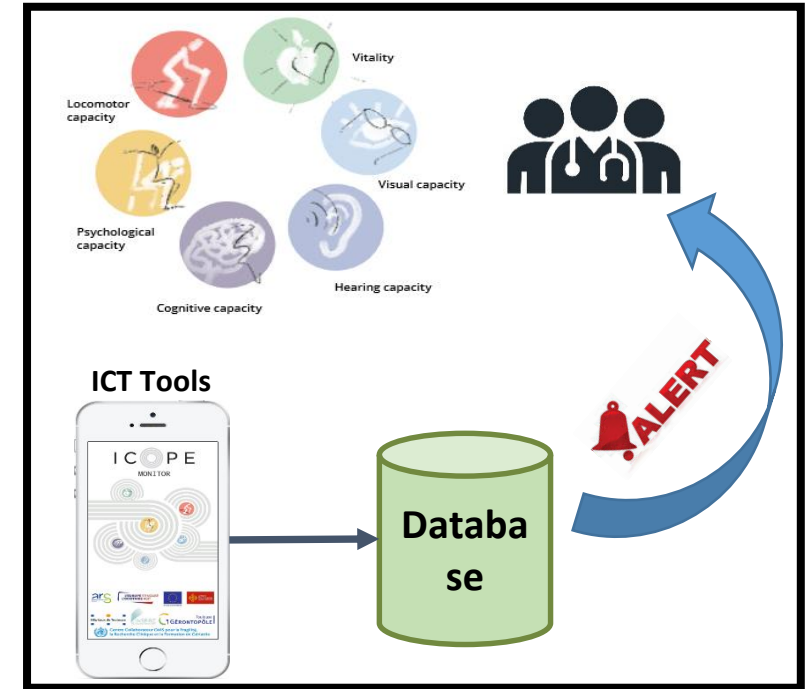


# Person-centered intervention: The ICOPE experience in France



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# Presentation Plan

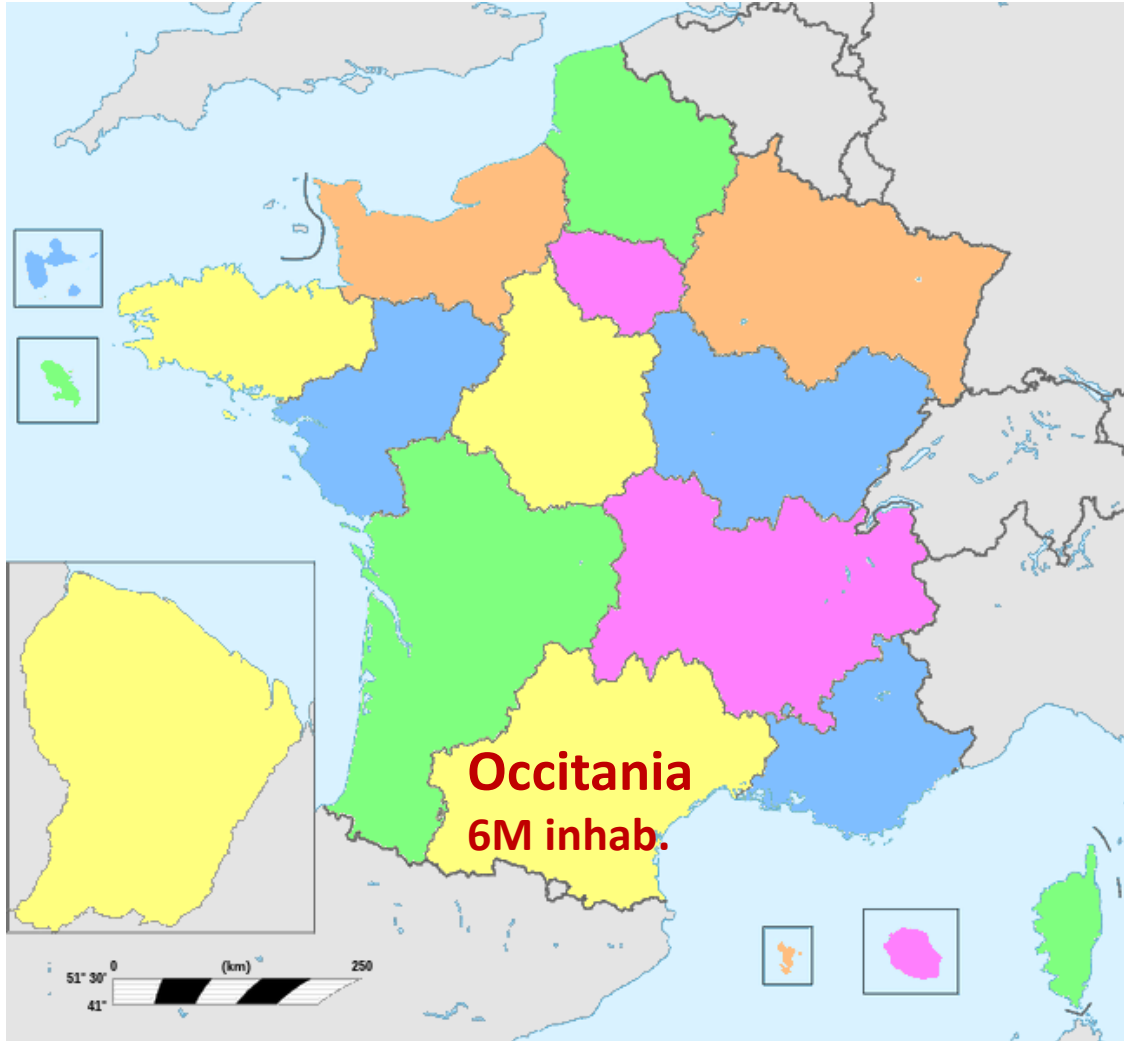
1. The idea and the ambition

2. The set up: digital infrastructure & tools

3. Preliminary data: the ICOPE screening part (Step 1)

4. Perspectives for the ICOPE implementation in France

# 1. The idea and the ambition



Implement in clinical practice the  
WHO ICOPE program in 200 000  
subjects in 2025

**2020, May:** Start ICOPE digital health with ARS over  
Occitania (2 M€)

# 2. The set up: digital infrastructure & tools

## WHO ICOPE SCREENING TOOL

Priority conditions associated with declines in intrinsic capacity

Tests

Assess fully if any answer in each domain triggers this

### COGNITIVE DECLINE

(Chapter 4)

1. Remember three words: flower, door, rice (for example)
2. Orientation in time and space: What is the full date today? Where are you now (home, clinic, etc)?
3. Recalls the three words?



Wrong to either question or does not know



Cannot recall all three words

### LIMITED MOBILITY

(Chapter 5)

Chair rise test: Rise from chair five times without using arms. Did the person complete five chair rises within 14 seconds?



No

### MALNUTRITION

(Chapter 6)

1. Weight loss: Have you unintentionally lost more than 3 kg over the last three months?
2. Appetite loss: Have you experienced loss of appetite?



Yes



Yes

### VISUAL IMPAIRMENT

(Chapter 7)

Do you have any problems with your eyes: difficulties in seeing far, reading, eye diseases or currently under medical treatment (e.g. diabetes, high blood pressure)?



Yes

### HEARING LOSS

(Chapter 8)

Hears whispers (whisper test) *or*  
Screening audiometry result is 35 dB or less *or*  
Passes automated app-based digits-in-noise test



Fail

### DEPRESSIVE SYMPTOMS

(Chapter 9)

- Over the past two weeks, have you been bothered by
- feeling down, depressed or hopeless?
  - little interest or pleasure in doing things?



