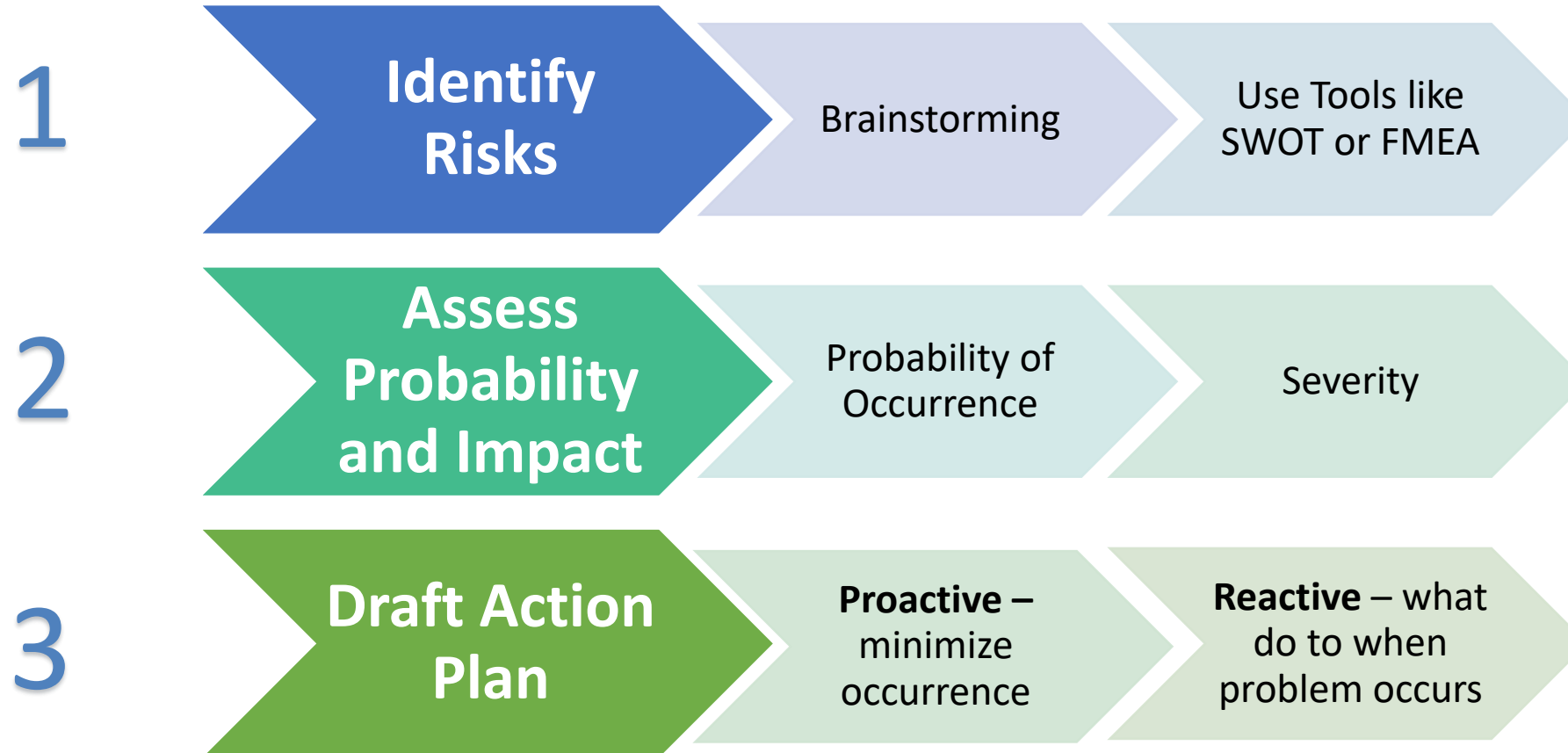


Risks and Issues Log

- Use a Risks and Issues Log to track and manage your project risks and issues.

