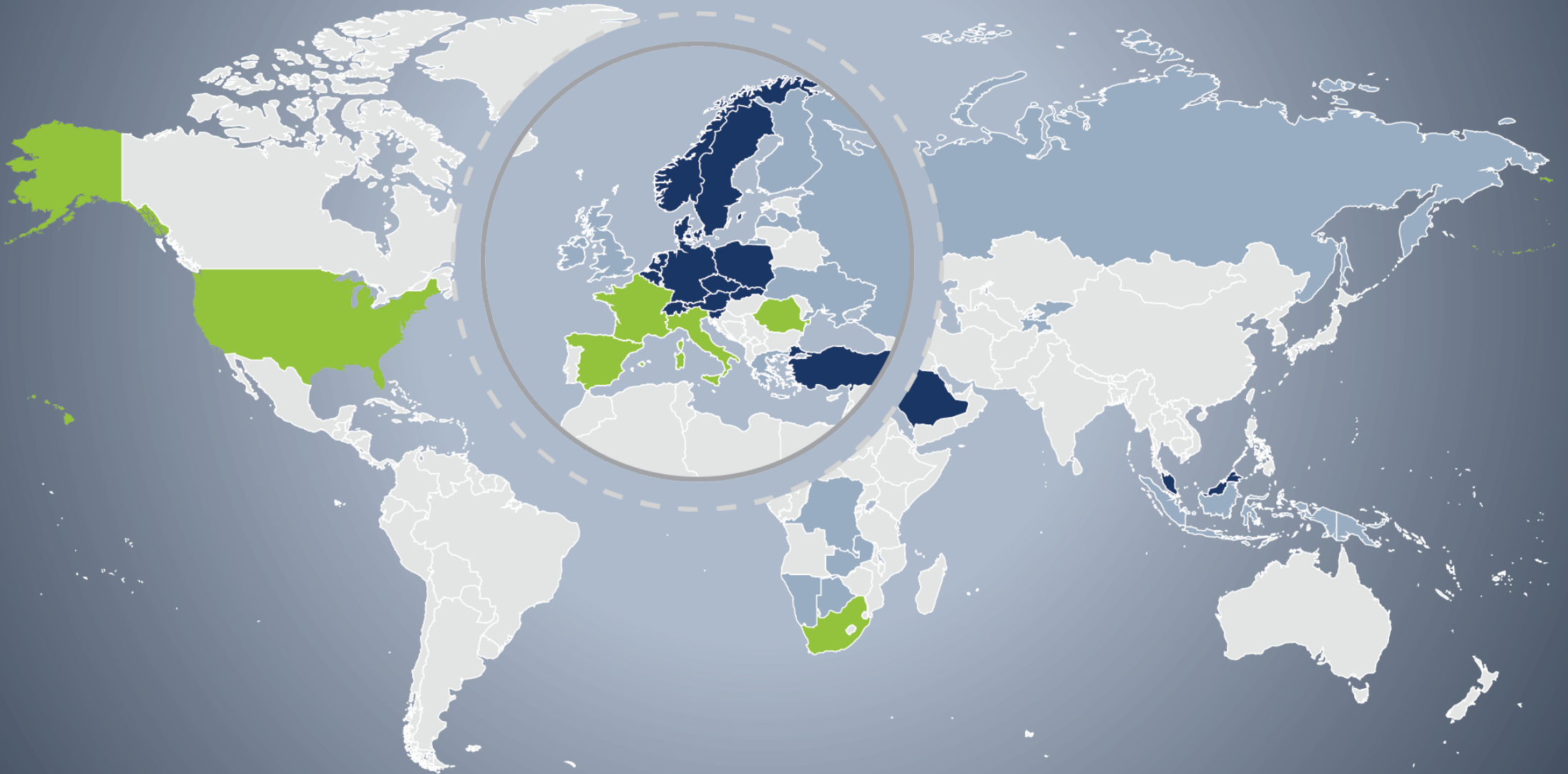




TASK FORCE SUMMARY & NEXT STEPS



DELIVERING INNOVATION AS A SERVICE

GAT has delivered several successful products...

MediEd



- Launched in 2019.
- Cloud-based EMR for Schools and Universities.
- Currently 30+ Clients and 1700+ Users.