Yes



Yes

# 2. The set up: digital infrastructure & tools

## Overtime monitoring and self-assessments

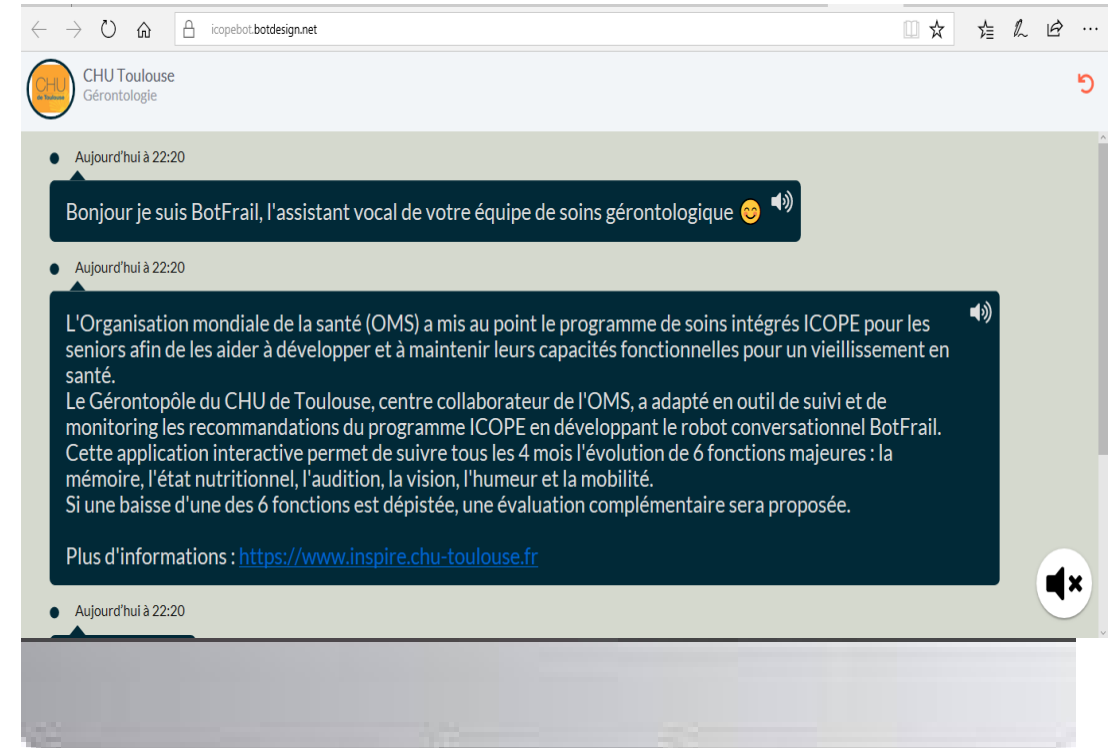
Application mobile  
ICOPE MONITOR








**SMARTPHONE and TABLETTE**




Chatbot  
ICOPEBOT




<https://icopebot.botdesign.net>











**On-line**




COGNITIVE CAPACITY 		
Do you have problems with memory or orientation (such as not knowing where one is or what day it is)?	YES 	NO
<b>[if YES]</b> Have you noticed any worsening of these disorders in the past 4 months or since the last evaluation?	YES 	NO
Orientation : What is the full date today?		
Year: AAAA	CORRECT	INCORRECT
Month: list from January to December	CORRECT	INCORRECT
Day of the week : list from Monday to Sunday	CORRECT	INCORRECT
Date : list from 1 to 31	CORRECT	INCORRECT
TOTAL	=4/4	< 4/4 
Recall of the three words		
WORD 1	CORRECT	INCORRECT
WORD 2	CORRECT	INCORRECT
WORD 3	CORRECT	INCORRECT
TOTAL	=3/3	< 3/3 

NUTRITION 		
Weight: ....Kg	--.- kgs	
Have you unintentionally lost more than 3 kgs over the last three months?	YES 	NO
Have you experienced loss of appetite?	YES 	NO
How has your appetite been over the last month? Indicate / enter on the scale the value that best suits you.	Value from 0 to 100	

VISUAL CAPACITY 		
Do you have any problems with your eyes: difficulties in seeing far, reading, eye diseases or currently under medical treatment (e.g. diabetes, high blood pressure)?	YES 	NO
Do you feel that your vision has decreased, with or without your glasses, in the past four months or since your last evaluation?	YES 	NO
How do you consider the quality of your vision (with your glasses if you wear glasses) in the past month? Indicate / enter on the scale the value that best suits you.	Value from 0 to 100	

HEARING CAPACITY 			
Whisper test			
Right Ear		YES	NO 
Left Ear		YES	NO 
Do you feel that your hearing has decreased in the past four months or since your last assessment?		YES 	NO
Do the people close to you complain about recent hearing loss?		YES 	NO
How do you rate the quality of your hearing (with your hearing aids, if necessary) in the past month? Indicate / enter on the scale the value that best suits you.		Value from 0 to 100	

PSYCHOLOGICAL CAPACITY 		
Over the past two weeks, have you been bothered by:		
Feeling down, depressed, or hopeless?	YES 	NO
Little interest or pleasure in doing things?	YES 	NO
How sad or happy have you felt in the past month? Indicate/enter on the scale the value that best suits you.	Value from 0 to 100	

LOCOMOTOR CAPACITY 		
Have you performed the five chair raises?	YES	NO 
<b>[if NO]</b> How many chair raises have you performed ?	Value from 0 to 4	
<b>[if zero]</b> Would you be able to get up from a chair using your arms but without assistance ?	YES	NO
<b>[if YES]</b> Did you do so in less than 14 seconds?	YES	NO 
Did you perform the assessments without assistance ?	YES	NO

## 2. The set up: digital infrastructure & tools

### PSYCHOLOGIE

[Optionnel]

A quel point vous êtes vous senti triste ou heureux au cours du dernier mois ?

