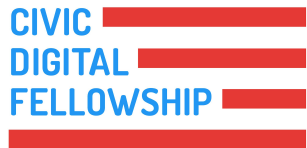


CR PEOPLE AND SYSTEMS

Medicare Payment System Modernization (MPSM)

Shannon Williams — Director of MPSM



MELISSA ANTHONY
Olin College of Engineering
Engineering

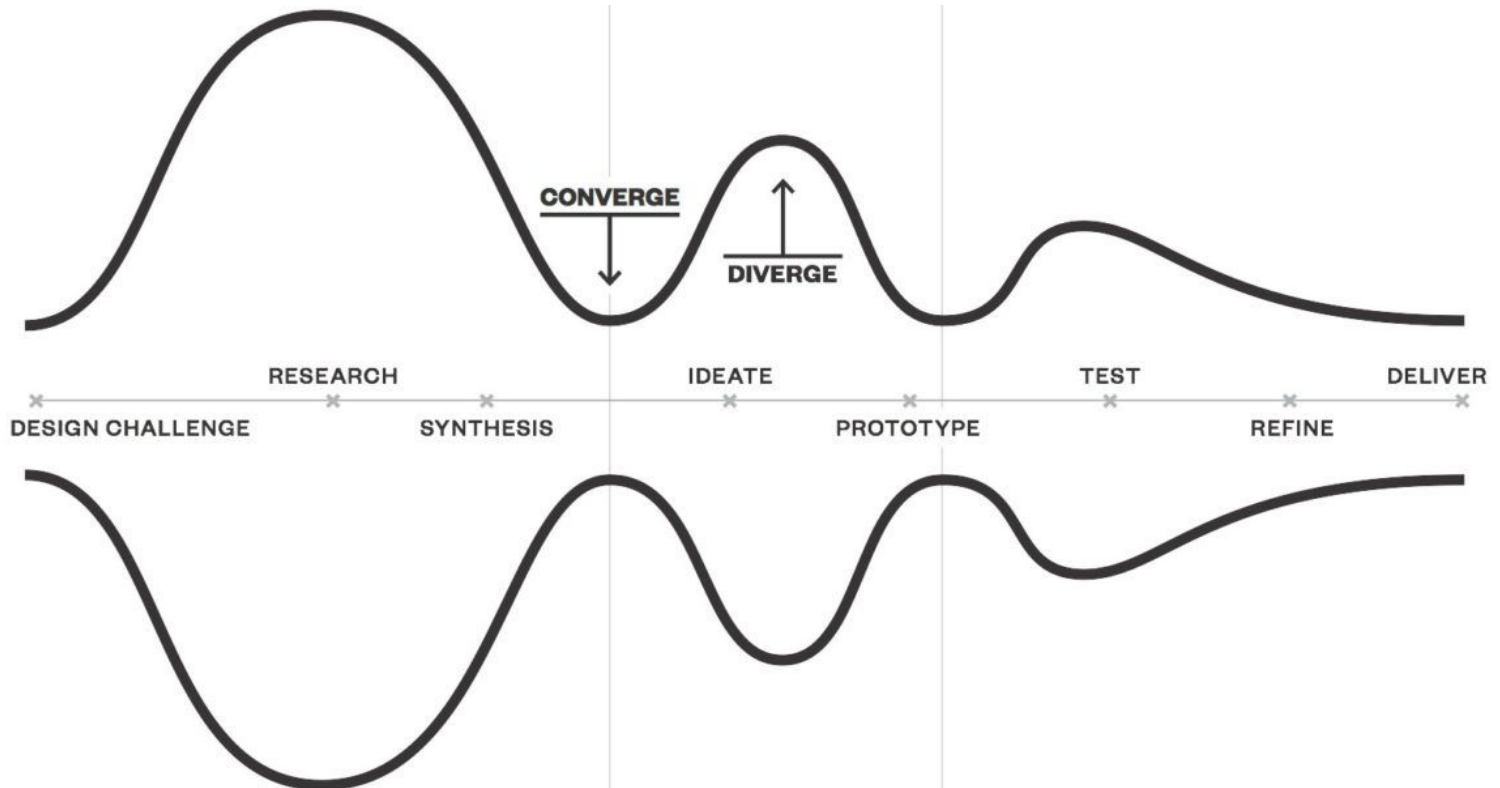
EMI ROHN
Dartmouth College
*Geography and
Human-Centered Design*