CGM Measures



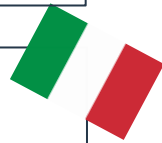
- Launched in 2018
- A web-based application providing dashboard of Clinical Quality Indicators for G2's & G3's
- Supports US MU3 customers but rule engine can adapt to ANY clinical indicators
- 75 customers and 200+ users

CGM ERX



- Launched in 2018
- US Specific ERX module extracted from MediStar for use by G2's & G3's
- Supports standard & controlled substance prescribing & drug interactions/allergy
- 200+ clinics with all CGM US clinics to be transitioned by MS1 2020

eFATTURA



- Launched in 2019
- Cloud based invoicing software with basic note features
- Targets independent physicians
- More than 60+ providers

CARA4A (ZA) in 2020 – First Alpha Pilot customers going live in mid-Jan

... yet the current set-up provides some limitations

	Working well	Room for improvement
Product	Focused products close to template developed efficiently	<ul style="list-style-type: none">• Lack of alignment on product vision with central USP and market differentiation• No alignment on MVP concept (lean, agile, targeted)• Lack of clear design system• No common DevOps model• Current product without modern look and feel
Methodology	Quick local development under certain conditions	<ul style="list-style-type: none">• Lack of ownership for architecture, re-use, core parts• No common framework for product development• PMs invested in local products not core product with lack of focus on reusability• No central development roadmap
Architecture	Front end architecture is modular CDM models are flexible and scalable for all needs	<ul style="list-style-type: none">• Different user interfaces• Too much variation on components used• Not enough ability to simply modify the product• No common hosting strategy
Governance		<ul style="list-style-type: none">• Lack of structure for steering, decision making, prioritization• Not all stakeholders involved• Interfaces to broader CGM ecosystem, e.g. CGM LIFE, ClickDoc unclear

To ensure continuous GAT success the set-up needs to support key requirements

Product

- Strong and common product visions with clear focus for delivery
 - Differentiated product creating excitement with customers and local BUs
 - Include legacy products in roadmap discussions and sharing of knowledge
 - One product roadmap for full development effort
 - Modern look and feel with connection to existing CGM portfolio
-

Organization, team and governance

- Alignment of organization with intended results, new name to reflect importance as program
 - Clear owner and governance for platform with strong team also understanding market needs
 - Tied into overall portfolio management and roadmap and alignment with strategy and other programs, e.g. CGM LIFE
 - Scalable organization to ensure flexibility, tied to product domain model
 - Strong steering and governance framework/committee for prioritization & decisions making, without country bias
-

Methodology and architecture

- Reducing dependencies, defining right boundaries/scope for modular product development
- Install project management, delivery status and SCRUM master
- Implement KPIs for progress and quality of stories after sprints
- Ensure involvement of key customers in streamlined CIP process with clear assignment for customer communication
- Ensure/include long term strategic perspective with clear make or buy guidelines, (e.g. AI, NLP)
- Provide transparency on strategic goals
- Product teams with clear final decision making
- Define design system and G3 style guide relation with overarching QA, UX
- Define common infrastructure and deployment methodology
- DevOps assisted development (stability, scalability, security)
- Highly scalable multitenant SaaS solution able to support anywhere from one to millions of users
- Interoperability points planned and known at design time

To support these requirements we proposed several fundamental changes to GAT

Product

- Relaunch GAT as **full fledged program under a new name** → New Ambulatory Information system = **NAIS**
- Install **clear and strong product vision** aligned between NAIS countries
- **Focus product development** to ensure successful delivery in one country **starting with Italy**
- Italian product to be built in **reference configuration** also without specific Italian features, serving as core AIS

