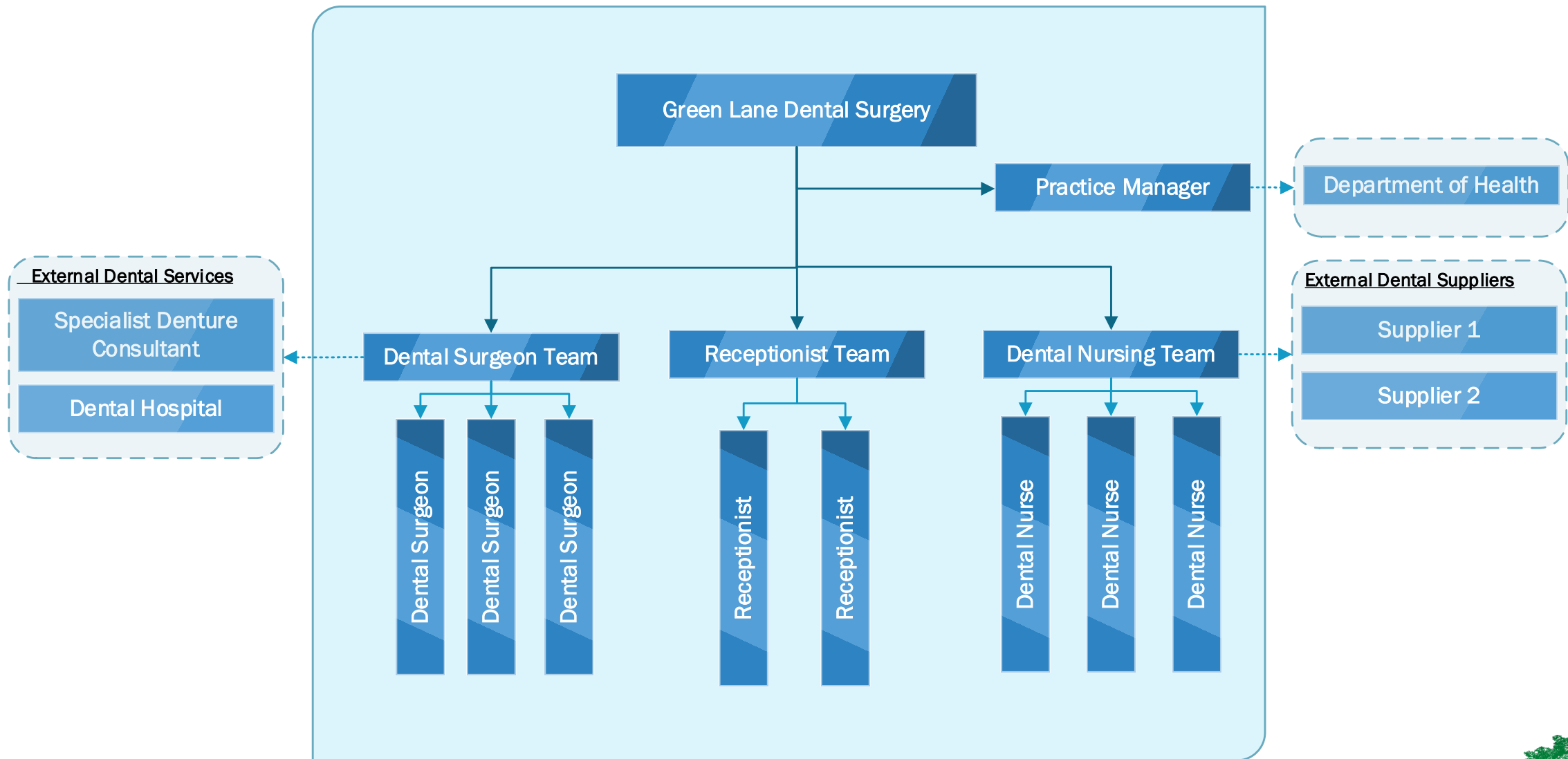




Group 2

Project Planning Exercise
Week 5





Scope statements align stakeholders' expectations and give projects a framework for success.