THE PROBLEM – OVERVIEW

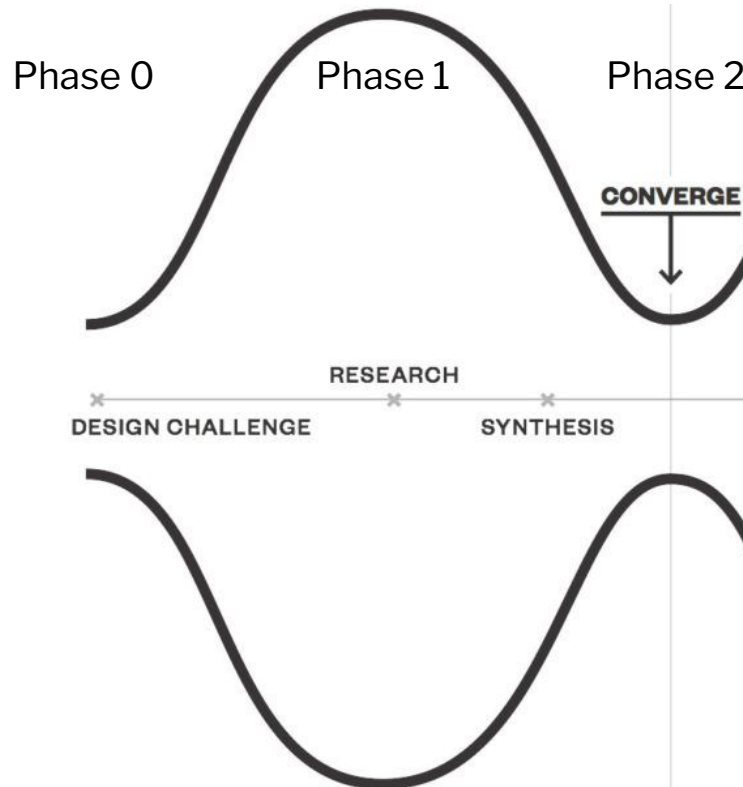
- CMS's MPSM team is trying to modernize an outdated, complex payment system.
- They are using human centered design (HCD) and agile to ensure that the modernized payment system meets stakeholder needs.
- We were tasked with creating personas for this system.



PROCESS



PROCESS



Phase 0: Initial Planning

- Project brainstorming
- Project Directions

Phase 1: Consolidate Personas

- Consolidate Personas in Confluence
- Group Personas

Phase 2: Expand on Personas

- Re-Orienting/Narrowing
- Systems Level HCD

PHASE 0: INITIAL PLANNING

What is one thing that excites you about starting this project?

Understanding and empathizing with the experiences of a diverse array of people

Improving my overall communication skills through user interviews

Better understanding what it's like to work in the public sector

Learning about Medicare, something that will benefit me later on in life

Immersing myself in something that's completely outside my comfort zone

Applying what I've learned about design in school to a real-life challenge

Helping government officials understand the people they're trying to help

Using my design skills in the real world

Understanding work in the government

Work with other Human Centered Designers (CMS Contractors)

We need to better understand and categorize our stakeholders

We have a diverse stakeholder community and want to understand them, put them in buckets, know their likes, dislikes, motivations

Better serving diverse stakeholders

PHASE 0: INITIAL PLANNING

What is your vision for this phase of the product?

Goal for this project

★
Overall: help create a new Medicare payment system that more efficiently interfaces with key players

★
New insights, not repeating work that's already been done

★
Better understand the user to make better systems

★
Help stakeholders understand value of HCD - training for them as well

We want to give our stakeholders a journey through HCD

Personas based on user interviews

Detailed enough personas to help MPSM make decisions

It is us, we make technology for MACs which MACs use to address Benes concerns

We need to better understand and categorize our stakeholders

Note: Stakeholders don't usually include users or providers. MACs interface with them

Understand the pain points of stakeholders

With interviews, quality > quantity, making that our findings don't leave any gaps

Identify inefficiencies within the system itself that can be remedied

Finding gains that could be easily implemented

Understanding needs and not just jobs

Seeking advice from HCD employees and contractors within CMS

Help stakeholders understand themselves

Understanding current situation

Envisioning a better future for MPSM to strive towards

Helping design a system with flexibility in mind - one that can adapt to changing world

Two directional help. They help us understand them and develop in our corner, we help them understand themselves and HCD

VISION

In order to support MPSM's overall goal to create a new medicare payment system that more efficiently interfaces with key players, we will **apply human centered design principles** to create user personas, using past research, new interviews, and insight from the MPSM team, **educate stakeholders** about the value of HCD during this process and, **build trust** between stakeholders and MPSM through the process of HCD.

VISION

In order to support MPSM's overall goal to create a new medicare payment system that more efficiently interfaces with key players, we will **apply human centered design principles** to create **valuable artifacts** ~~user personas~~, using past research, new interviews, and insight from the MPSM team, ~~educate stakeholders~~ about the value of HCD during this process and, **build trust** between stakeholders and MPSM through the process of HCD.

RESULT

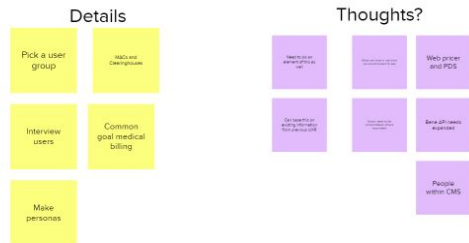
In order to support MPSM's overall goal to create a new medicare payment system that more efficiently interfaces with key players, we will

apply human centered design principles to create ^{user} personas, valuable visualizations and artifacts using past research, ^{new interviews,} and insight from the MPSM team, **educate stakeholders** about the value of HCD during this process, and **build trust** between stakeholders and MPSM through the process of HCD.

