



REGIONE DEL VENETO

Health Information Systems supporting surveillance activities on the exposed population

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SUPPORT OF BOTH PREVENTION AND HEALTH SURVEILLANCE THROUGH INFORMATIVE AND COMPUTER SYSTEMS



Computer system strengthening



Implementation of simplified working practices and procedures through application software

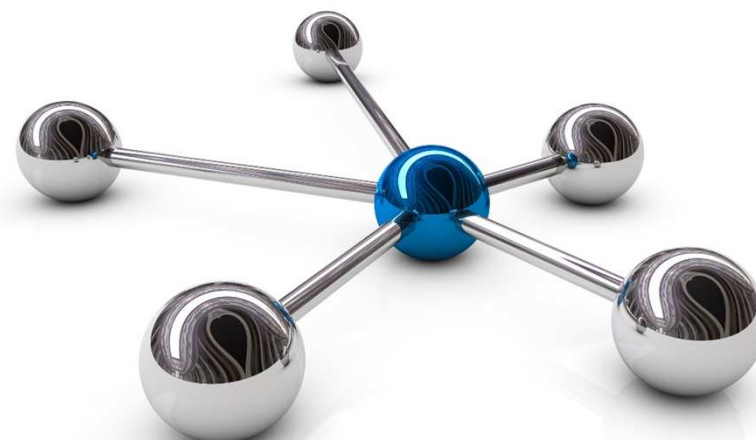


Operators training and of the best practices propagation

ORGANISATIONAL MODEL

✓ Centralization of software applications

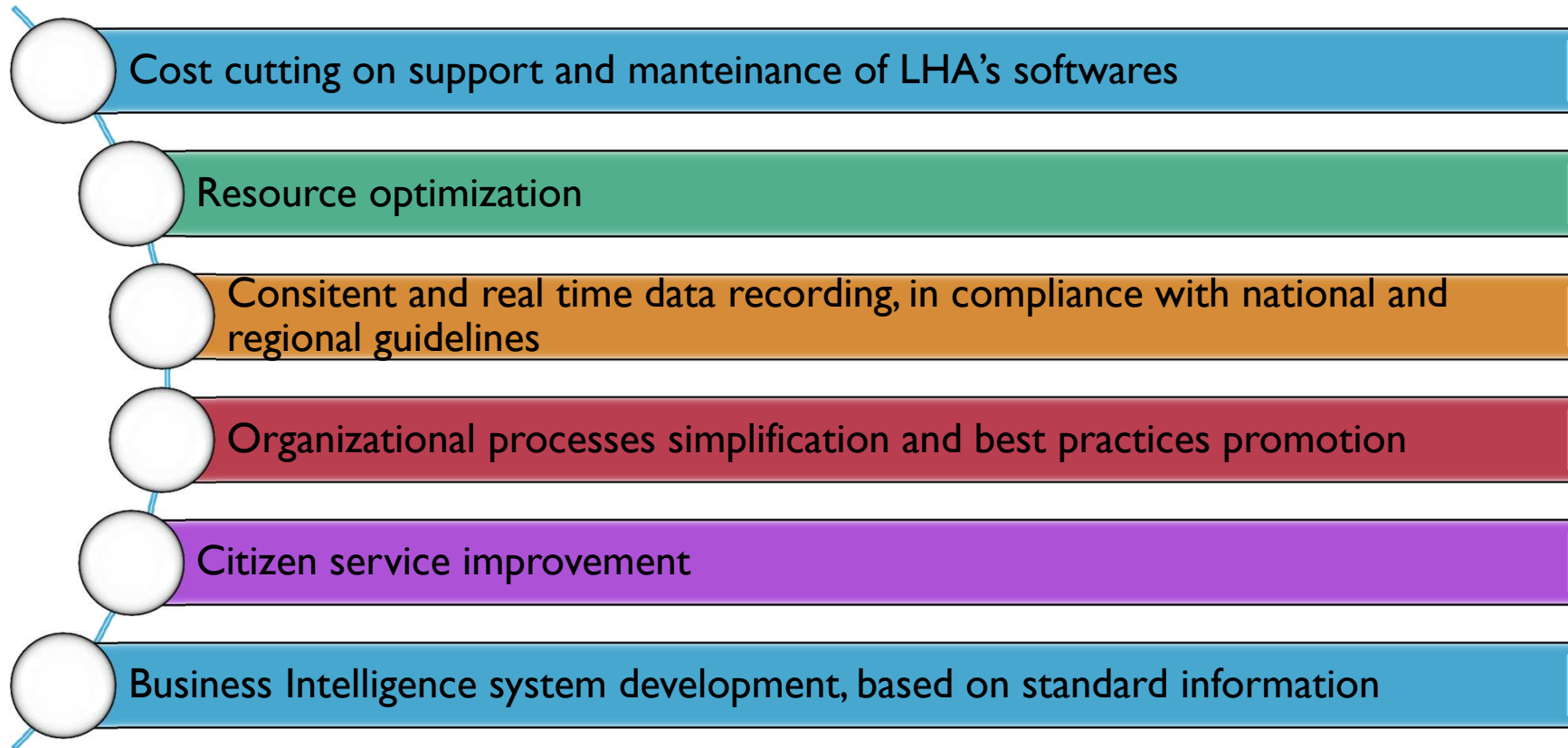
- *Dedicated Regional Technical Group*
- Control of suppliers
- Suitability check of developmental functions
- Network support (prevention, oncological)
- Easier application of the hub&spoke model