Risk Planning					
Risks	Risk Mitigation Strategy/Actions			Owner	Leadership Support
Risk #1: <i>[e.g. Time not granted to staff]</i>	Identify existing meetings and add project updates to agenda				
	Other Activity				
	Other Activity				
Risk #2: <i>[e.g. Leadership approvals not granted]</i>	Schedule meeting with executive to develop case for approval				
	Draft talking points that support and justify project efforts				
	Other Activity				
Risk #3: <i>[e.g. Providers do not engage in QI efforts or requests]</i>	Draft talking points that demonstrate how project will benefit providers				
	Meet 1-on-1 with providers				
	Other Activity				
Risks and Issues Log					
Risk/Issue Description	Date Identified	Strategy/Actions to Resolve Issue	Date Resolved	Owner	Leadership Support

Preparing for Risks/Challenges



Project SWOT Analysis

	Helpful	Harmful
Internal	S Strengths	W Weaknesses
External	O Opportunities	T Threats

Source: Minnesota Department of Health - <https://www.health.state.mn.us/communities/practice/resources/phqitoolbox/swot.html>

Project SWOT Analysis

	Helpful	Harmful
Internal (Team/Project-Specific)	<p>Strengths</p> <p>(e.g. staff skills/capabilities that contribute to success; existing management/team leadership; support for area of focus; resources that are accessible – time, funding, staff, systems, facilities, infrastructure)</p>	<p>Weaknesses</p> <p>(e.g. staff skills/capabilities not yet present; lack of management/team leadership; lack of support/buy in from key stakeholders; missing resources)</p>
External (Environment/Org)	<p>Opportunities</p> <p>(e.g. health plan priorities/interests; funding sources; external partnerships and collaborations; social, cultural, and technological factors that you could leverage, such as the increase in social media use)</p>	<p>Threats</p> <p>(e.g. uncertainty of current health policy; withdrawing funding sources; impacted projects as a result of diverted resources; social, cultural, and technological factors that could put your project efforts at risk)</p>

Source: Minnesota Department of Health - <https://www.health.state.mn.us/communities/practice/resources/phqitoolbox/swot.html>

SWOT Example: School-Based Dental Services

Strengths	Weaknesses
<ul style="list-style-type: none">• Good relationships with existing adult patients who are parents of school-aged children• Dr. Smith has agreed to lead efforts• Aligned with mission	<ul style="list-style-type: none">• Recent provider turnover/general staff shortages• Don't have budget for key equipment• Scheduling process has been historically challenging
Opportunities	Threats
<ul style="list-style-type: none">• Partnerships already established with schools/leadership• Funding opportunities available through health plan and First 5; other foundations have a general interest in increasing funding• Co-location of services is being explored across the sector	<ul style="list-style-type: none">• Regulatory/liability considerations• Limited reimbursement for services• COVID-19 restrictions and safety concerns