PHASE 0: INITIAL PLANNING

Phase 2

Redo/expand on current personas



Personas of people within CMS



Phase 1

Consolidate existing personas



PHASE 1: CONSOLIDATE PERSONAS

Found all previous personas
and consolidated in a single
Confluence page

Many different teams within MPSM have created personas, these are compiled here.

- MPSM Personas Table
 - Interview Analysis
 - PC Pricer User Journeys
 - PC Pricer Preliminary Personas
 - PC Pricer Personas
- Strategic Design
 - Persona PDF
 - User Story Personas (Incomplete)
- Bene API Personas
 - Cycle 1 - MSP data needs and pain points (12/11/2020)
 - Cycle 3 - MACs workflows between FISS/MCS and HIMR
 - Cycle 4 - API Design
- MAC API
- Non-MPSM Groups
 - MDP Persona Making

MPSM Personas Table

(Source: [MPSM Personas Table](#))

Last modified May 19, 2021

Persona	Beneficiary	Provider	Clearinghouse	A/B MAC	DME MAC	Policy Team(s)
Customer/Consumer*	Customer	Customer	Customer	Customer	Customer	Customer
Description/Purpose	Medicare recipients: People over 65 and who are entitled to Medicare.	Institutional Providers - hospitals, outpatient departments, hospices, home	Companies who offer services to providers to bill insurance (including	Medicare Administrative Contractor for Medicare Parts A & B Responsible for	Medicare Administrative Contractor for durable medical equipment	Primarily teams in Medicare (CM) who legislaion and dev Rules regarding pa updates each year. Coverage and Anal

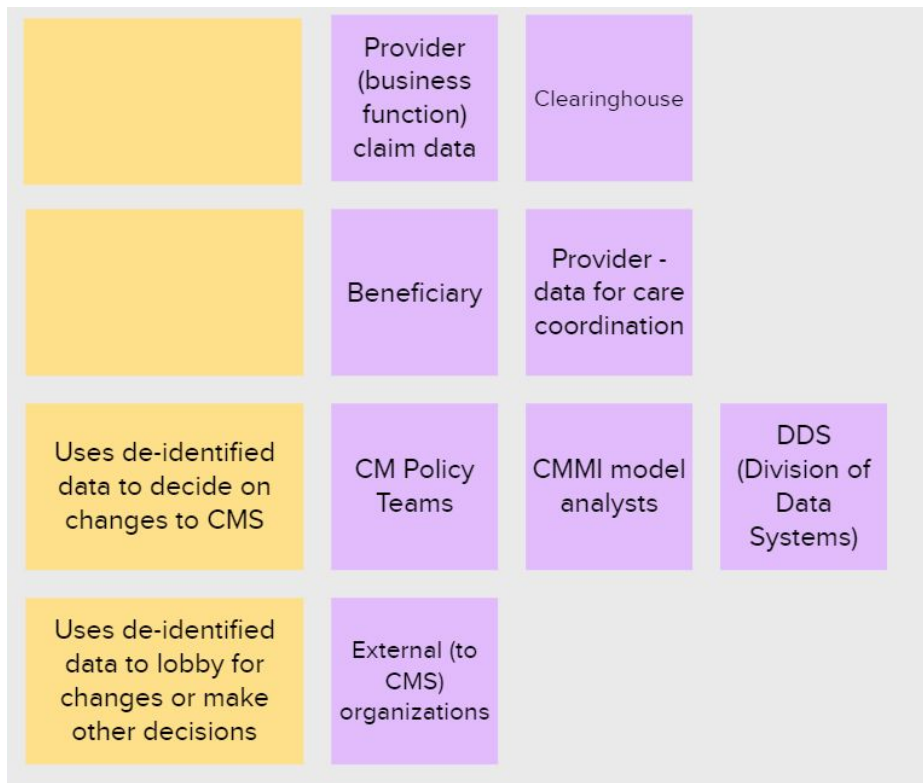
PHASE 1: CONSOLIDATE PERSONAS

Provider (business function) claim data	Clearinghouse	MAC Testing	DME Mac Local System Change	A/B MAC Local System Change	CMMI Model Teams	Policy Teams
Beneficiary	Provider - data for care coordination	CM Pricer Developers	Beneficiary	Provider	Coordination of Benefits Contractor	CM CR Writer
CM Policy Teams	CMMI model analysts	DDS (Division of Data Systems)	Provider	Clearinghouse	Testing Contractors	SSM - Analysts
External (to CMS) organizations	SSM - "Master" Shared Systems Developers	OIT ADOs	MAC Manual Adjudicator	MAC Medical Reviewer	Security Officer	

CHANGING THE SYSTEM



CONSUMING DATA FOR DECISION MAKING



FACILITATING ADJUDICATION



PHASE 2: EXPAND ON PERSONAS

Changing the System

Policy Teams

Job to be done: Help to apply policy to the systems with the correct time, administrative changes.