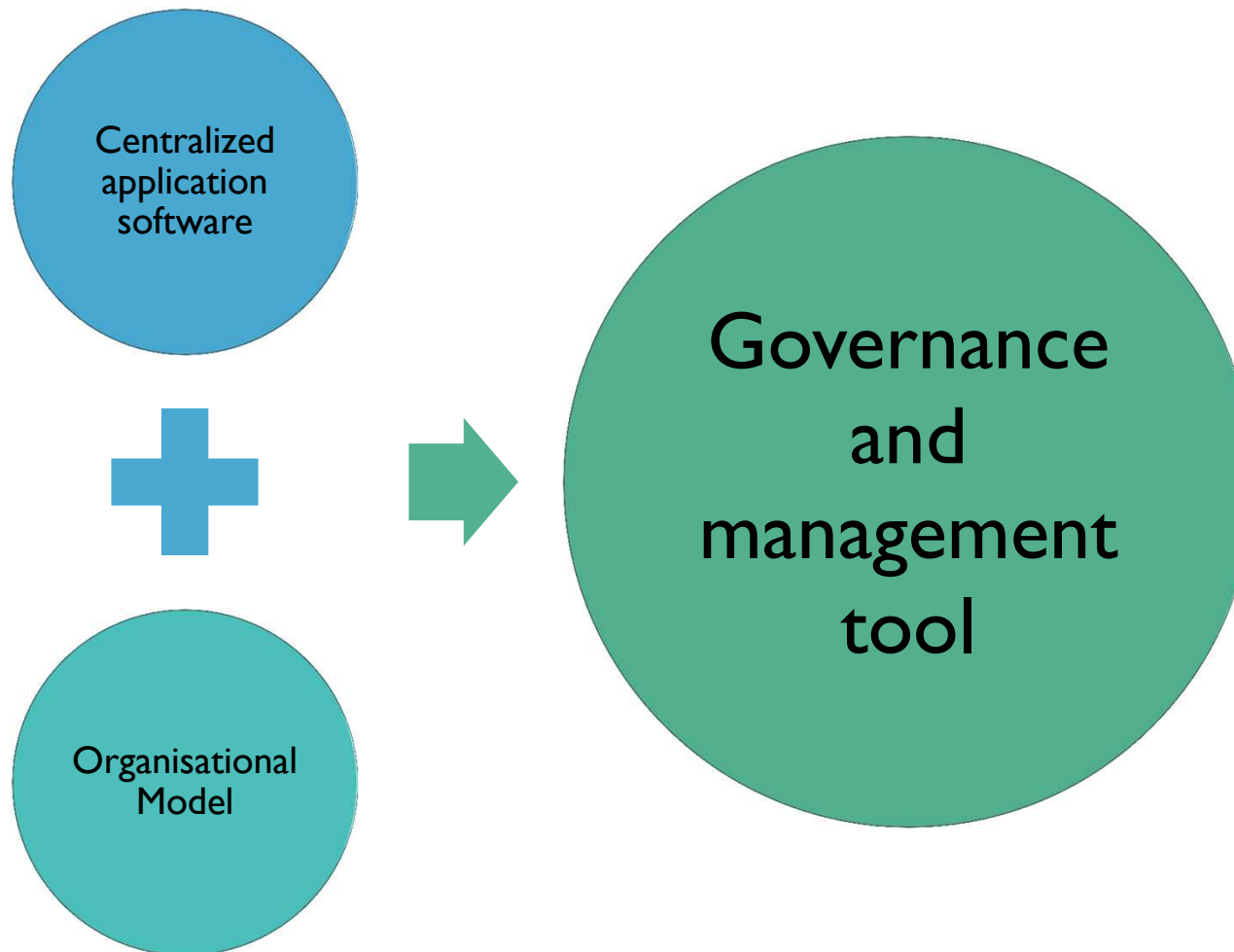
✓ Regulation for the definition of responsibilities