Organization, team and governance

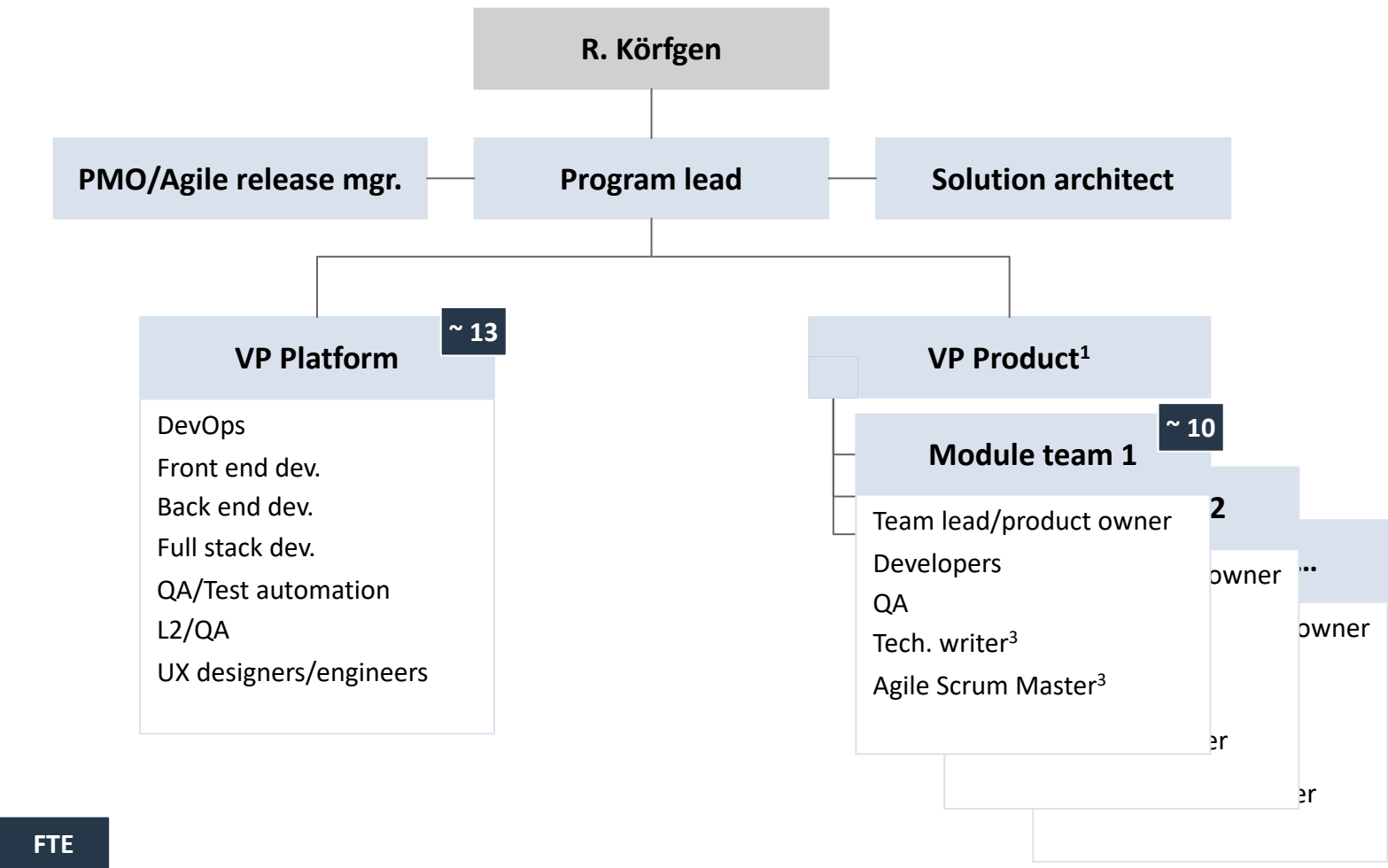
- Install **solution architects for overall product cohesiveness**, link to customer journeys and fit into G3 environment
- Ensure **right fit of talent and capabilities** especially at key positions
- Install **steering committee representing all key stakeholders**, in particular from involved countries
- **Enable G2 organizations to provide input and enable G2 organization in G3 methodology** and technology
- Enable **project management with strong KPIs and success measures**

Methodology and architecture

- NAIS team as **central product development unit for all G3 primary products**; ownership until launch in NAIS org.
- **Abandon forking model in favor of reference product** built for one market with **global docking points** in mind
- **Clear UX, architecture, data model and hosting guidelines** controlled by platform team for all NAIS products
 - Adherence to the **CIP Process**
 - Adherence to the **G3 Style guide**
 - Use of G3 Foundation components whenever/wherever possible (e.g. Common Data Models are mandatory)
 - **Scalability** and **Multitenancy** are considered from the start
 - Common platform model based on OpenStack, jointly with Group IT for common deployment
- **Consolidate backend and frontend** into monorepo and design for modularity in “macro”-services



Organization: New Ambulatory Information System (NAIS) Program set-up



Steering committee	
F. Gotthardt	G. Schütz
R. Körfgen	L. Henze
B. Brückle	W. Miller
F. Frayer	S. Müller

NAIS/BU Council	
Program lead	VP Sales²
VP Product	VP Support²
VP Platform	VP Marketing²
GMs²	

Country product expert group	
VP Product	Requirement engineers for participating countries
VP Platform	

NAIS Team Progress – Summary of Current Actions

The NAIS team will be created out of the existing GAT organization. We will be using the "GAT App" from the European colleagues as the primary basis for the new code repository and all future development

- Closest to G3 Style Guide
- Most well organized for UX adaptation
- Best back-end code for module separation inside HELIX

Other GAT products in production (ERX, Measures, MediEd, CARA4A) will stay behind in their existing code repositories and be migrated when the remainder of backlog is completed so as not to impact revenue targets.