Indiquer/pointer sur l'échelle la valeur qui vous correspond le mieux.



### NUTRITION

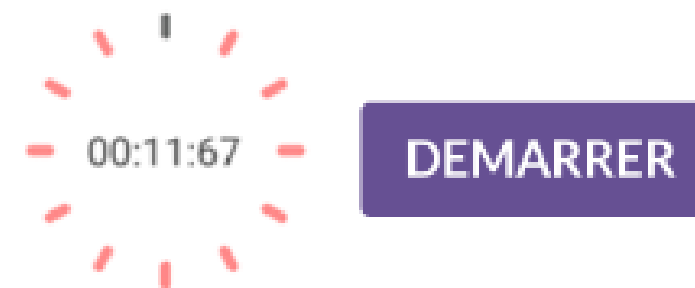
[Optionnel]

Comment qualifiez-vous votre appétit au cours du dernier mois ? Indiquer/pointer sur l'échelle la valeur qui vous correspond le mieux.



### MOBILITE

Cliquez sur « DEMARRER » et appuyez sur le bouton « STOP » dès que vous avez terminé



Temps réalisé:  
[00,00] secondes

Avez-vous réalisé les 5 levés de chaise?

Oui

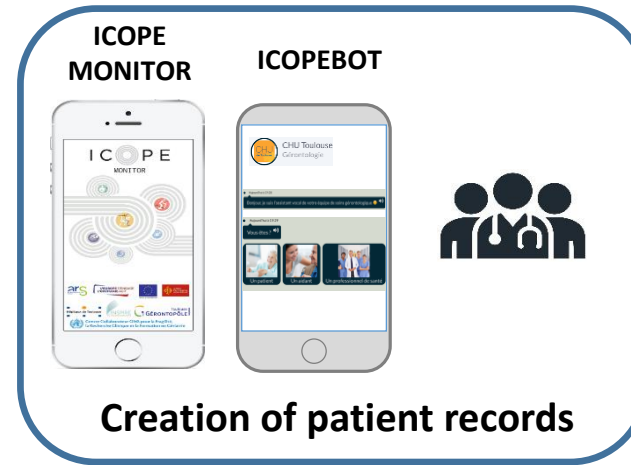


Non



# Schemme of ICOPE implementation in France

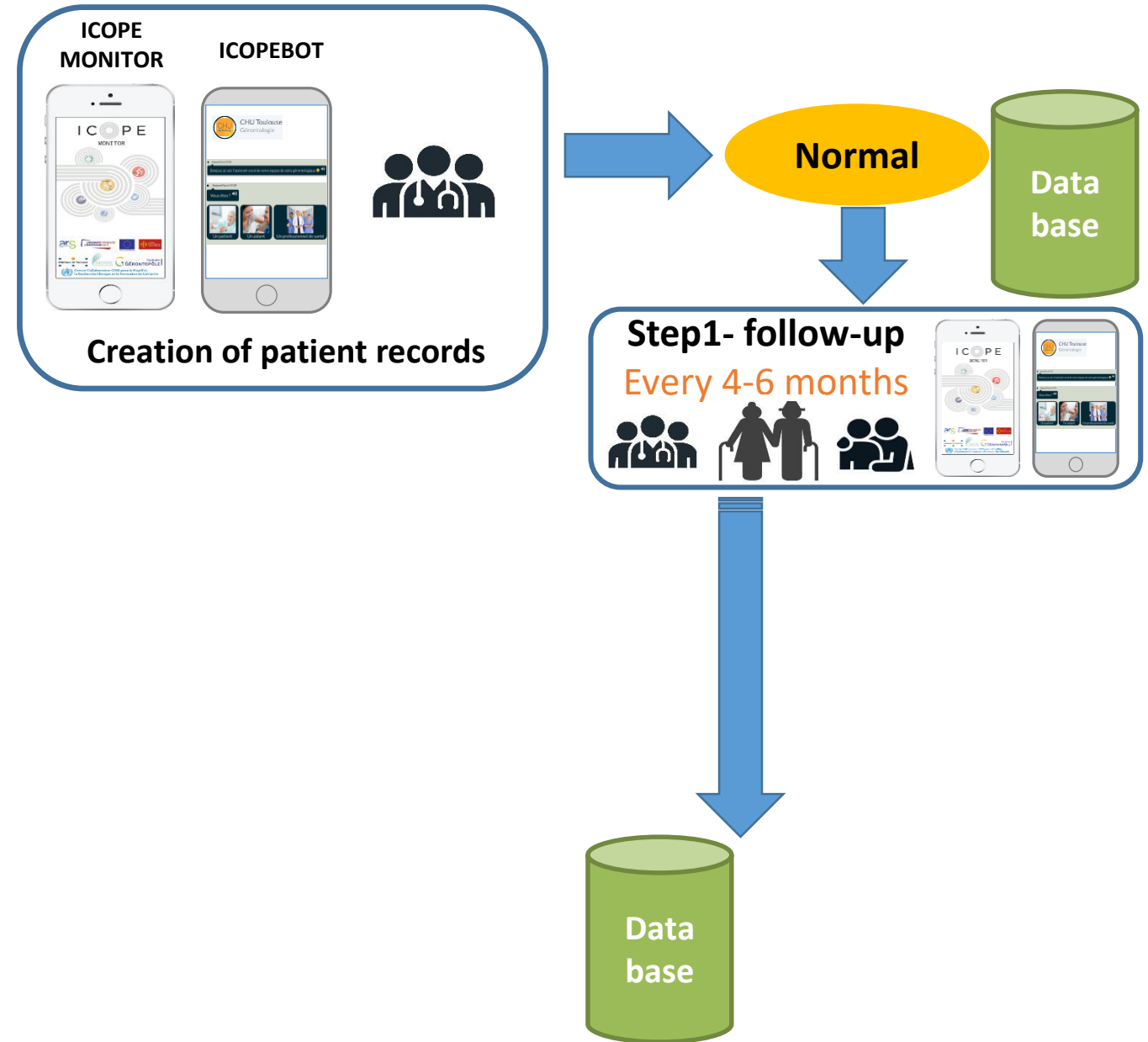
## Step1- First evaluation



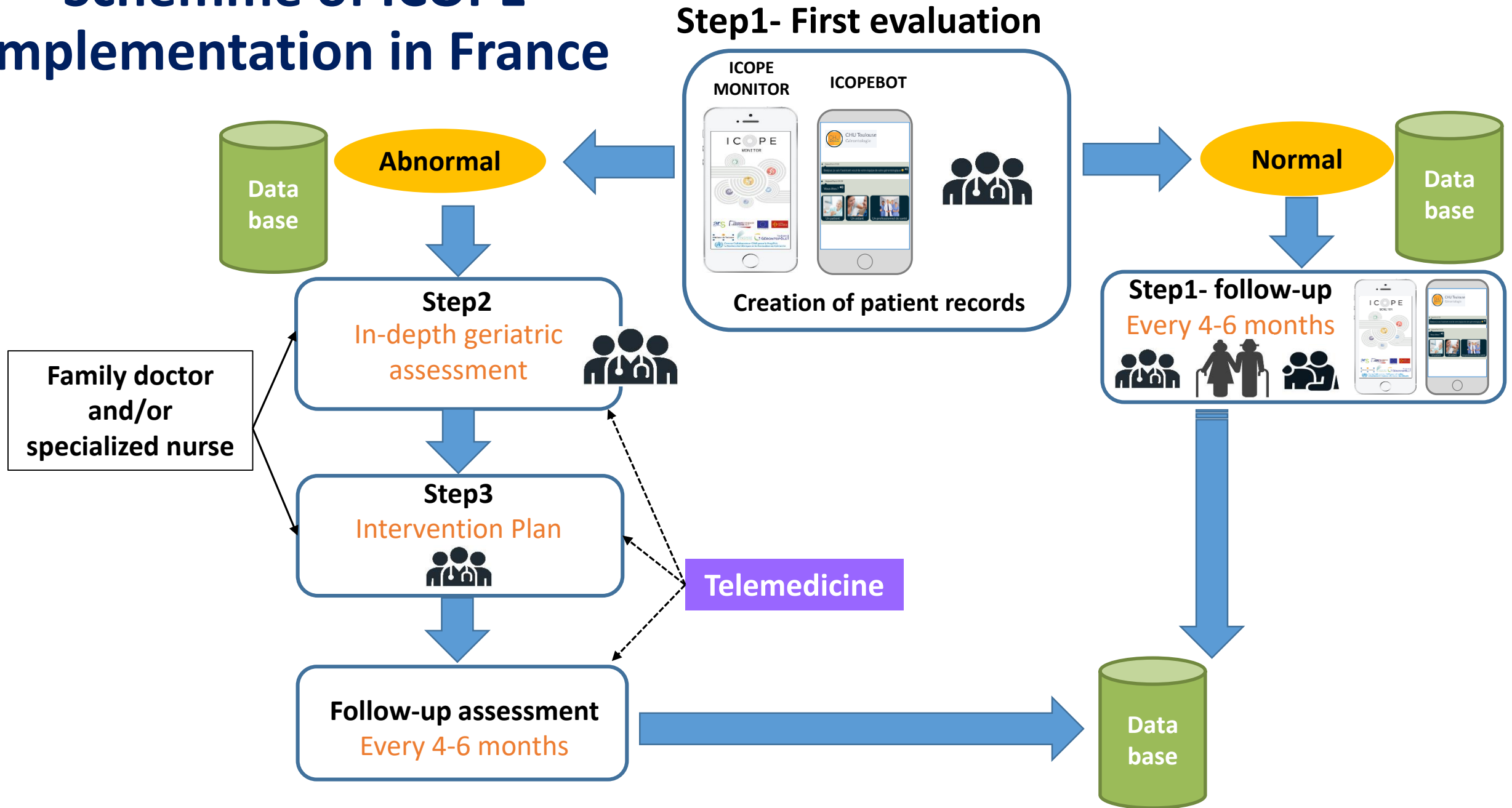


# Schemme of ICOPE implementation in France

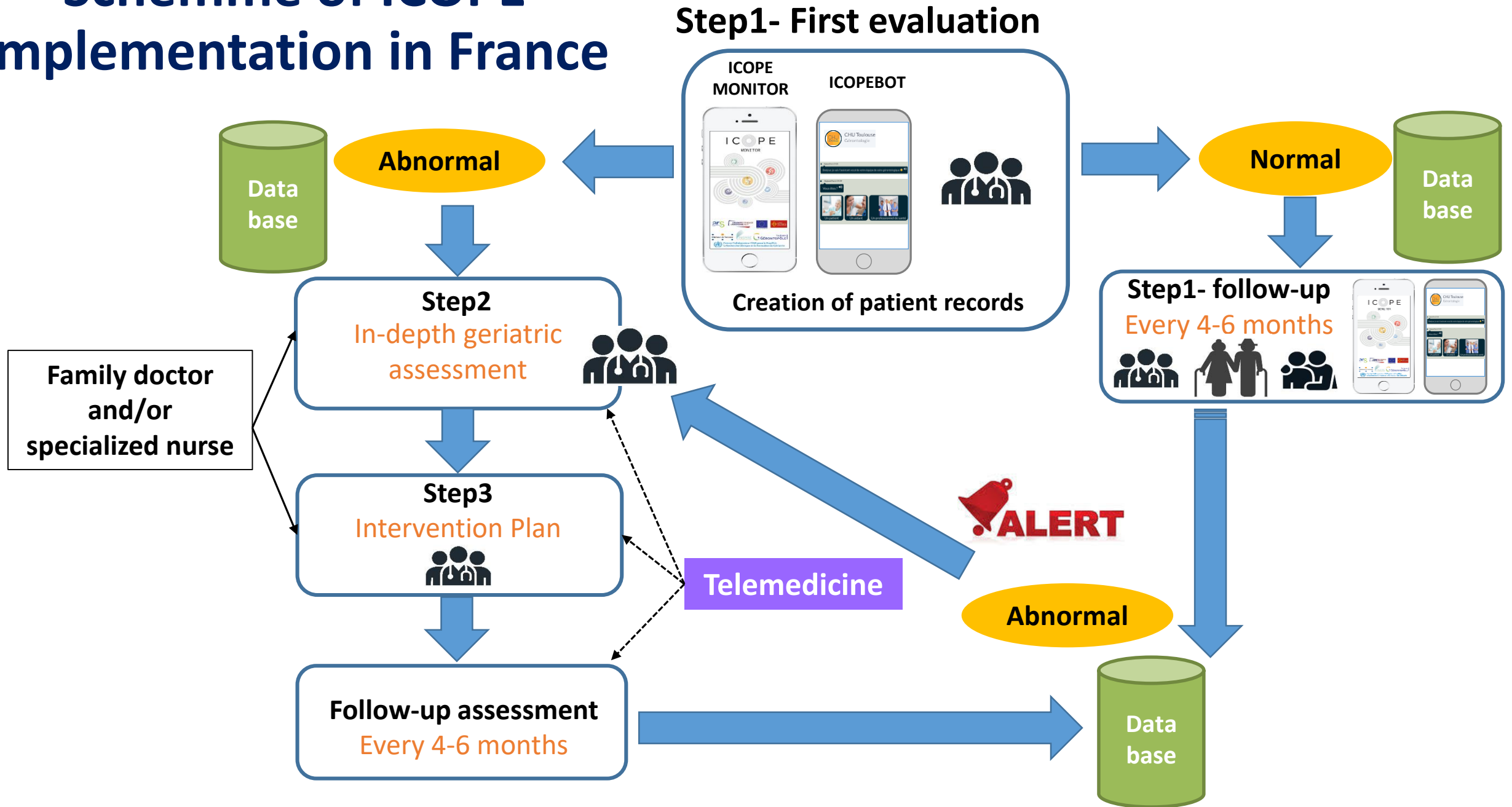
## Step1- First evaluation



# Schemme of ICOPE implementation in France



# Schemme of ICOPE implementation in France



# 2. The set up: digital infrastructure & tools

## Handling Alerts

Toulouse  