SWOT Example: School-Based Dental Services

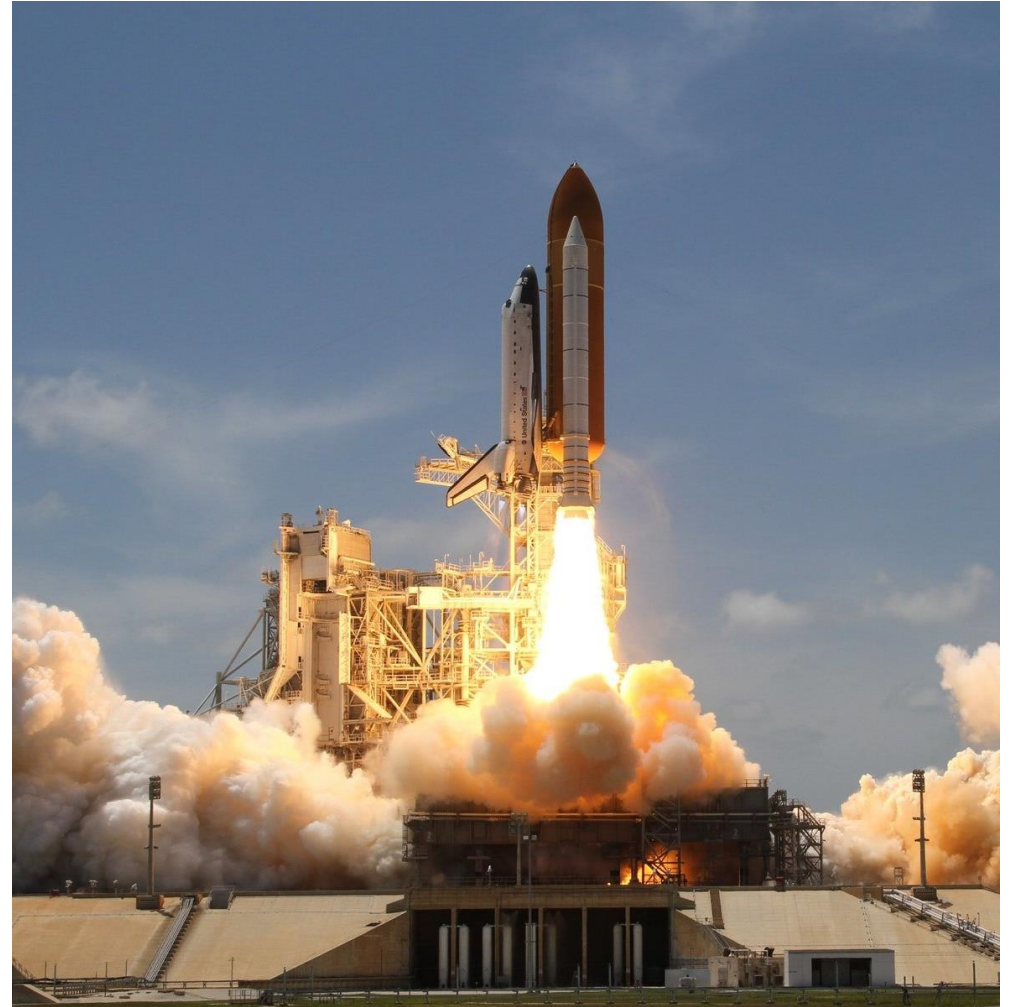
Weaknesses
<ul style="list-style-type: none">• Recent provider turnover/general staff shortages• Don't have budget for key equipment• Scheduling process has been historically challenging
Threats
<ul style="list-style-type: none">• Regulatory/liability considerations• Limited reimbursement for services• COVID-19 restrictions and safety considerations

High Probability/High Impact Risks

- **Create Action Plan -**
Determine actions the team can take address these risks (reduce occurrence, plan around, overcome, etc.)

FMEA (Failure Mode and Effect Analysis)

- Approach Developed by NASA in 1960s
- Used by Automobile Industry in the 1980's, and quickly spread to other industries after that



When Could You Use an FMEA?

- Project Planning Efforts
- Redesigning a process
- Mistake-proofing a new process



FMEA



The Good: Guide your team through each of these key steps and consolidates all this information into one table

The Challenging: Dense table with unfamiliar terminology, can become complicated for lengthy and complex processes

Process: Completing an FMEA for a QI Project

1. **Gather the team** – ideally a multidisciplinary team
2. **List critical processes or deliverables** related to your improvement initiative
3. **Identify assessment factors** the team will use to assess potential risks (e.g., likelihood of occurrence, likelihood of detection, severity, etc.)
4. Team brainstorm for each process step/deliverable
 - **Failure Mode:** What could go wrong?
 - **Failure Cause:** What would cause the failure mode
 - **Failure Effects:** What happens when failure mode occurs?
5. **Calculate Risk Priority Number (RPN) scores** to each Failure Mode and come up with an **action plan for highest-rated risks/failures.**

FMEA Table Set up

Process Step	Failure Mode	Cause	Effect	Quantifying Risk				Action
				Occ	Det	Sev	RPN	

