PRESIDENZA DEL CONSIGLIO DEI MINISTRI
Ministro per la Cooperazione Internazionale e l'Integrazione
Dipartimento Politiche Antidroga

REGIONE VENETO
ULSS 20
VERONA

Regione del Veneto - Azienda ULSS 20
Dipartimento delle Dipendenze

Outcome results through the mFp information collection system

Serpelloni G., Genetti B., Balestra N., Zermiani M., Gomma M., Bettero C.

Zagreb, March 5th, 2013

mFp – Main concepts

mFp is a complete system for tracking drugs and addictive problems of patients entering a public or private health structure.

Using state-of-the-art web technology to collect and show up the data, in a server-centric architecture, **mFp** can provide valid and effective tools to manage the daily work of the various health operators.

In real-time, with few mouse clicks, reports and tables are always ready to show and explain the various aspects of the data collected.

All the tools are aimed at one single target: **discover the "outcome" of the offered treatments**, to constantly improve the daily activites and better cure the patients involved.

The mFp platform

Main feature: to be a management system of the daily work processes and not a simple clinical data entry tool.

organization → ***computerization***

A correct organization of the local units is the key to profitable results in the adoption of a so pervasive system like the mFp platform

*Regions whose local units currently use **mFp** are:*

- *Veneto (95%)*
- *Lombardia (80%)*
- *Liguria (entire Region)*
- *Umbria (entire Region)*
- *Marche (entire Region)*
- *Sicilia (90%)*
- *Basilicata (entire Region)*
- *Calabria (entire Region)*
- *Molise (entire Region)*
- *Friuli V/G (entire Region)*
- *Sardegna (entire Region)*

*In total, there are more than 200 local units using this software platform, making it **the most widely adopted tool in Italy**.*

Multifunctional Platform (mFp) – History and working team

2000

↓

2013

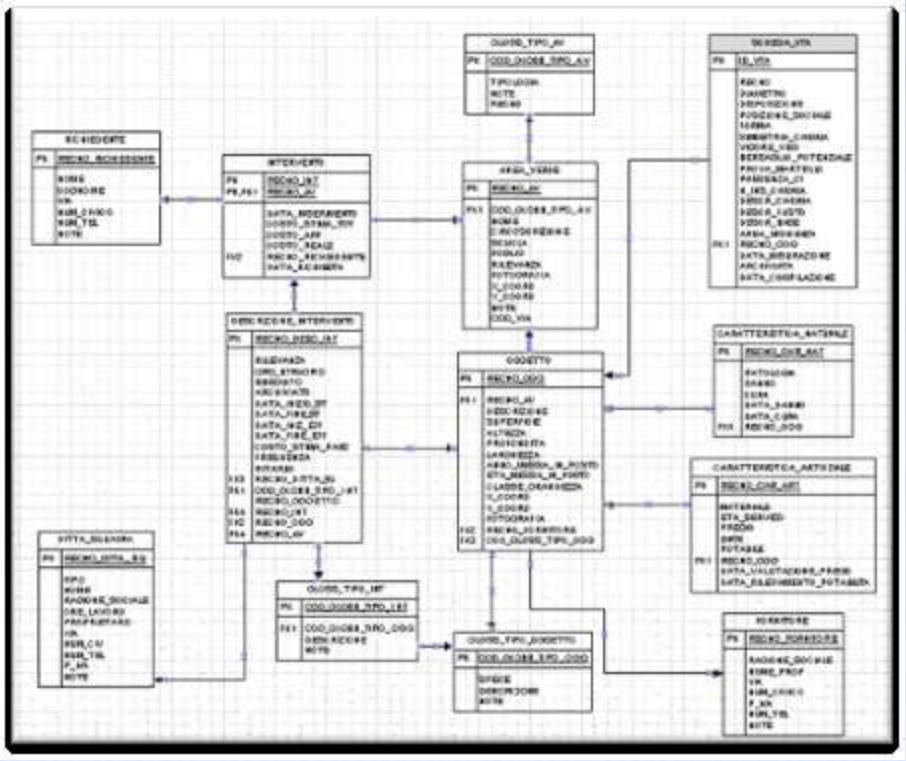
CRITERIA:

- *USEFUL*
- *EASY*
- *APPEALING*

mFp – Main data flow

mFp relational data model

Through the use of the various functions of the system local units contribute to the creation of a large relational database, fully able to satisfy the various standards (regional, national and European) and also offer various options for assessing the outcome, with standardized and easy to use instruments.



Multifunctional platform – Management and data collection

User details / Movement

Clinical Management

Operational management

mFp – management and data collection

Each of the process groups contains several functions, to provide all the necessary tools to the health operators.