GÉRONTOPOLE

ICOPE Database <https://icope.chu-toulouse.fr> Isabelle Carrie

Filtres: Aucun

### Alertes générées par les évaluations Step 1

Traitements Alertes

Nom	Prénom	Naissance		Date de l'alerte	Statut	Tendance	Dernière action	Centre	
Terrieux	Marie suzanne	16/07/1941	Patient	23/09/2020	Non traitée	●		MEDES-HOSPITAL	Alerte
TJY011	Tania	19/10/1975	Patient	17/09/2020	Non traitée			CentreTest	Alerte
Mickey	Lola	23/06/1956	Patient	17/09/2020	Non traitée	●		Test 1 Test 1	Alerte
Winston	Churchill	30/11/1900	Patient	17/09/2020	Non traitée			Test 1 Test 1	Alerte
TEST 2	TEST 2	02/03/1956	Patient	17/09/2020	Non traitée	●		Test 1 Test 1	Alerte
Beaubestre	Yael	04/06/1963	Patient	16/09/2020	Non traitée	●		Christopher Lenoir	Alerte
Botfrail	Chat	12/06/1945	Patient	16/09/2020	Non traitée	●		Test 1 Test 1	Alerte

Total: 162 entrées

● Déclin ● Stable ● Amélioration

### Dates des prochaines évaluations Step 1

Nom	Prénom	Naissance		Date dernier Step 1	Date prochain Step 1	Centre	
Londios	Elodie	02/01/1985	Patient	20/01/2020	20/05/2020	Christopher Lenoir	Step 1
TestPart	Testprenom	09/09/1948	Patient	02/02/2020	02/06/2020	Cohorte Digitale	Step 1
Rambo	John	08/02/1980	Patient	27/02/2020	27/06/2020	Christopher Lenoir	Step 1
Test	Test	10/08/1910	Patient	10/03/2020	10/07/2020	Aller Retour	Step 1
TestMontse	Montse	15/04/1957	Patient	15/04/2020	15/08/2020	ERVPD	Step 1
Hxhdhdhd	Dbdbdvd	15/04/1932	Patient	15/04/2020	15/08/2020	Dev MEDES	Step 1
Hoiif	Eidiif	09/04/1961	Patient	15/04/2020	15/08/2020	Dev MEDES	Step 1

Total: 167 entrées

Créer

- Nouveau Step 1
- Nouveau Step 2
- Nouveau Patient
- Nouveau Professionnel
- Nouveau Centre
- Nouveau Type de centre

Lister

- Questionnaires Step 1
- Questionnaires Step 2
- Patients
- Professionnels
- Centres
- Types de centre

Tableaux de bord

- Alertes
- Statistiques Step 1
- Statistiques Step 2
- Indicateurs d'activité
- Cohorte digitale

Divers

- Mon compte

# 2. The set up: digital infrastructure & tools

Toulouse  
GÉRONTOPOLE

ICOPE Database <https://icope.chu-toulouse.fr> Isabelle Carrie

Créer

- Nouveau Step 1
- Nouveau Step 2
- Nouveau Patient
- Nouveau Professionnel
- Nouveau Centre
- Nouveau Type de centre

Lister

- Questionnaires Step 1
- Questionnaires Step 2
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Tableaux de bord

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- Statistiques Step 1
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- Indicateurs d'activité
- Cohorte digitale

Divers

- Mon compte

Rechercher un Step 1

Rechercher Annuler

Du [ ] au [ ] Saisie [ ]