Project Scope

- **Introduction.**
- **Project Scope**
- **Deliverables**
- **Acceptance criteria**
- **Exclusions**
- **Constraints.**

The patient management information system (PMIS) project will be delivered within 8 months.

The software product that will be made through this project will have features for dental receptionists to access patient information, automate bi-yearly appointment reminders, digitize treatment invoices and collect clinical activity data.

The software product should have the capability of supporting the surgeries patient capacity and be useable by the 9 staff employed by the practice through an internet connection and log-in details.

Stakeholders

Stakeholders are any party with a direct or indirect interest in the project, for the latter might have a positive or negative impact on the stakeholder.

Internal

This group includes the **project team** as well as **general management** in a company. They are all the actors within an organisation who have an interest in seeing the project succeed or have an impact on **decision-making** or **project resources**.

- Dental Surgeon
- Practice Manager
- Dental nurse
- Receptionist
- Other practice staff
- Project Management Team

External

These comprise all external people and institutions which could be **affected** or **targeted by** the project. They also include all actors who have the **power to influence** the development or **outcome** of the project.

- Patients (NHS and private)
- Suppliers
- Software Developers
- NHS Wales
- Dental Hospital (patients being referred to)
- Specialist Denture Consultant (sub-contractor)
- Digital Health & Care Wales

Objective

An **objective** is a target that's actionable, measurable and achievable and should be **SMART**

The following objectives will be achieved within 8 months:

- The project consultants will deliver a working PMIS solution to budget, that will digitalise the patient record management system and practice diaries, using a waterfall approach to project management
- Patient records must contain basic demographic details, treatment(s) received, costs incurred, payments received and be identifiable as NHS or Private patient. 30% of paper records will be transferred to the system for testing ahead of go-live
- A working digital appointment diary will include all surgery calendars, be accessible to all staff, and link with the patient's record. The appointment diary will automate patient daily lists and pre-populate follow-up appointment letters to reduce the time spent by receptionists on manual tasks by 80%
- Increase Dental Nurse capacity by 10% by developing a treatment menu that includes automatic treatment pricing and records the consumables used, allowing better management of stock levels.
- Integrate the PMIS solution with the current Finance Package used at the practice to share/export data before go-live for successful interoperability

SPECIFIC

Who and what?

MEASURABLE

By how much?

ACHIEVABLE

How?

RELEVANT

Why?

TIME-BOUND

When?