✓ Integration and cooperation with hospital health information systems

GOALS



GOVERNANCE TOOL



REGIONAL CENTRALIZED APPLICATION SOFTWARE IN HEALTH PREVENTION

- Cancer Screening (cervical, breast, colorectal) and HPV-DNA module
- Cardiovascular Screening
- PFAS Screening
- Mammographic Network System
- Veneto Region Vaccination Informative Sys
- Health and Safety in the workplace
- Invalids Procedure



CANCER SCREENING SOFTWARE

MAIN FEATURES:

- Definition of targeted population
- Management of the erogation centers' agendas as well as invitation and reminder processes
- Management of the invitations' results, including reporting and subsequent actions
- Management of the screening program left out cases
- Utility features like prints, setups, access profiles

CARDIOVASCULAR SCREENING MODULE

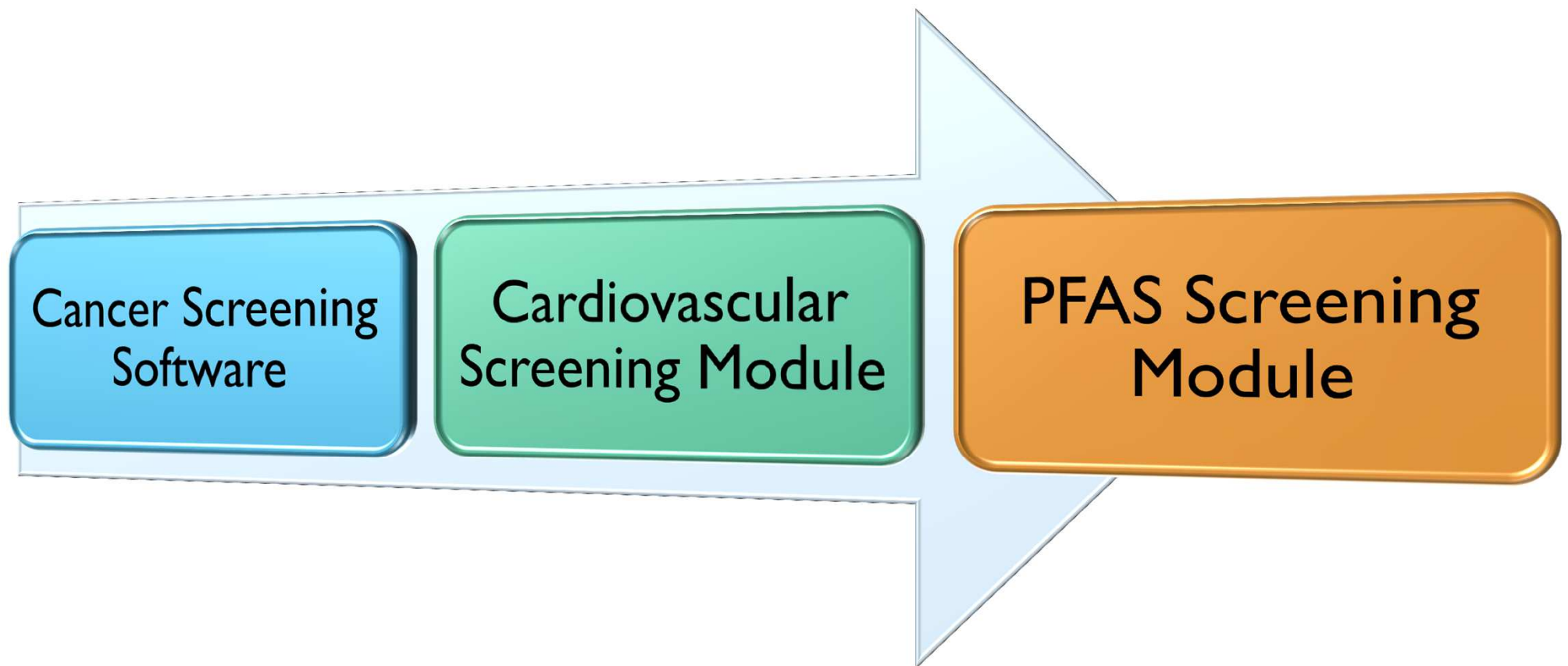
Monitoring of the target population in order to highlight eventual predisposition to cardiovascular risk that would require **awareness** and **prevention**