Centre [ ] Type [ ] Source [ ]

Liste des Questionnaires Step 1

En alerte [ ] Exporter [ ] Créer [ ]

	Date	Nom	Prénom	Type	Cognit...	Nutriti...	Vision	Audition	Psychol...	Locomo...	Saisie	Sou...
<input type="checkbox"/>	24/09/2020	Arthur	Arthur	Initiale	!	!	!	!	!	!	Professio...	BDF
<input type="checkbox"/>	23/09/2020	Terrieux	Marie suzanne	Suivi	-	!	!	!	-	-	Professio...	Icpe pro
<input type="checkbox"/>	18/09/2020	Covid	Test	Initiale	!	-	-	!	-	!	Professio...	Bot pro
<input type="checkbox"/>	17/09/2020	TEST 2	TEST 2	Suivi	!	!	-	!	!	!	Professio...	Bot pro
<input type="checkbox"/>	17/09/2020	TJY011	Tania	Initiale	!	-	!	!	!	-	Professio...	Bot pro
<input type="checkbox"/>	17/09/2020	Mickey	Lola	Suivi	!	-	-	-	-	-	Professio...	Icpe pro
<input type="checkbox"/>	17/09/2020	Winston	Churchill	Initiale	-	-	!	-	-	-	Professio...	Icpe pro
<input type="checkbox"/>	17/09/2020	TEST 2	TEST 2	Suivi	!	-	!	-	!	-	Professio...	Icpe pro
<input type="checkbox"/>	16/09/2020	Beaubestre	Yael	Suivi	!	-	!	!	!	-	Professio...	Bot pro
<input type="checkbox"/>	16/09/2020	Botfrail	Chat	Suivi	-	!	-	!	-	-	Professio...	Icpe pro

Total: 321 entrées

● Déclin ● Amélioration

# 3. Preliminary data: the ICOPE screening part (Step 1)

## Implement ICOPE in Clinical Practice

- **By October 2<sup>nd</sup>:**
  - **3279 senior citizens** are being followed using the ICOPE Monitor,
  - **887 health care professionals** have downloaded ICOPE Monitor App
  - **1747 first patients analyzed:**
    - 73.7 yrs, 61% women.
    - IC abnormalities
      - **Only 6% have no IC abnormality**
      - 18%: one
      - 52,5 %: 3 +
    - Most frequent Intrinsic capacities problems are:
      - vision (74%)
      - memory (58%)
      - hearing (48%)
      - psychological (36%)
      - mobility (33%)
      - nutrition (18%)

# 3. Preliminary data: the ICOPE screening part (Step 1)

## Implement ICOPE in Clinical Practice: Follow-up

- **ICOPE Step 1 Follow up at 4 months: N=298**
  - 104 (34.9%) decline in IC detected
  - The most frequent declines are for:
    - Memory decline (28.9%),
    - Psychological function (24.5%),
    - Hearing (21%)
  - ⇒ additional visits planned for 49 cases (16.4% of the 298 patients: clinically relevant )
- **ICOPE Step 1 Follow up at 8 months: N=88**
  - 25 (28.4%) have a decline
  - The most frequent alarms are for:
    - Memory: 11%
    - Vision: 9%
    - Psychological: 8%
  - Additional visits planned for 7 cases (8%)

# 3. Preliminary data: the ICOPE screening part (Step 1)

## ICOPE self-assessment

- 172 subjects
- Mean age: 61.9 yrs, 56% women
- **No IC abnormalities: 20%**
- 80% at least one
  - Vision: 60%
  - Psychological: 37%
  - Memory: 35.5%
  - Hearing: 31.4%
  - Mobility: 16.9%
  - Nutrition: 9.3%



## 4. Perspectives for the ICOPE implementation in France

CPAM (Social security) will send:

- A letter to 16 000 nurses in Occitania

- A letter to all Primary care Physician

- A letter to all senior citizen aged + 70 yrs old

## 4. Perspectives for the ICOPE implementation in France

CPAM (Social security) will send:

A letter to 16 000 nurses in Occitania

A letter to all Primary care Physician

A letter to all senior citizen aged + 70 yrs old

### AMI ICOPE

- Call – French Ministry of Health and Social Security
- Objective: Building the procedures for adapting ICOPE to the French contexte based on the Toulouse Gerontopole experience
- Deadline: November 2020

# Person-centered intervention: The ICOPE experience in France

## Main collaborators from Toulouse Gerontopole

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Tania Jouffrey