The following steps are already underway to ensure a timely launch of NAIS

- NAIS Target Definition – Completed. Epics & Planning are being migrated to new "clean" JIRA Project
- NAIS Vision Statement – In progress
- NAIS UX360 Alignment
 - CIP Workshop for Italy Completed 12/13
 - Domain / City Plan completed
 - G3 Style guide adaptation underway – UI components under development already
- NAIS Architecture Alignment
 - Technical transition plan prepared and aligned with Global Architecture
 - Initial Team assigned with clear focus, and deadline
 - GAT/NAIS code separation – new repo created and relevant code is being copied now
 - CI Pipeline (basic) underway

NAIS Team Transition

Products which are active in production or near to production and have revenue targets dependent on deliveries will therefore be developed in their existing structure until the existing roadmap for said targets is met.

At that time they will be put into “maintenance” mode with only a skeleton team to handle customer inquiries & bug fixing for a short period. Once in maintenance mode, resources will be shifted to main NAIS development and the products will be refactored into the NAIS framework. Once refactored, maintenance team will rejoin.



MediEd – Major
enhancements due end
of MS1 2020

US Add-Ons – Major
development complete
end of MS1 2020

QURIS/CARA4A –
General release for GP's
due MS4 2020

New Code Repository & Approach – Aligned with Global Architecture (W. Miller et. al.)

- All NAIS code for all products lives in ONE single repo including front end, back end, tests, dev ops, tools, API's
- Separate products are built using only variation techniques – no forks. Branches are short life span only (≤ 1 sprint)
- Single CI pipeline, multiple build profiles depending on requested output (e.g. Italy AIS, NAIS RI, ZA AIS, etc...)
- At launch (Feb 2020) Monorepo will only consist of NAIS Reference + Italy AIS
- Additional products will be migrated to the new structure in 2020 once product & platform (CI / Test etc)... has reached maturity (est. MS4 2020)

```
monorepo/
├── api (the api definitions with variations using OpenAPI)
├── backend
│   └── see below: Backend -> Application Level
├── ci (build, integration and deployment instructions)
│   ├── nais
│   └── nais-studio
├── infrastructure (contains configurations for environments)
│   ├── nais (base configuration)
│   │   ├── development
│   │   ├── test
│   │   ├── demo
│   │   ├── staging
│   │   └── production
│   └── nais-studio (extending/using the base configuration)
│       ├── development
│       ├── test
│       ├── demo
│       ├── staging
│       └── production
├── test (test code and macros for integration and e2e tests)
├── frontend (contains the frontend application)
│   └── see below: Frontend -> Workspace Level
├── tools (scripts, binaries)
└── README.md
```