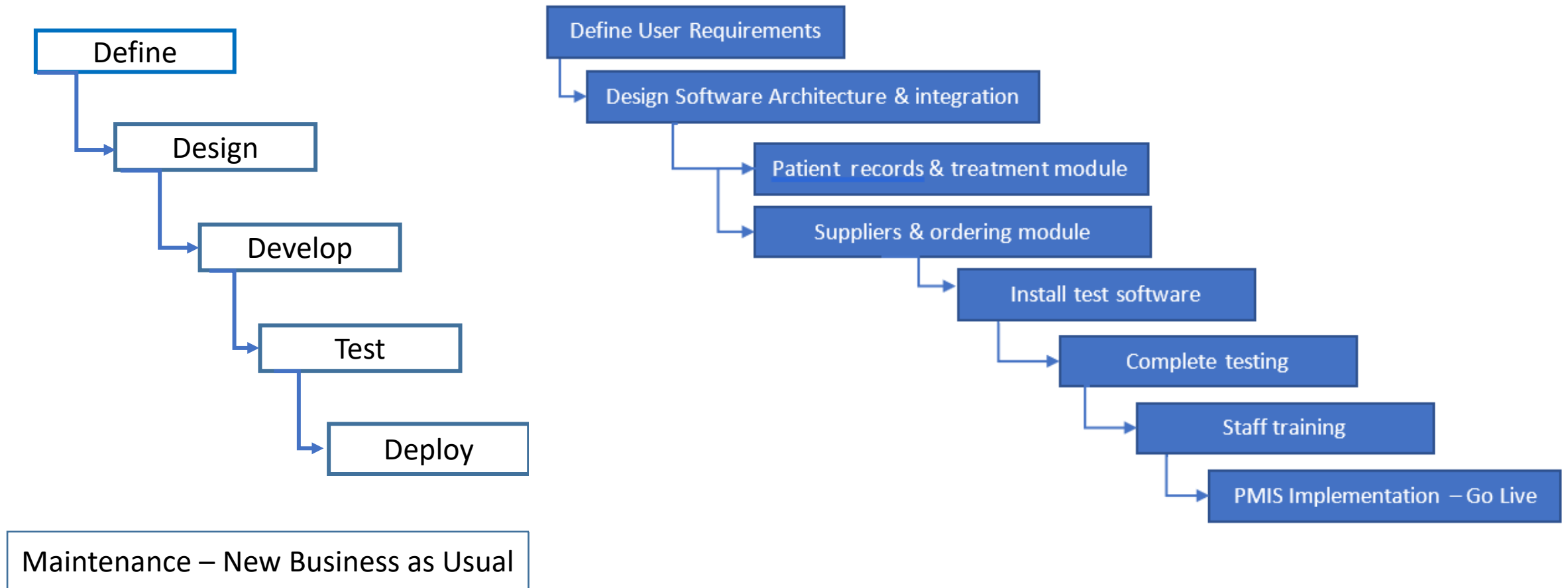
Objectives > Stakeholders

Objective	Stakeholder Interest
The project consultants will deliver a working PMIS solution to budget, that will digitalise the patient record management system and practice diaries, using a waterfall approach to project management	All internal stakeholders
Patient records must contain basic demographic details, treatment(s) received, costs incurred, payments received and be identifiable as NHS or Private patient. 30% of paper records will be transferred to the system for testing ahead of go-live	Practice Manager Dental Surgeon Dental Nurse Receptionist
A working digital appointment diary will include all surgery calendars, be accessible to all staff, and link with the patient's record. The appointment diary will automate patient daily lists and pre-populate follow-up appointment letters to reduce the time spent by receptionists on manual tasks by 80%	Receptionist Patient
Increase Dental Nurse capacity by 10% by developing a treatment menu that includes automatic treatment pricing and records the consumables used, allowing better management of stock levels.	Dental Nurse Practice Manager
Integrate the PMIS solution with the current Finance Package used at the practice to share/export data before go-live for successful interoperability	Practice Manager