DIFFERENCES WITH THE CANCER SCREENING SOFTWARE:

- ✓ Survey conduction to evaluate lifestyle
- ✓ Measurement of physiological parameters (weight, height, pressure...)

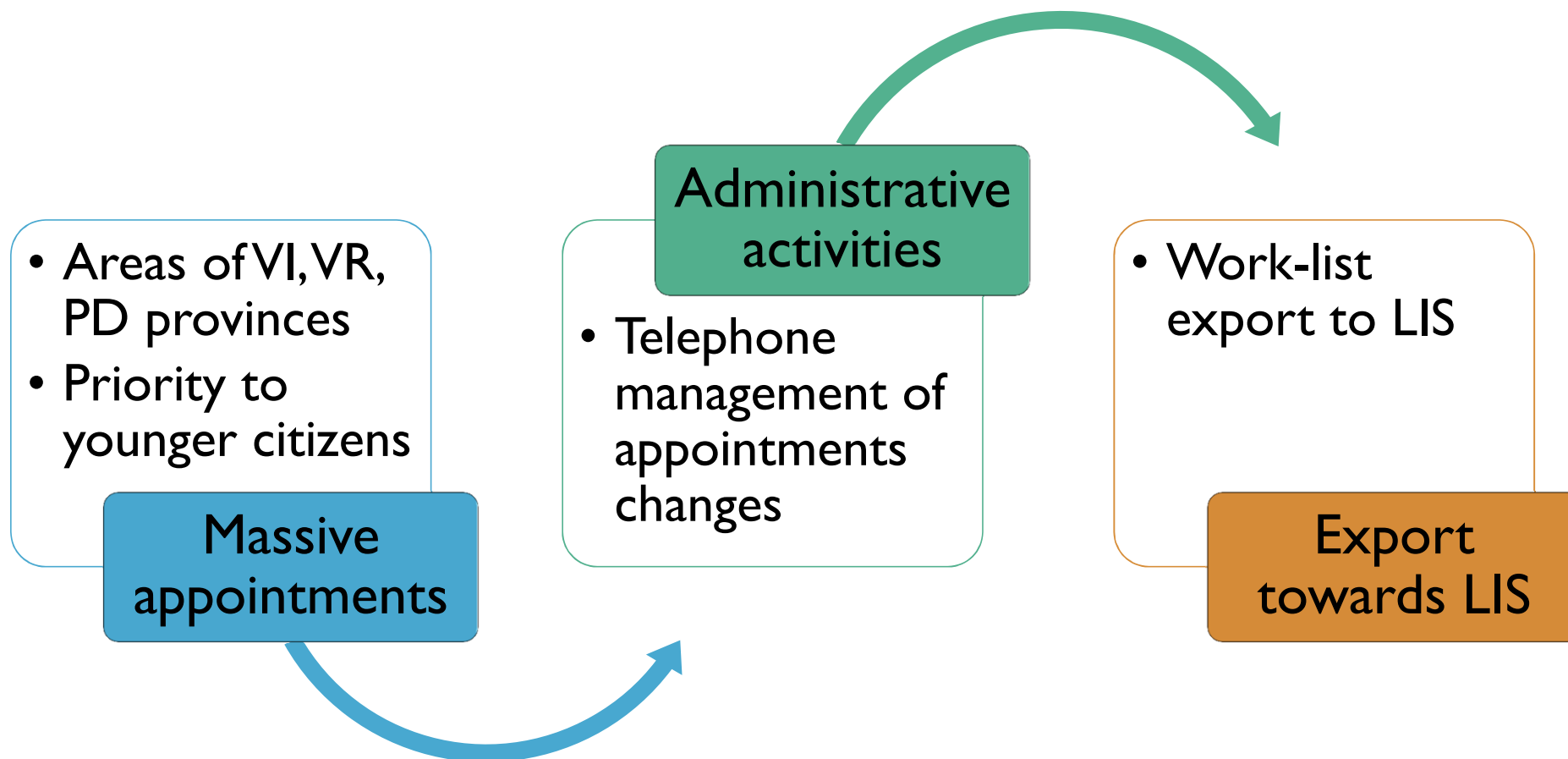


PFAS SCREENING MODULE

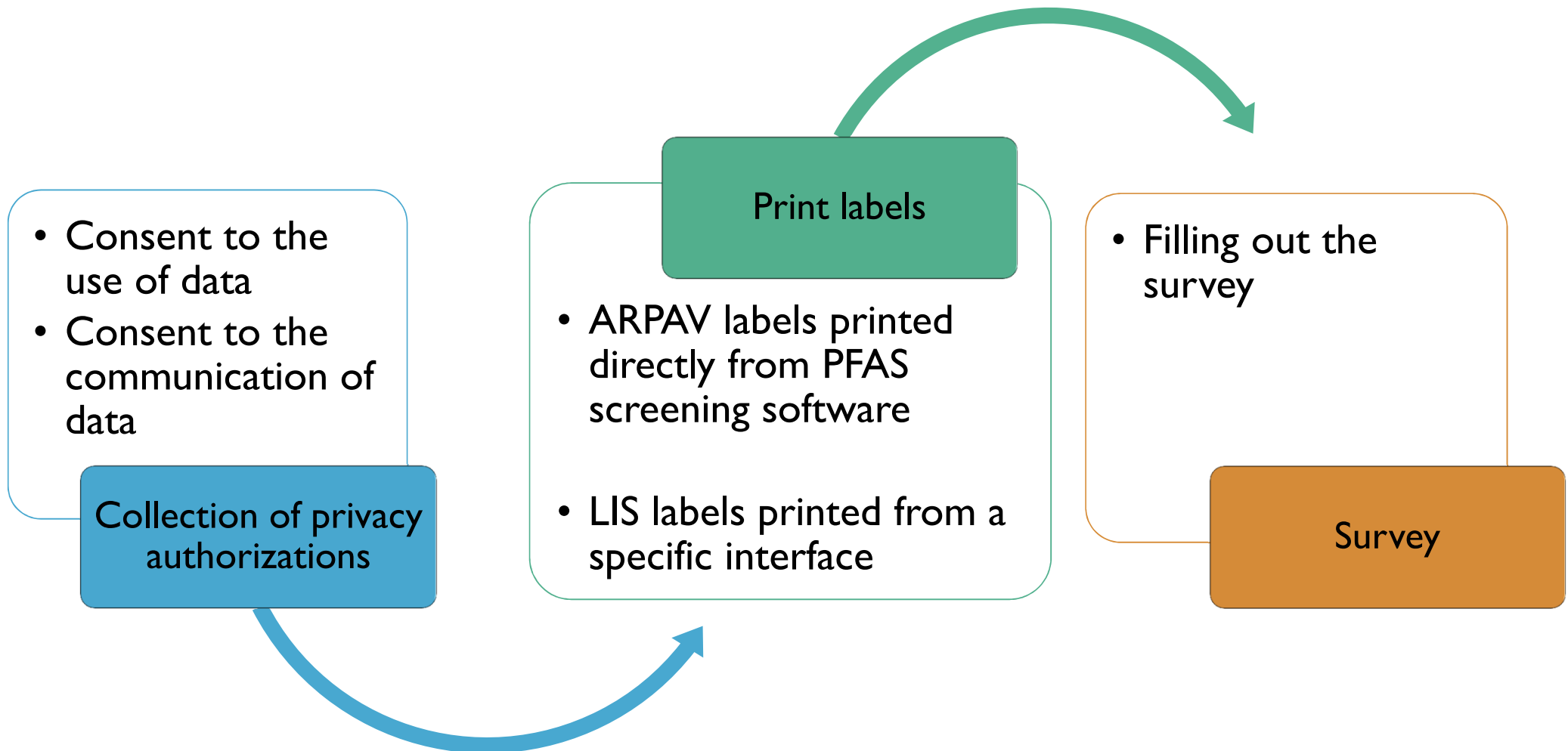


CENTRALIZED ORGANIZATIONAL SECRETARIAT

LHA 8 – ARZIGNANO'S DISTRICT



ACCEPTANCE PHASE – EROGATION CENTERS



SURVEY SECTIONS

- General data
- Residential history
- Food production for personal use
- Family, pathological and pharmacological anamnesis (3 different sections)
- Smoke
- Physical activity
- Food and drinks
- Water
- Reproductive function
- Anthropometric parameters (weight, height, pressure)



HEALTHY LIFESTYLE

- At least two daily portions of fruit and vegetables
- Low daily consumption of alcoholic beverages