Transition into new structure will occur by End of February

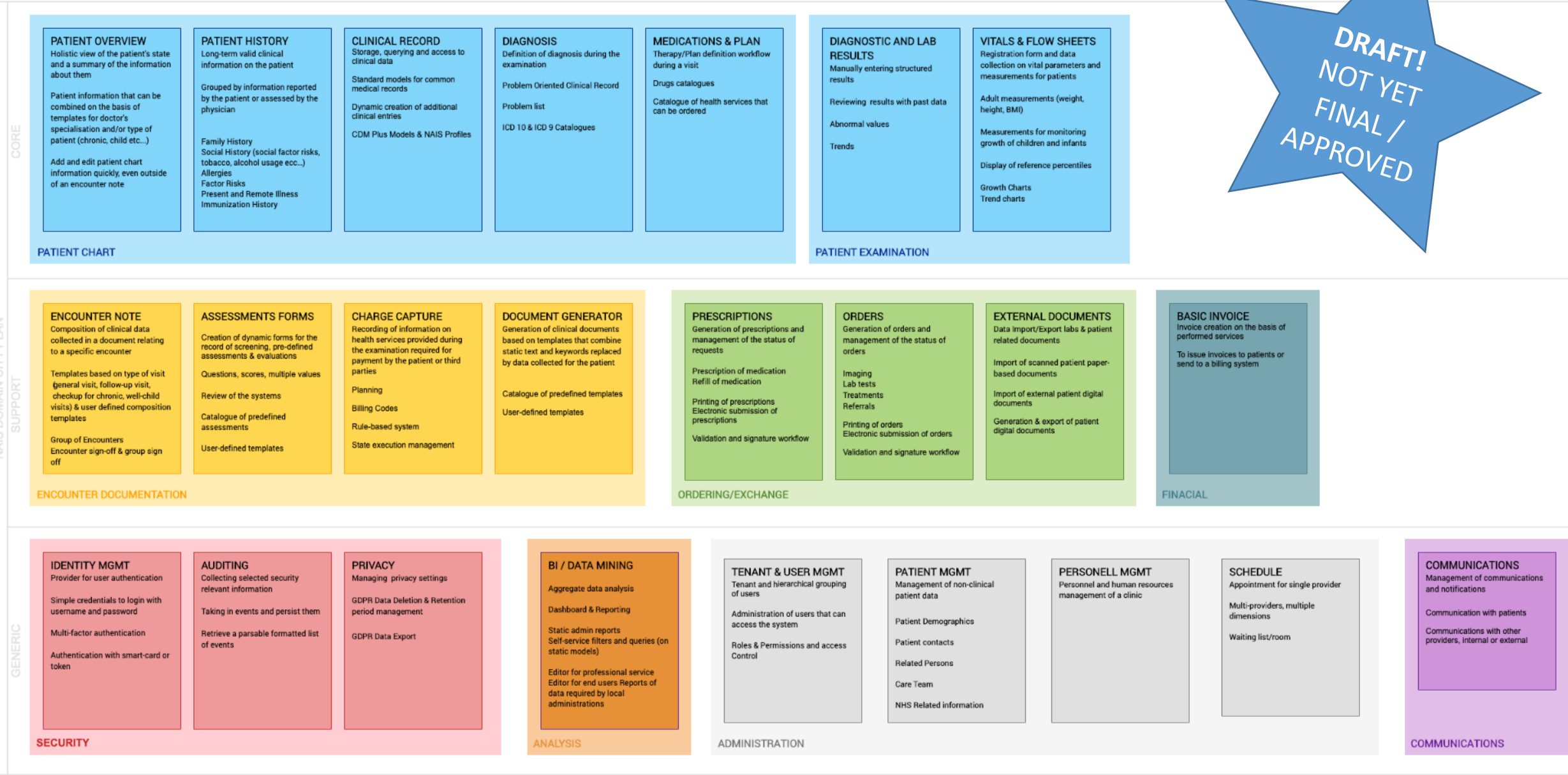
CW 50	Decide final code structure, prepare new mono-repo. Technical preparations for UI (G3 Style Guide) & Servers
CW 51	Complete Dev & Staging environments. Setup CI Pipelines & Domain city plan. Technical refactor / preparation
CW 52	Christmas / New Year Week – limited dev
CW 01	Dev & Stage working. Removal of obsolete code. Continue UI preparations (re-style components)
CW 02	Technical UI reworking for G3 Style Guide. Code restructuring. CIP REQUIREMENTS COMPLETE
CW 03	Technical UI rework continued. Begin Front-End & Back-End rework
CW 04	FE & BE rework continued
CW 05	FE & BE rework continued
CW 06	FE & BE rework, migration
CW 07	FE & BE rework, migration Italy & NAIS Reference Impl. able to be compiled & run individually