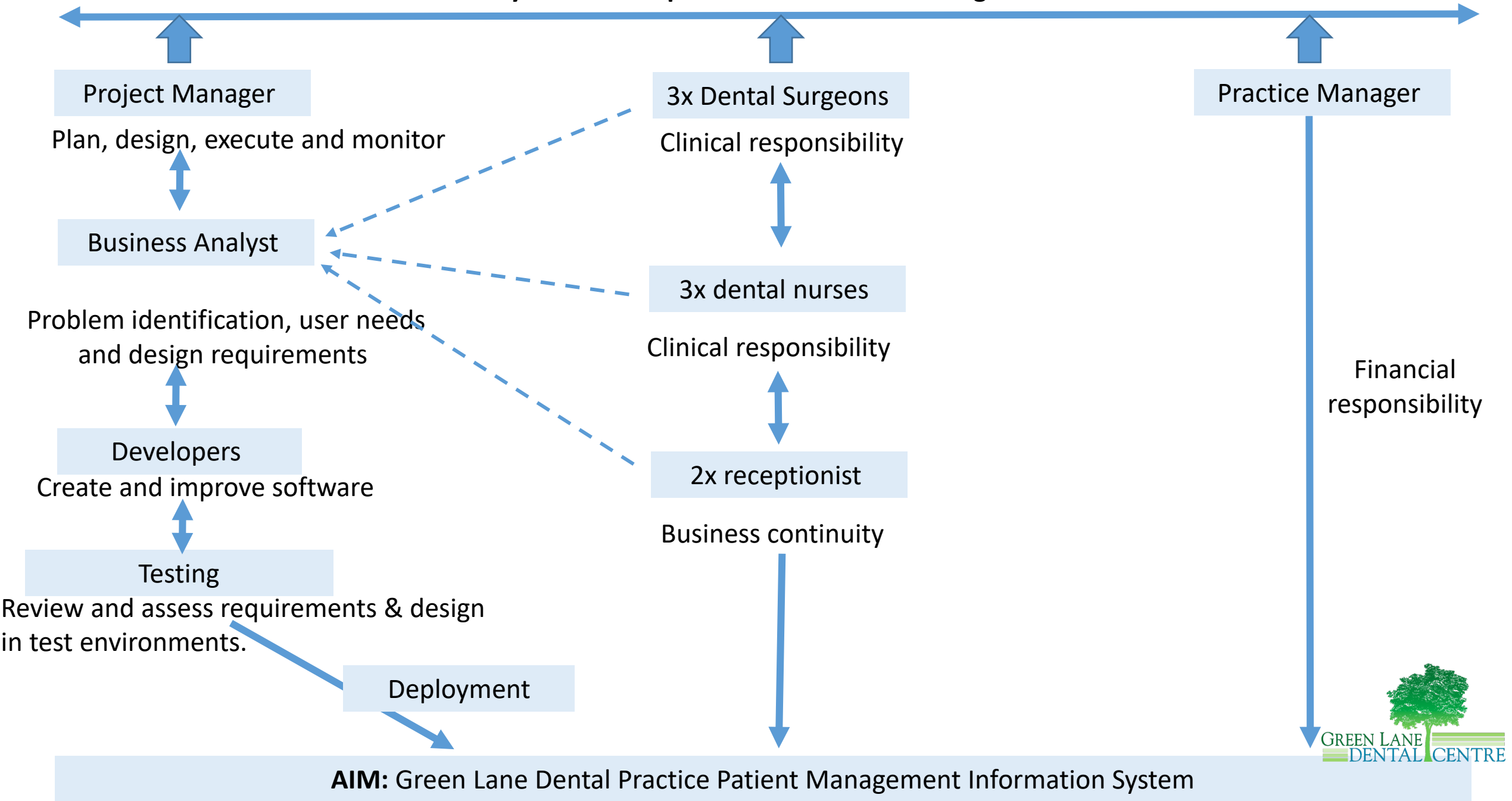
Work Breakdown Structure

Patient Management Information System (PMIS)	Phase	Activity	Task
	Define	Document user needs and design requirements	- Issue project requirements document - Define project deliverables, schedule, milestones and budget, hardware & software requirements
	Design	Complete software design	- Design software architecture - Map interface requirements i.e. with internal (financial accounting) and external (DoH, Dental Hospital, NHS Wales) systems - Define storage and security requirements (GDPR compliant) - Confirm GUI appearance and functionality
	Develop	Software coding	- Develop patient records and treatment module - NHS and private patients - Develop suppliers and ordering module - Develop system interfaces / integration
	Test	Implement testing phases	- Detailed and documented testing phases to include key stroke / click testing - User Acceptance Testing, interface testing - User training
		Training	
	Deploy	Implementation of PMIS – Go Live	Client acceptance
	Maintenance	Issue reporting	Process for reporting issues and requesting changes