CMS CR Writer

Job to be done: Decide on and write the exact specifications for changes to be made.

SSM - Analysts

Job to be done: Determine what changes can be made to the system and write the exact specifications for changes to be made.

CMMI Model Teams

Job to be done: Responsible for applying policy that affects the system of the system for the purpose of the CMMI model.

SSM - "Master" Shared Systems Developers

Job to be done: Make changes to the system in a C2 for the "Master" version of the SSM, MCS, VMS for the MACN for their use.

Job to be done: Make changes to the system in a C2 for the "Master" version of the SSM, MCS, VMS for the MACN for their use.

OIT ADOs Office of IT Application Development Organization

Make programs on cloud platform

Allow for incremental development

Job to be done: Make an incremental change to the system in a C2 for the "Master" version of the SSM, MCS, VMS for the MACN for their use.

CM Pricer Developers

Job to be done: Responsible for CM to ensure the system is in a C2 for the "Master" version of the SSM, MCS, VMS for the MACN for their use.

The prices are linked to the "grouper" - see right

3M - Grouper Developers

Job to be done: Handle all CM that involve updates and changes to the Grouper (only in C2).

Security Officer

Job to be done: Security infrastructure?

Testing Contractors

Testing for integration of new changes into the "Master" version of the SSM, MCS, VMS for the MACN for their use.

A/B MAC Local System Change

Job to be done: Make changes to the system in a C2 for the "Master" version of the SSM, MCS, VMS for the MACN for their use.

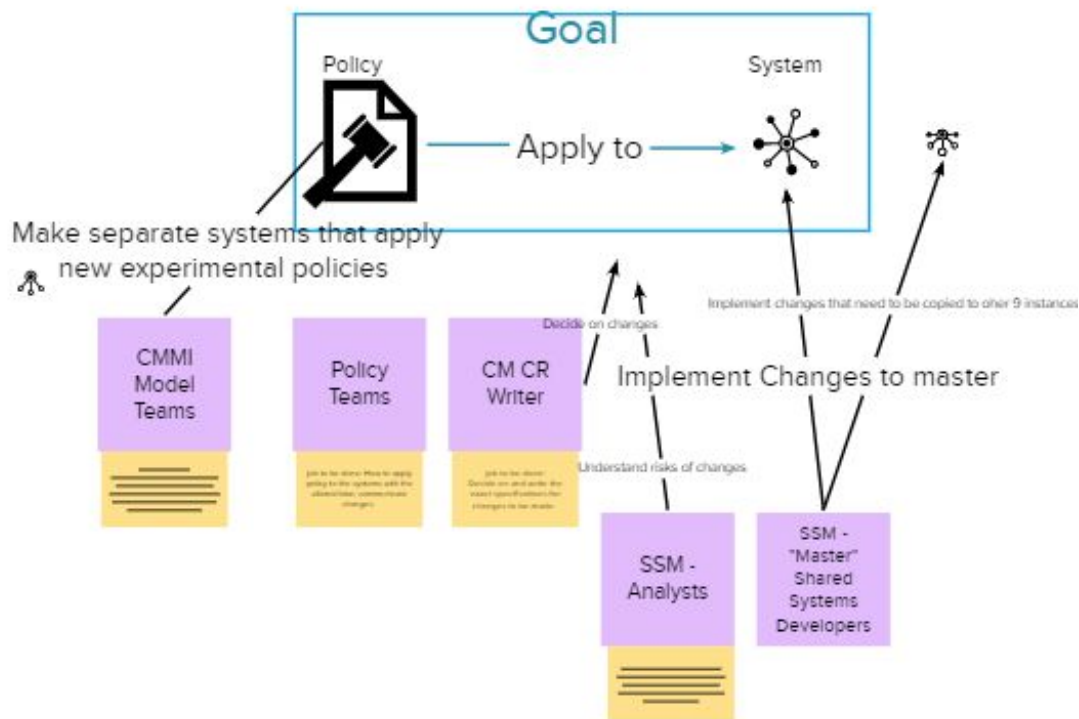
DME Mac Local System Change

Job to be done: Make changes to the system in a C2 for the "Master" version of the SSM, MCS, VMS for the MACN for their use.