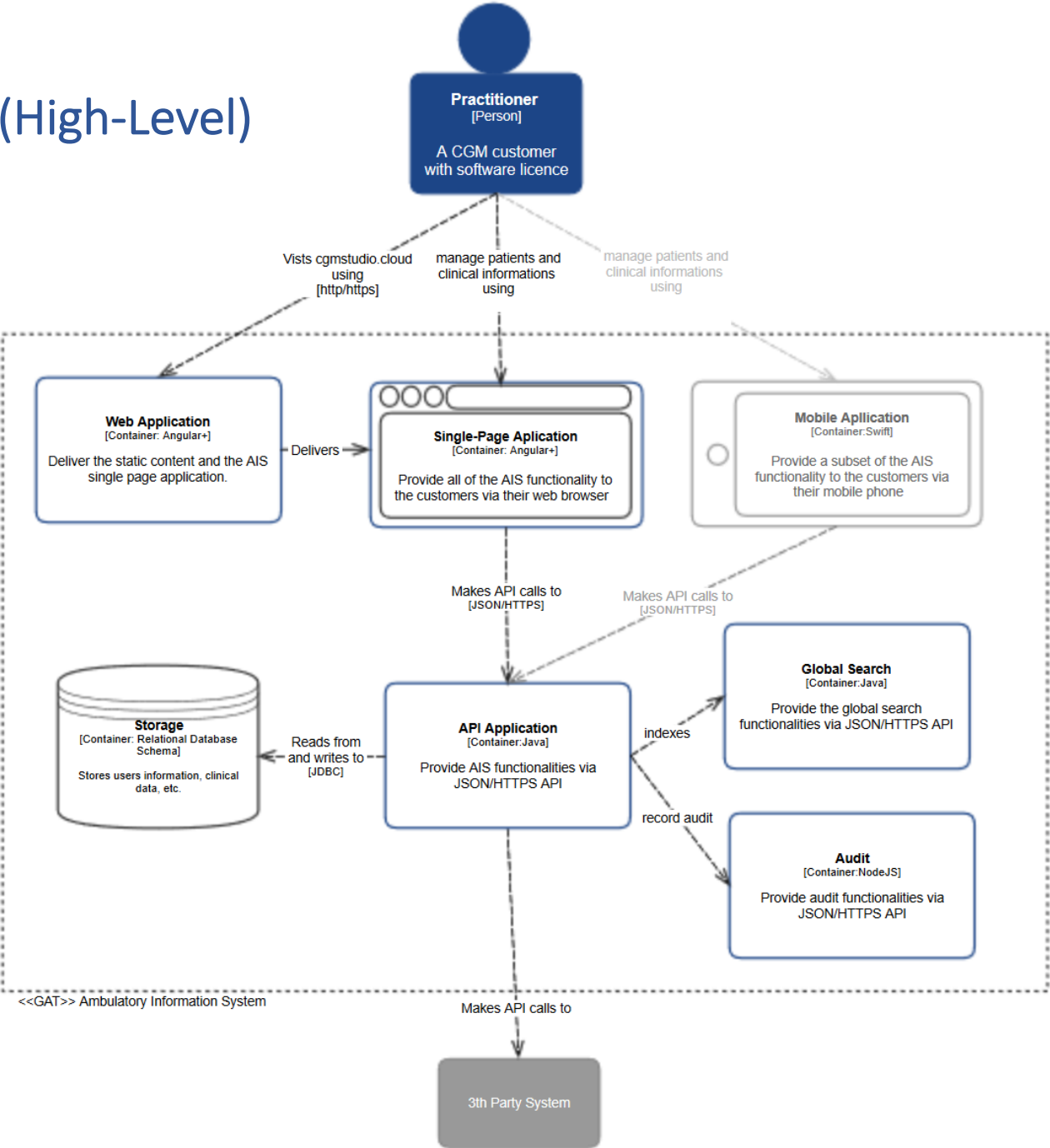
Before teams can be fully transitioned, certain technical & product goals must be met as outlined here

A small initial Platform Team has already been created in order to handle this preparation. Initial work began week 50