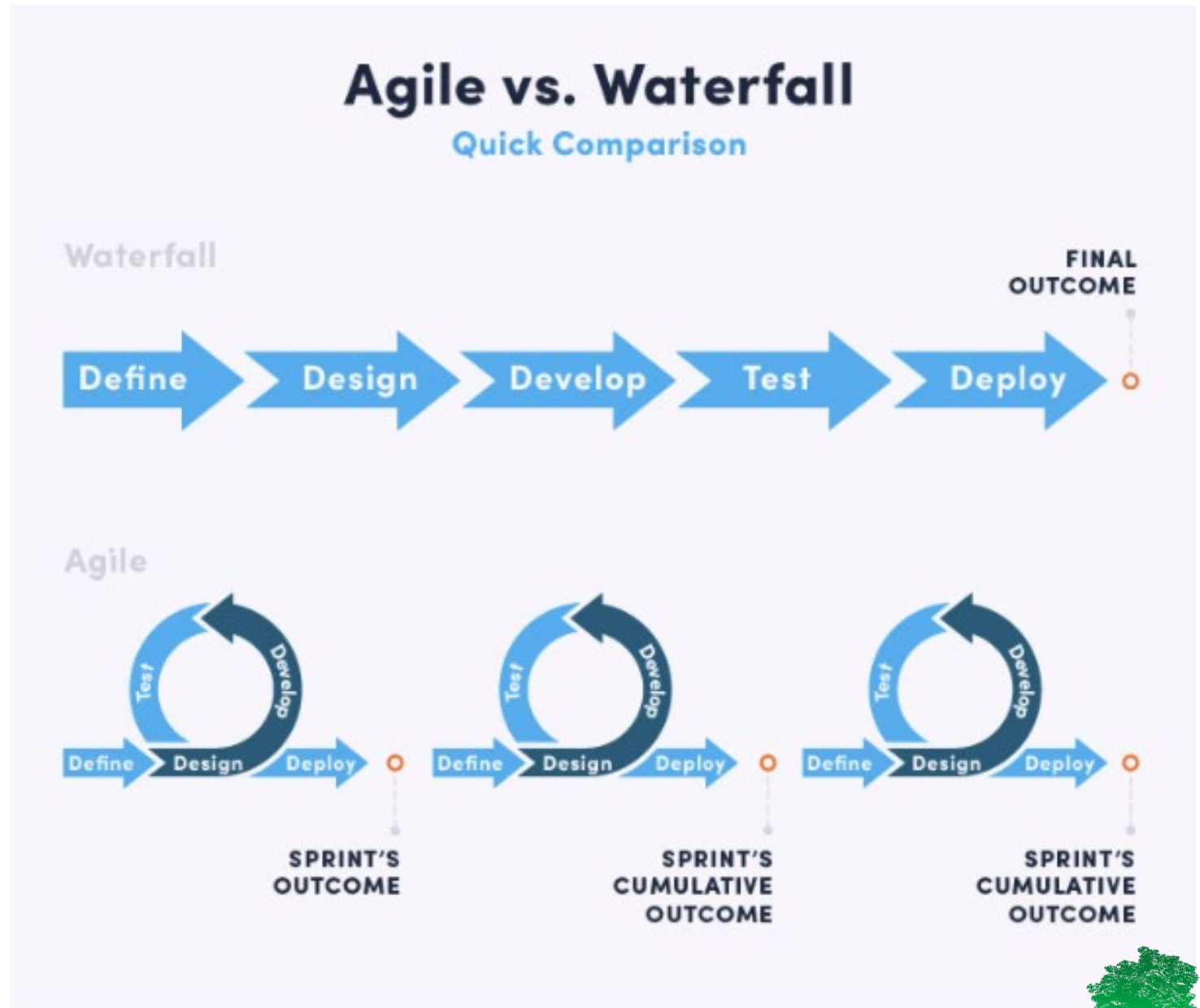
Task Dependency Network



Information System development team - Matrixed organisational structure



Agile VS Waterfall Methodology



(Image from: Selleo, 2021)

Agile

VS

Waterfall

Flexible

Much more communication needed between project team and client

Development and testing of changes are simultaneous throughout development process

User friendly- Clients can give user feedback after every stage.

Allows release of a standard system before complete product

Structured- full scope agreed upon in advance

Little client involvement- Client only takes part in first and last stages of the project.

Changes can be tricky due to set timeframes

Last minute testing- a lot of time is spent in development phase with limited time to test the system.

Final product released when whole process is complete.