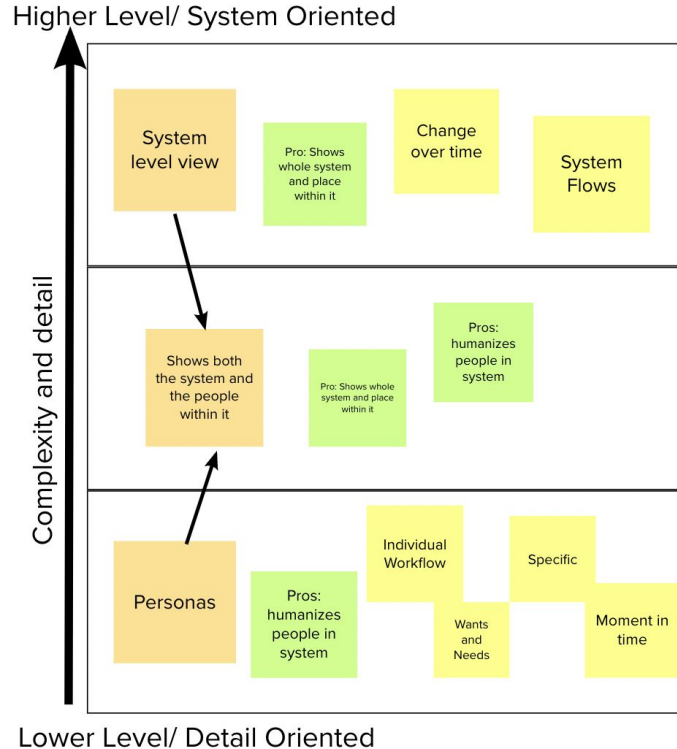
MAC Testing

Job to be done: Conduct tests to ensure the system is in a C2 for the "Master" version of the SSM, MCS, VMS for the MACN for their use.

INITIAL ITERATION

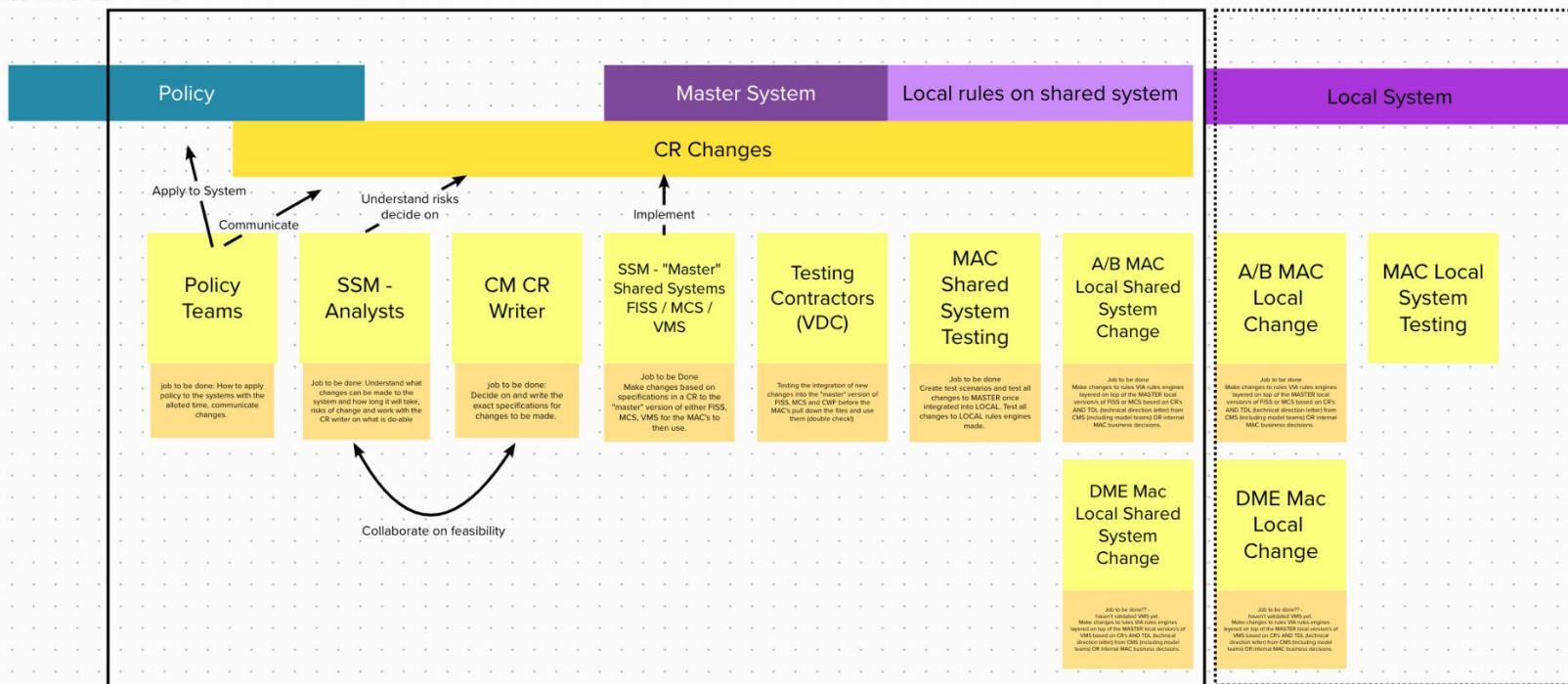


HIGHER OR LOWER LEVEL ARTIFACTS?