**CORRECT
NUTRITION**

- Intensive
- Moderate

**PHISICAL
ACTIVITY**

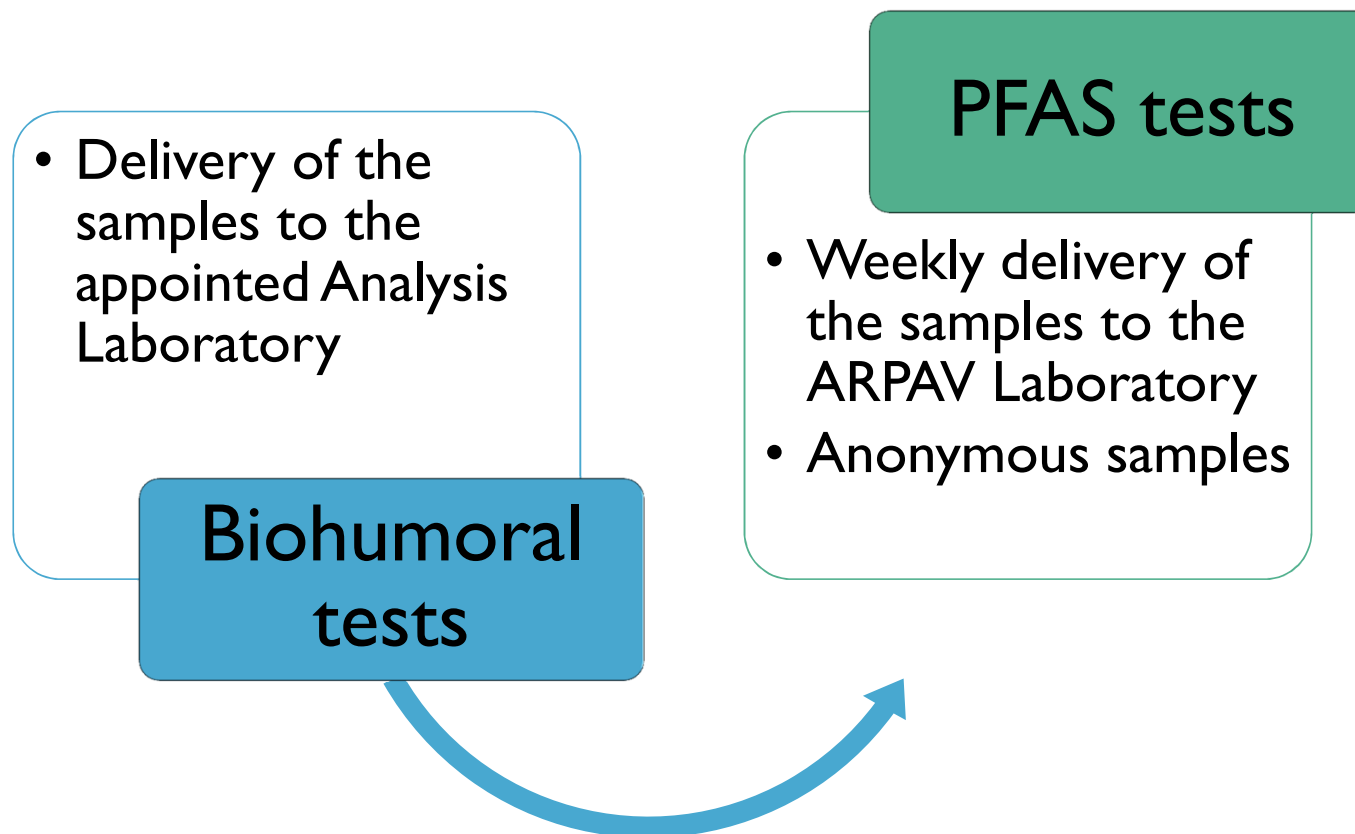
- Non smoker
- Former smoker

SMOKE

- Value included between 18,5 e 24,9

BMI

SAMPLES PROCESSING



BIOHUMORAL TESTS

EXAM	RESULT TYPE	UNIT OF MEASURE	REFERENCE VALUES
creatinine	number with two decimal	mg/dL	M: 0,8-1,3 F: 0,6-1,0
eGFR	integer	mL/min/1,73 mq	>90
uric acid	number with two decimal	mg/dL	M: 3,5-7,2 F: 2,6-6,0
ALT	integer	U/L	M: 0-50 F: 0-35
AST	integer	U/L	M: 0-50 F: 0-35
HbA1c	integer	mmol/mole	<48
total cholesterol	integer	mg/dL	<190
HDL cholesterol	integer	mg/dL	M: 0-39 F: 0-43
LDL cholesterol	integer	mg/dL	<115
TSH	number with two decimal	mIU/L	0,27-4,20
triglycerides	integer	mg/dL	30-175
urinary microalbumin	integer	mg/L	<30

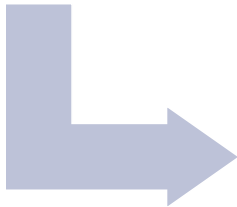
PFAS TESTS

EXAM	RESULT TYPE	UNIT OF MEASURE	REFERENCE RANGE*
Perfluorobutanoic acid (PFBA)	number with two decimal	ng/ml	-
Perfluoro-n-pentanoic acid (PFPeA)	number with two decimal	ng/ml	-
Perfluorohexanoic acid (PFHxA)	number with two decimal	ng/ml	-
Perfluoroheptanoic acid (PFHpA)	number with two decimal	ng/ml	-
Perfluorooctanoic acid (PFOA)	number with two decimal	ng/ml	1.15 - 8.00
Perfluorononanoic acid (PFNA)	number with two decimal	ng/ml	-
Perfluorodecanoic acid (PFDeA)	number with two decimal	ng/ml	-
Perfluoroundecanoic acid (PFUnA)	number with two decimal	ng/ml	-