Sample FMEA for Prosthetic Dental Services

Copy (2) of Access to Prosthetic Dental Services						
United States Public Health Service Detroit Lakes, Minnesota, United States Public Health						
Aim: Reduce the Risk Priority numer, eliminate problems associated with patient access to prosthetic dental services by 100 percent in six months.						
Process Data						
Date: 05/16/2008						
Step	Description					
1	patient presents for prosthesis					
Failure Mode	Causes	Effects	Occ	Det	Sev	RPN Actions
No appointment available	Shortage of Dentists	Negatively affects : ability to eat-nutritional concerns,self esteem, and speaking or enunciation.	1	1	5	5 1.Recruit Dentists. 2.Continue to accept American Dental Association volunteer Dentists. 3. Accept JRCOSTEP and COSTEP Dentists. 4. Patient education regarding prosthetic procedure; including keeping appointments. 5. Follow IHS Dental procedure prioritiza
Step	Description					
2	Dental prosthethesis/ exam required					
Failure Mode	Causes	Effects	Occ	Det	Sev	RPN Actions
Prosthetic exam appointment not available	1.IHS treatment policy outlines prosthetics are low on priority list. 2. Patients cancel or break appointments without notice. 3.Prosthetic exams scheduled only on specific week-days.	1. extractions, restorations, emergencies are scheduled before prosthetic appointments. 2. cancelled and broken appointments impede potential prosthetic appointments. 3. Patient unavailable for a prosthetic appoint on a specific week day.	1	1	5	5 1. Recruit Dentists, maintain volunteer Dentists participation. 2. Patient education regarding value of keeping multiple appointment sequence in prosthetic treatment. 3. Revise schedule; allow for exam-prosthetic appointments to be available all clinic da
Step	Description					
3	Complete restorative needs prior to prosthetic fabrication					
Failure Mode	Causes	Effects	Occ	Det	Sev	RPN Actions
Patient unable to be appointed for restorative needs (prior to prosthetic fabrication)	1.Dentist shortage 2. Existing schedule is filled with Level I,II, and III appointments.	1.Prosthetic fabrication is delayed an unacceptable length of time. 2. Negative affects upon nutrition, speech, and self-esteem.	1	1	5	5 1. Continue to recruit Dentists. 2. Continue volunteer Dentists/ Student Dentists programs. Improve clinical efficiency via a myriad of opportunities including but not limited to: seating scheduled patients upon arrival to clinic, utilize EFDA dental asst
Step	Description					
4	Prosthesis fabrication					
Failure Mode	Causes	Effects	Occ	Det	Sev	RPN Actions
Dental laboratory delays	laboratory is overworked	patient prosthesis treatment completion delayed: affects nutrition, speech, self-esteem, natient satisfaction	1	1	5	5 1. Acquire new dental laboratory with improved reliability. Lab changed in December 2006.

Source: Institute for Healthcare Improvement (IHI)

<https://app.ihq.org/Workspace/tools/fmea/ProcessDetailDataReport.aspx?ToolId=6597&ScenarioId=7774&Type=1>

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1: Process Step - specific step or deliverable in the overall process or workflow

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2: Failure Mode - what could go wrong at this step? Note - there could be multiple failure modes for each process step

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3: Failure Cause – Why could this failure happen? What’s the root cause?

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4: Failure Effect – what happens when you experience this failure? What are the consequences?

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5: Quantifying Risk (each using a 1-10 scale)

- **Occurrence (Occ)** – Likelihood of failure occurring
- **Detection (Det)** – Likelihood you won't notice the failure using current resources and protocols
 - 1 = you will detect it; 10 = you won't detect it
- **Severity (Sev)** – How severe is this failure effect? (To achieving your goal? For the patient? Safety?)

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5: Quantifying Risk

- **Risk Profile Number (RPN) = Occ x Det x Sev**
 - Higher RPN values are your major risks and are things you should prioritize addressing
 - Lower RPN values are lower process risks

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6: Actions – What actions could you take to proactively prevent this failure mode from happening? And/or what action should you take if this failure still occurs?

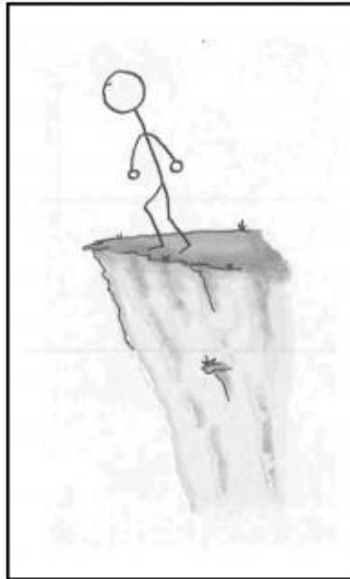
Other Potential Failure Modes

- Teachers will not excuse students from classroom to receive dental service
- Long wait times/long appointment times due to dental provider having too many assessments to complete
- Images captured by intraoral camera are not detailed enough to make effective diagnosis; photos need to be retaken