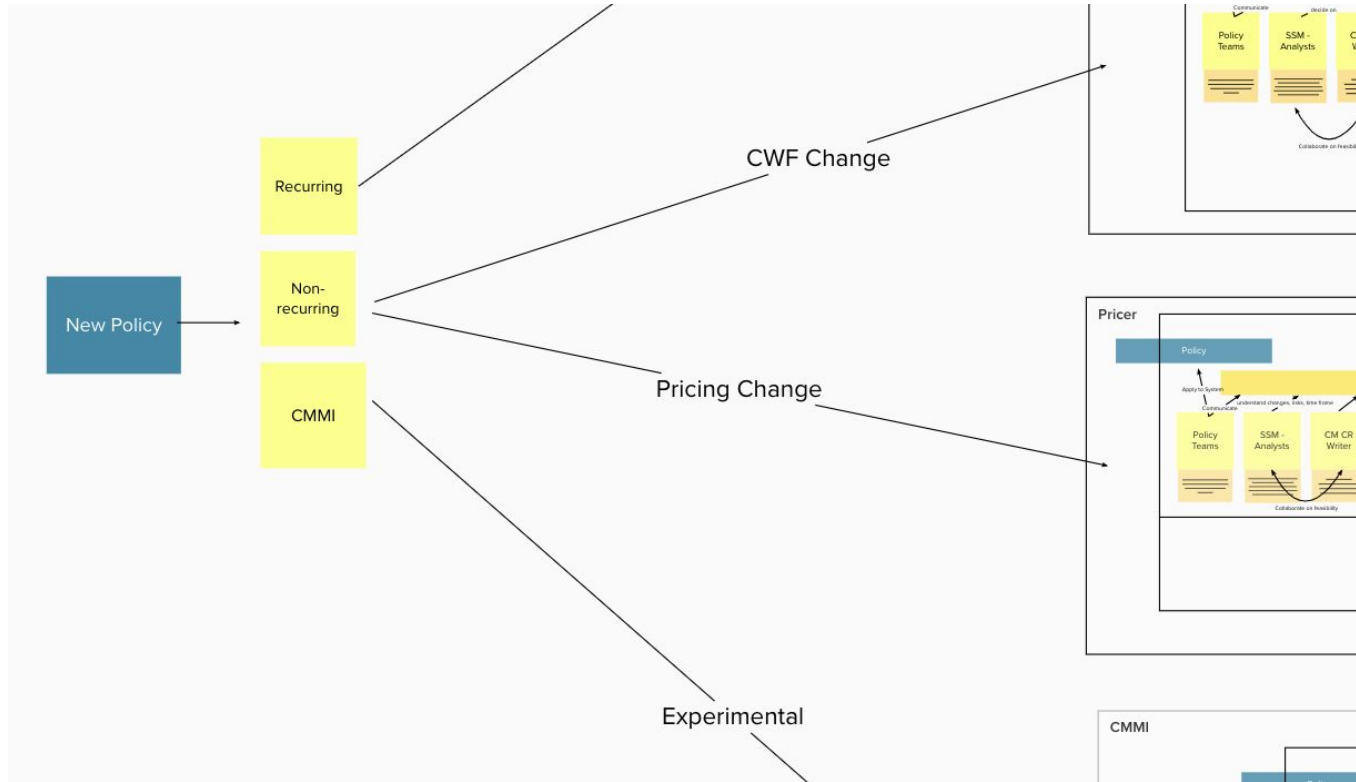


RESULTS

Fiss/MCS/VMS



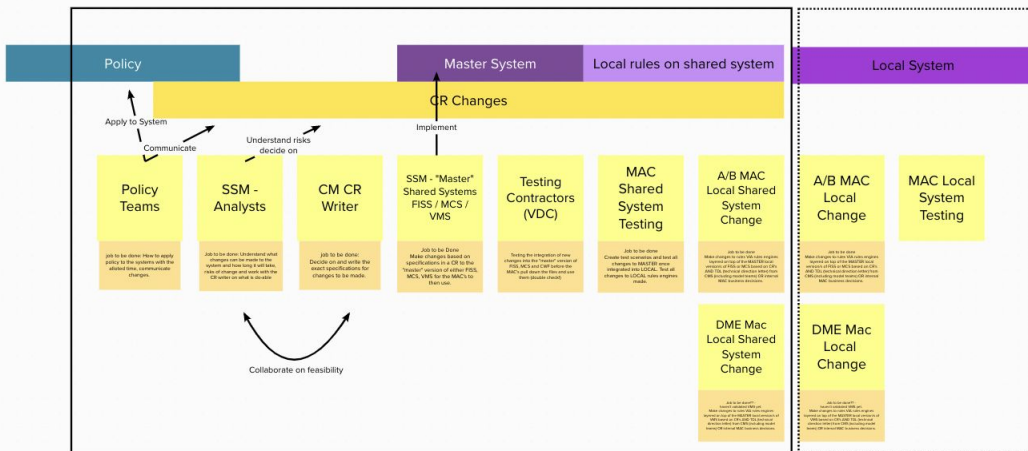
RESULTS



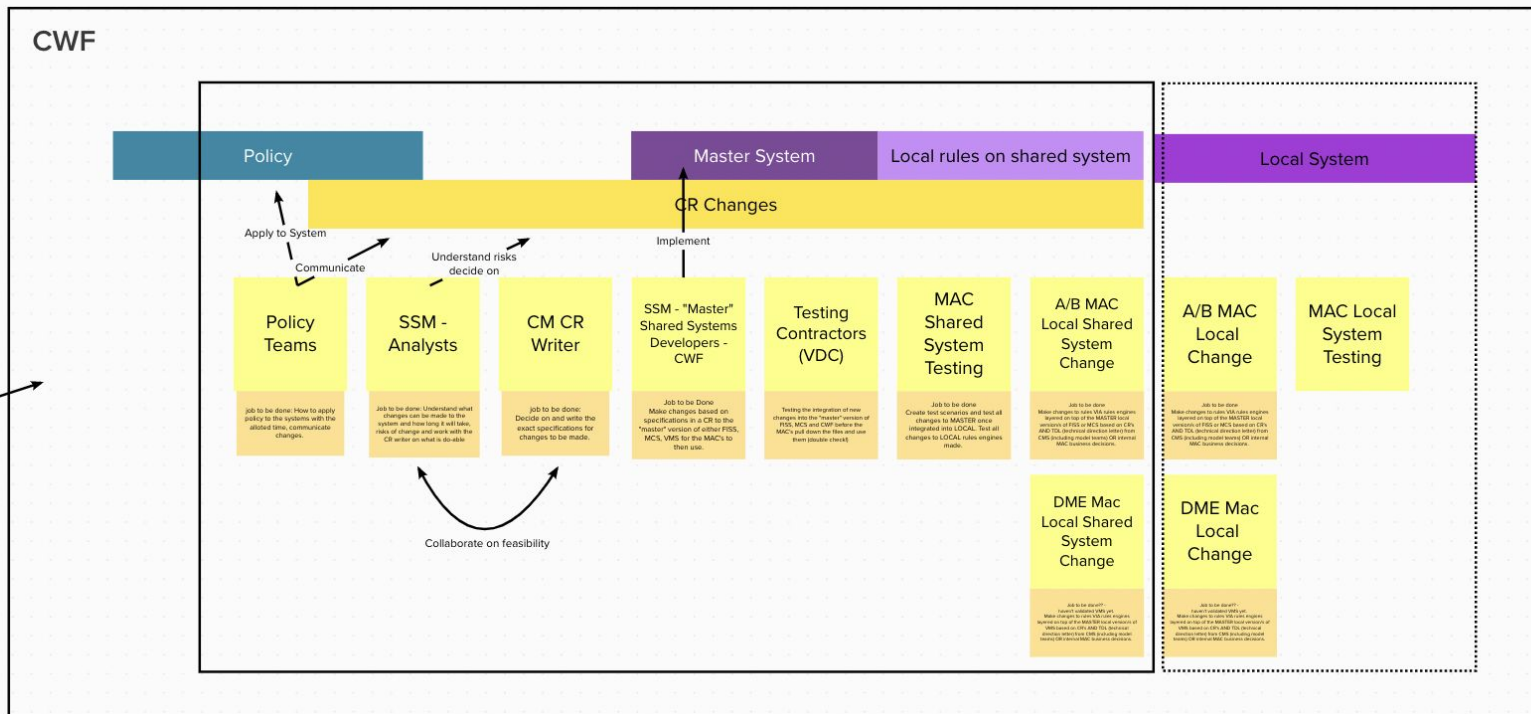
RESULTS



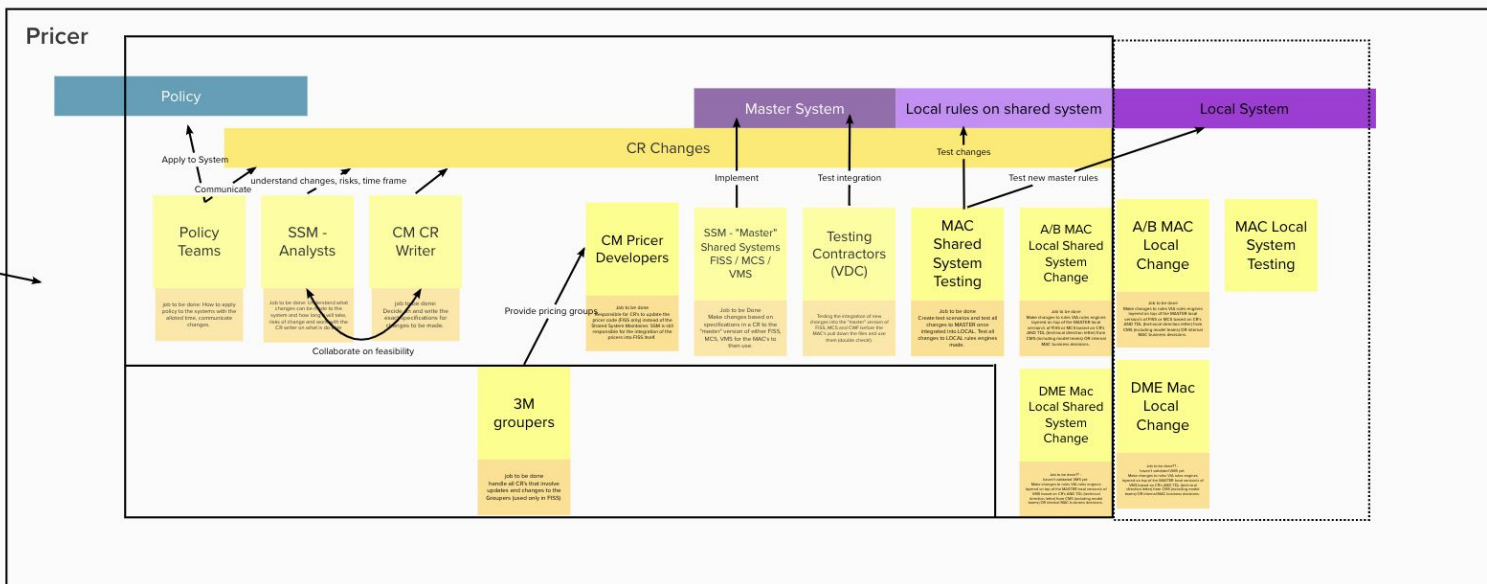
FISS/MCS/VMS