Domain City Plan – Updated 12/16

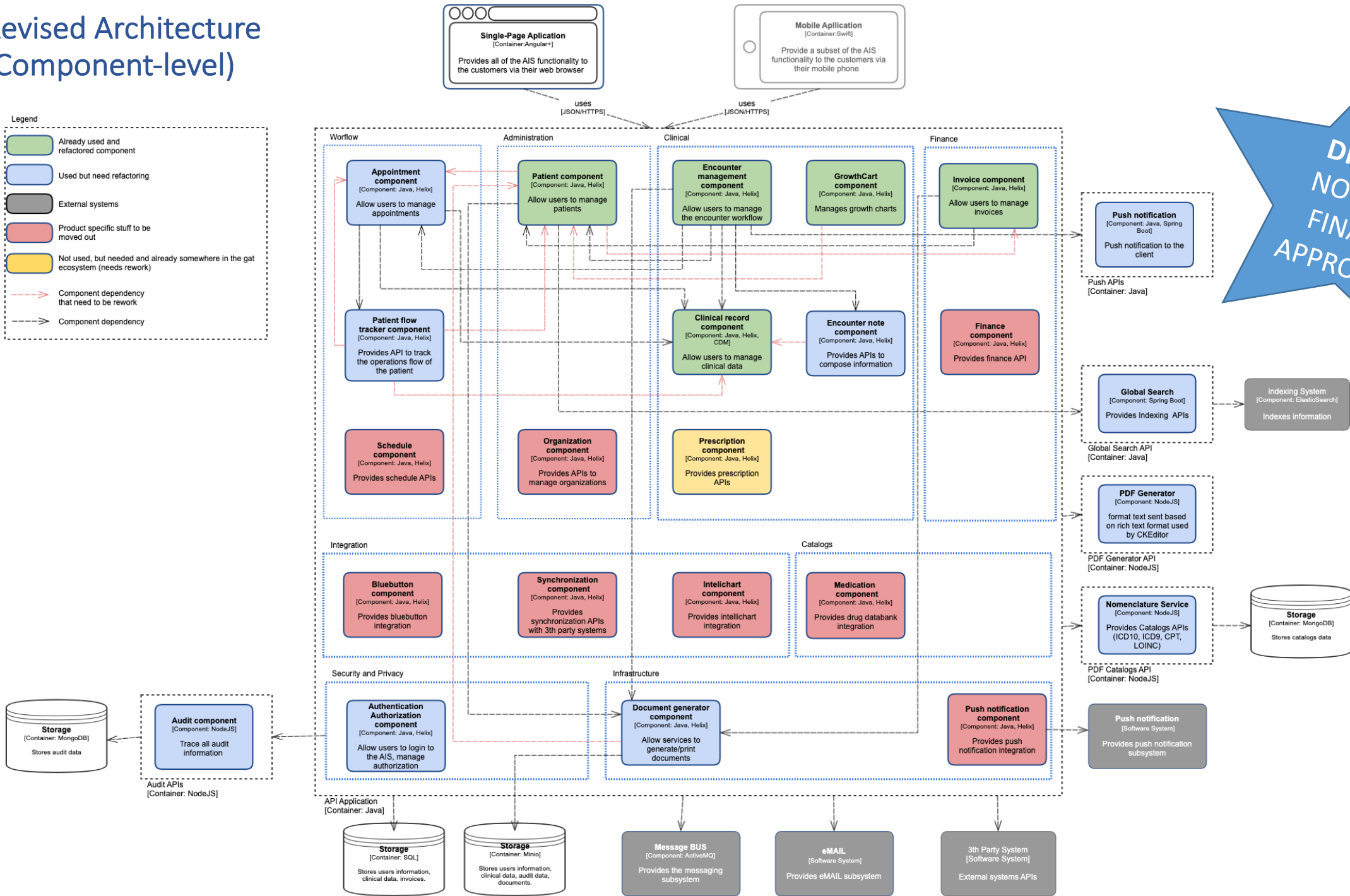
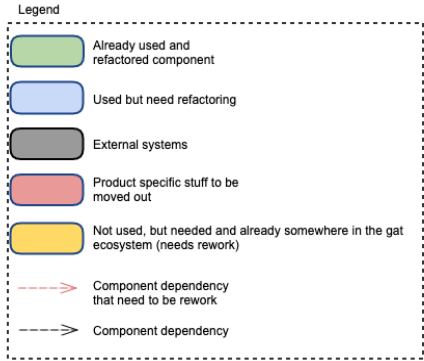


Revised Architecture (High-Level)



DRAFT!
NOT YET
FINAL /
APPROVED

Revised Architecture (Component-level)



Next Steps until NAIS Kick Off

When	What
CW 03	NAIS Steering Committee Meeting #2 (Final Approvals)
CW 03	Start work on NAIS Italian variation / migration
CW 03	HIP Sprint
CW 05	GAT MS 1 Planning (MediEd / CARA4A)
CW 07	NAIS Ready for general development – Epics prepared
CW 07	NAIS MS1 Planning / Kickoff
CW 07	First sprint measurements GAT
CW 09	First sprint measurements NAIS



Note: GAT Production teams which will stay separate (specifically: MediEd/CARA4A) will run their own MS1 planning BEFORE the rest of the NAIS Team (platform & module teams)

This will only happen in MS1 due to a need for extra time to prepare the NAIS Platform

Thank you for your attention!

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