Perfluorododecanoic acid (PFDoA)	number with two decimal	ng/ml	-
Perfluorobutanesulfonic acid (PFBS)	number with two decimal	ng/ml	-
Perfluorohexane sulfonic acid (PFHxS)	number with two decimal	ng/ml	-
Perfluorooctanesulfonic acid (PFOS)	number with two decimal	ng/ml	1.88 - 14.79

FINAL RESULTS IMPORT

Import of
automatic
reporting

- Cooperation/integration with LHA's application systems (LIS)
- Integration with ARPAV laboratory



Calculation of
the risk class

- Calculation algorithm which consider the values of the questionnaire and the results of both biohumoral and PFAS tests
- It allows the correct management of recall procedure

CALCULATION OF THE RISK CLASS

CLASS	LIFESTYLE	PRESSURE + BIOHUMORAL TESTS	PFAST TESTS
A	adequate	in the standard	detected value
B	improvable	in the standard	detected value
C	adequate	altered	detected value
D	improvable	altered	detected value

FINAL RESULTS COMMUNICATION TO USERS

The organizational secretariat sends the results to the citizens

Each risk class is associated with a specific letter

Proper follow-up procedure management

CONCLUSIONS

A solid database and a good data quality allow a correct calculation of the indicators and, as a result, an accurate risk assessment...

...to the scientific community the assessments
and the suggestions for actions to be taken

THANK YOU!