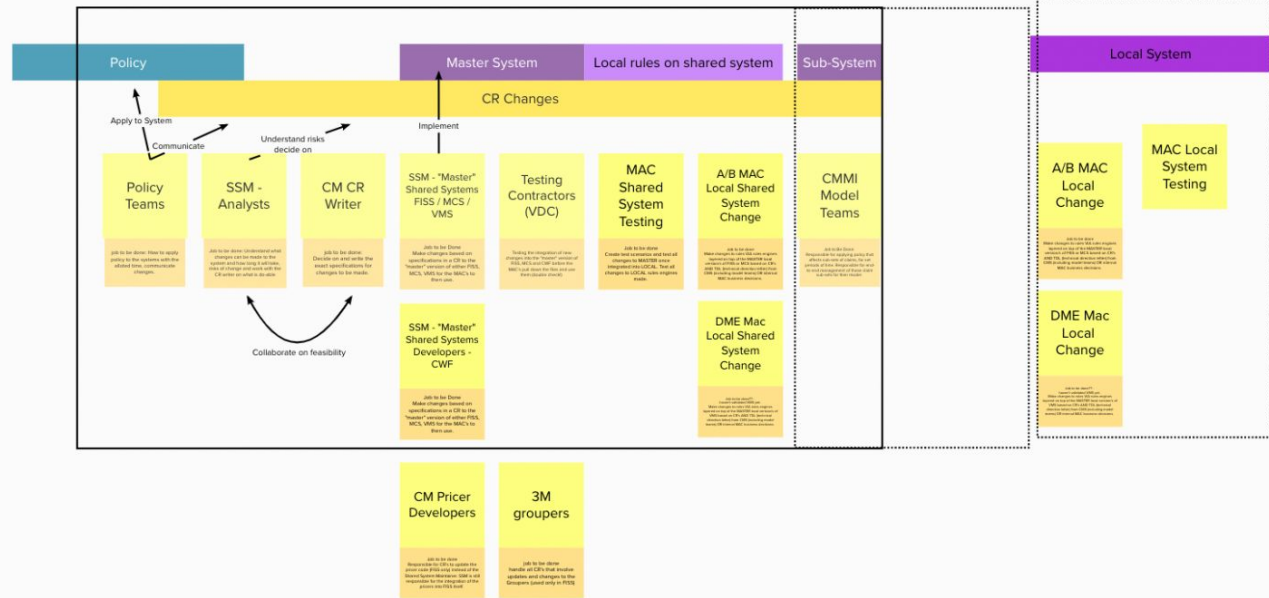
RESULTS



RESULTS



CMMI



NEXT STEPS

- Getting feedback from various CMS teams
- Handoff information for:
 - Possible Coding It Forward fellows
 - CMS employees working on the CR process
 - And other HCD projects



THANK YOU!

Thank you to Shannon Williams,
Charles Watson, Sumera Rownak,
Champa Hegde, Arabella Crawford,
Amelia Liarakos, and the rest of the
MPSM team for your help and
generosity!