Detailed Task List

Phase	Task ID	Task Description	Responsible Parties	Predecessors
Define	A1	Define User requirements	Project Manager	
	A2	Deployment diagram	Project Manager	A1
	A3	User Modelling	Project Manager	A1
Design	B1	Design Software Architecture	Project Developers	A1
	B2	Map interface requirements	Project Developers	A1
	B3	Get quotes for relevant hardware and software	Project Manager	A1
	B4	Generate Purchase Orders	Project Manager	A1, B3
Develop	C1	Develop patients records and treatment module	Project Developers	B1-2
	C2	Develop suppliers and ordering module	Project Developers	B1-2
	C3	Develop system interfaces/integration/data linkages	Project Developers	B2
	C4	Install software on Dental Computers for Demo/Test	Project Developers	B4
Test	D1	Test Functionality	Project Developers	C4
	D2	Carry out Amendments	Project Developers	D1
	D3	Complete testing	Project Developers	D2
	D4	Train Staff on demo system	Project Developers	D3
Deploy	E1	Implementation of PMIS - System Go Live	Project Manager	D1-4

Project Planner

[illegible]

Quality Assurance

.....of Product of Each stage
.....of Project Processes

Define – Define User Requirements
Project Charter
Project scope Definition
Benefits Review Plan
Business Case

Resources, Budget, Time

Stage Exit Criteria:

- Processes Completed
- Work Product Delivery
- Formal review for quality

Design

Product Status Accounts

Work Packages – tasks broken down for each stage and handed out to teams at right stages.

Communication Management Strategy

Configuration Management Strategy

Daily Log

End Stage reports

Risk & Issues Logs

Risk Management Strategy

Lessons Log

Project Product Description

Quality Management Strategy

Quality Register

System Architecture Design

Defect Prevention Strategy

Software Requirement Specifications - reviewed for completeness, flaws, maintainability, testability

Design review

Develop

Product Status Accounts

Work Packages – tasks broken down for each stage and handed out to teams at right stages.

Daily Log

Risk & Issues Logs

Quality Register

Software Requirement Specifications - reviewed for completeness, flaws, maintainability, testability

Development Review

End Stage reports

Test

Product Status Accounts

Work Packages – tasks broken down for each stage and handed out to teams at right stages.

Daily Log

End Stage reports

Risk & Issues Logs

Quality Register

System Architecture Design

Software Requirement Specifications - reviewed for completeness, flaws, maintainability, testability

Testing Review

End Stage Report

Deploy

Product Status Accounts

Work Packages – tasks broken down for each stage and handed out to teams at right stages.

Daily Log

Risk & Issues Logs

Quality Register

Deployment Review

End Stage Report

Maintenance

End Project Report

Deliverable	Tasks
Project Charter	Produce Arching statement of project
Business Case	Define scope of project Identify user requirement identification Identify project objectives Identify all possible options for delivering project Effort resource & cost estimation Initial project schedules Identify expected benefits/dis-benefits Identify required investment Identify major risks
Benefits Review Plan	Identify when measurement of the benefits of project should be made
Product Status accounts	Create the templates and populate the account with the state of products within defined limits
Work Packages	Breakdown the work in to sensibly sized 'packages' to be handed out to teams at the appropriate times
Daily Log	The 'Captain's Log' for the project....updated daily

Deliverable	Tasks
End stage Report	Documented summary of review of stage
Risk & Issues Logs	Document all risks, grade their severity, decide how best to mitigate them
Risk Management strategy	Decide how risks and issues will be managed
Product Description	Describe all of products required for project (and process management products)
Quality management Strategy	Clearly define the lines of communication, accountability, reporting, how quality is to be measured for each facet of the project
Quality register	Identify all the standards/templates and methods to be used to measure the quality of all elements of project
Systems Architecture Design	Create wire frames of System
Defect Prevention Strategy	Identify methods of reducing defects in the creation process
Software Requirement Specifications	Identify the Requirements of a minimal viable product
Lessons Learned Report	

Reference List

- Selleo [2021] *Agile Software Development Process – Everything You Need to Know* [Online] Available from: <https://selleo.com/blog/agile-software-development-process-everything-you-need-to-know> [Accessed 24th October 2022].