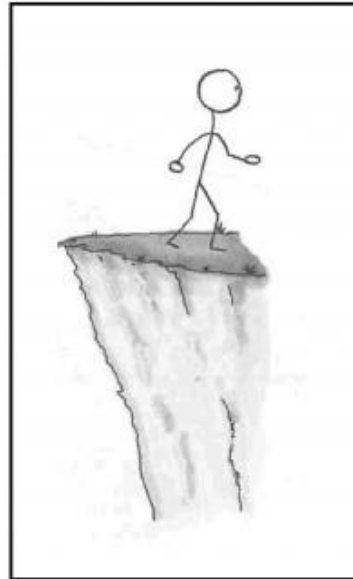
FMEA Resources and References

- IHI's FMEA Analysis Hub
 - <https://app.ihq.org/Workspace/tools/fmea/>

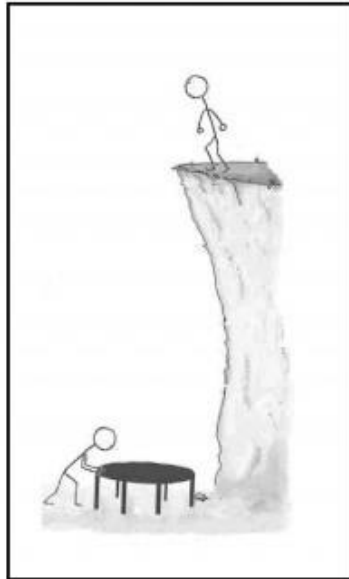
Action Plan for Project Risks



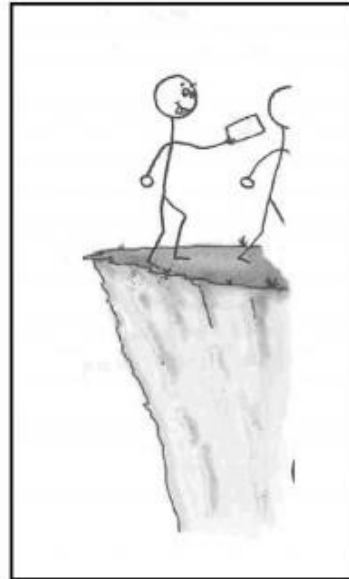
Your project



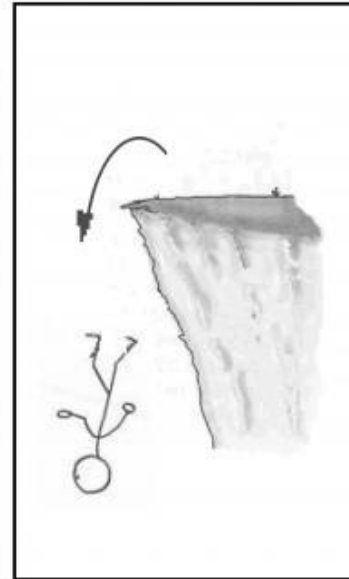
Avoid



Mitigate



Transfer

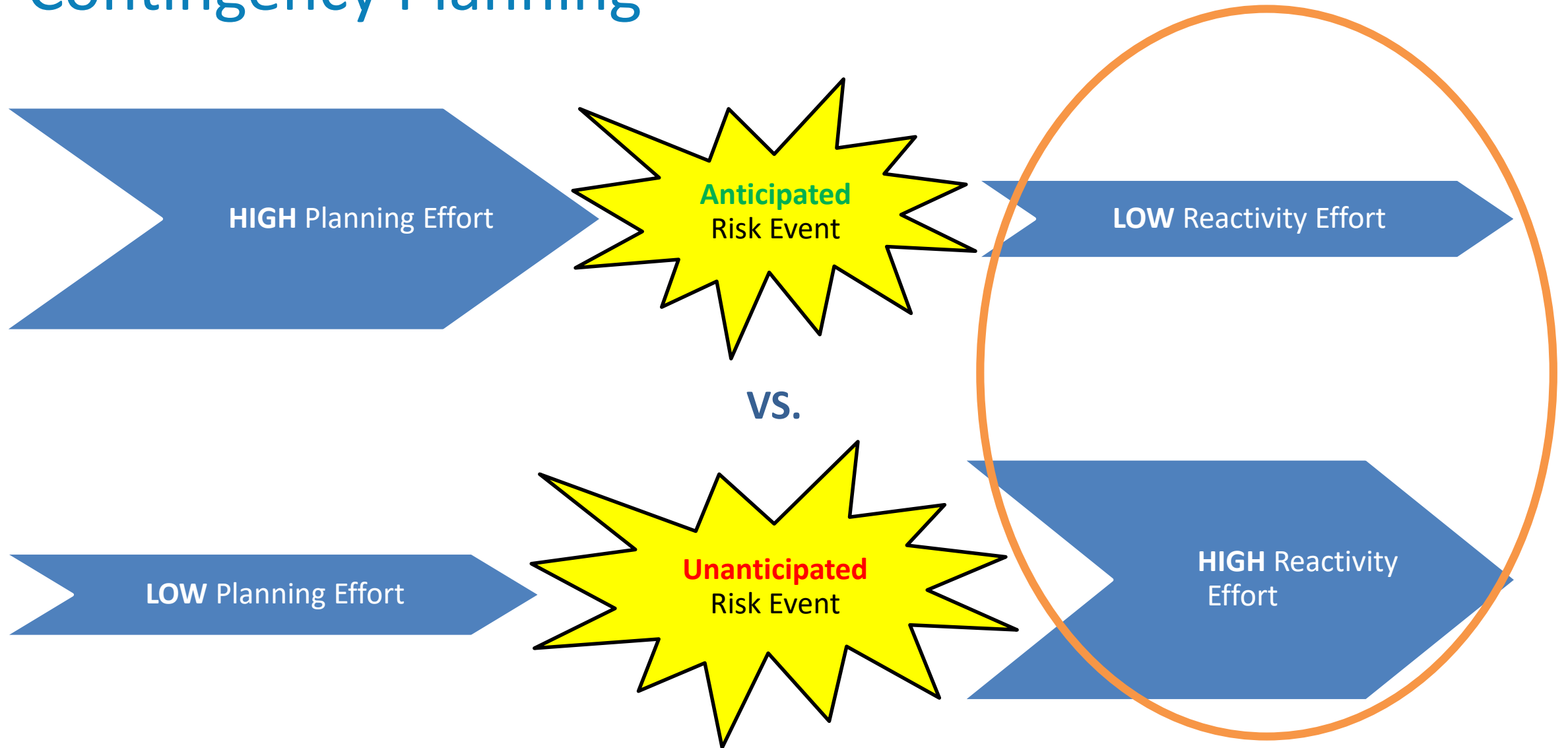


Accept

Action Plan for Project Risks

- Types of Responses:
 - **Avoid** – change the project plan or eliminate the source of the risk, so the risk is no longer a “risk”
 - **Mitigate** – reduce the chance of risk occurring
 - **Transfer or deflect** – shift the impact to another party, e.g. consultant
 - **Accept**
 - **Do Nothing**
 - **React** – what team will do when the risk or challenge occurs

Contingency Planning



When Risks Become Issues...

- Contingencies – Primary strategies for reacting to a risk when it occurs (i.e. becomes an issue)
 - You may have already determined a plan for it!
- How will this impact the project? (scope, budget, timeline)
- What is the problem that needs to be solved? What are the steps needed to achieve resolution?
- Who is responsible, or has the expertise to determine a solution/resolution? Who makes the decision to proceed?
- By when will the solution need to be implemented?

Communication is critical for addressing risks!

Use your Risks and Issues Log to escalate concerns and gather support to resolve issues.

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Risks	Risk Mitigation Strategy/Actions			Owner	Leadership Support
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Risk/Issue Description	Date Identified	Strategy/Actions to Resolve Issue	Date Resolved	Owner	Leadership Support

Deliberate Practice Opportunities

- ❑ Try creating a SWOT Analysis or FMEA with your team
- ❑ Using the Risks and Issues Log, document some of your risks or issues that came up over the course of your initiative. Highlight some of your key learnings that you would take into your next project, or next effort to scale up your VDH work.



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