In PATIENT MAIN DATA AND MOVEMENTS, you will find:

- The patient main data, with all the fields (social-demographic, patient family, legal status, addiction history, etc.)
- The patient in-out management
- The clinical log (diary), one for each figure (doctor, psycologist, educator, etc.)
- Patient auto discharge management, a system to keep patient record always up-to-date
- Certificate and documents encrypted repository

mFp – management and data collection

In CLINICAL MANAGEMENT, you will find:

- Intake checks
- Patient medical history
- List of diagnosis (ICD9, ICD10, DSMIV)
- Check-up exams
- Related pathology avoid check
- HIV risk check
- Psico and social guided interviews (EuropAsi, etc.)
- Quality of life interview
- Laboratory (blood and urine exams)
- Drug and medication treatments (methadon, other drugs, etc.)
- Patient Outcome evaluation

mFp – management and data collection

In OPERATIVE DAILY MANAGEMENT, you will find:

- **The daily activities management (for patient and for general activities)**
- **The equipe meetings manager**
- **The main agenda "outlook style" for all the programmed activities on the patients**
- **The residential communities management, with all the necessary budget control and process management**

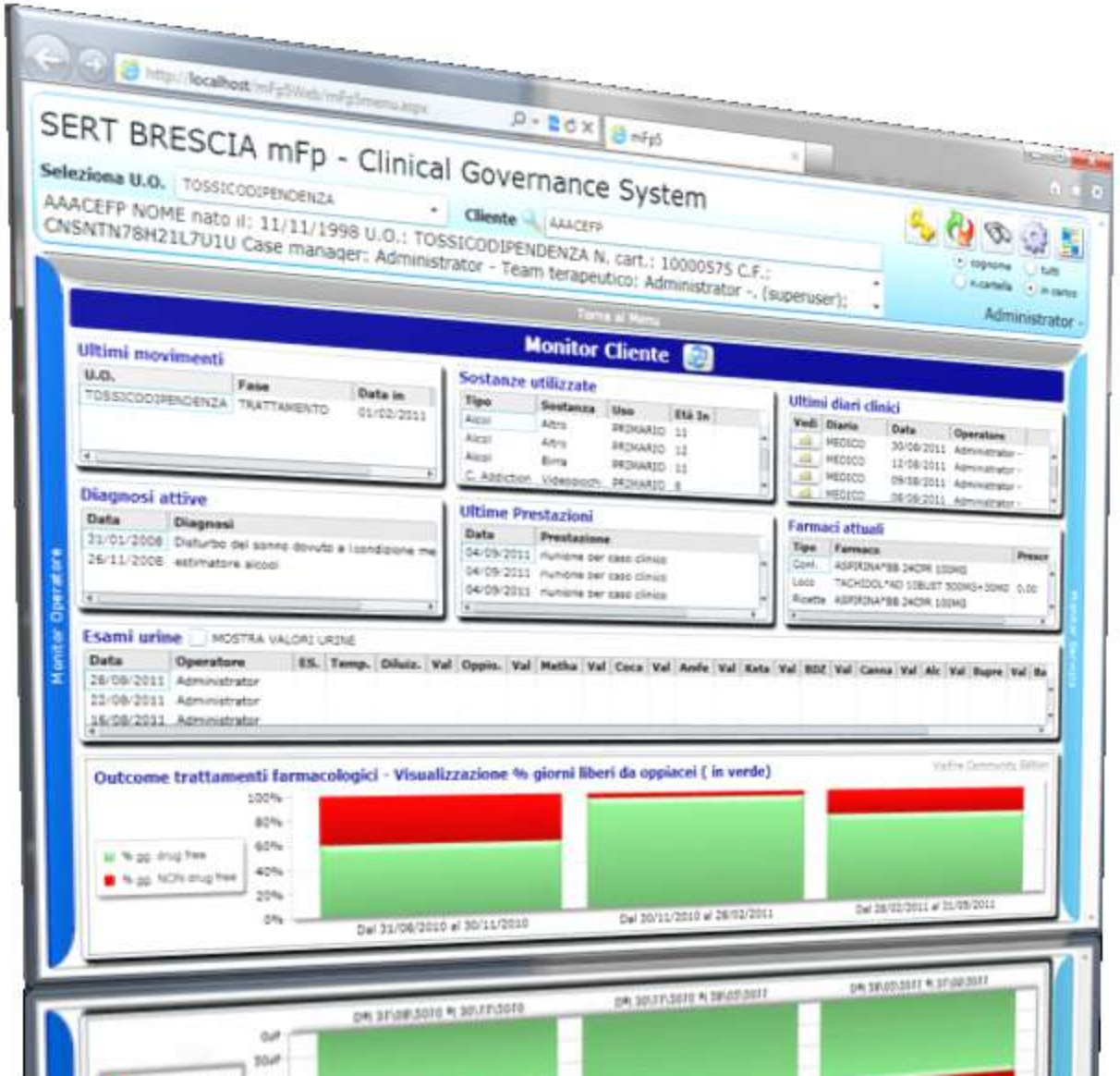
Finally, you will find tools to export single-record and aggregated data in various formats (txt, xml, etc.) and standards (SIND, EMCDDA, SESIT).

Monitor 3D – Patient side

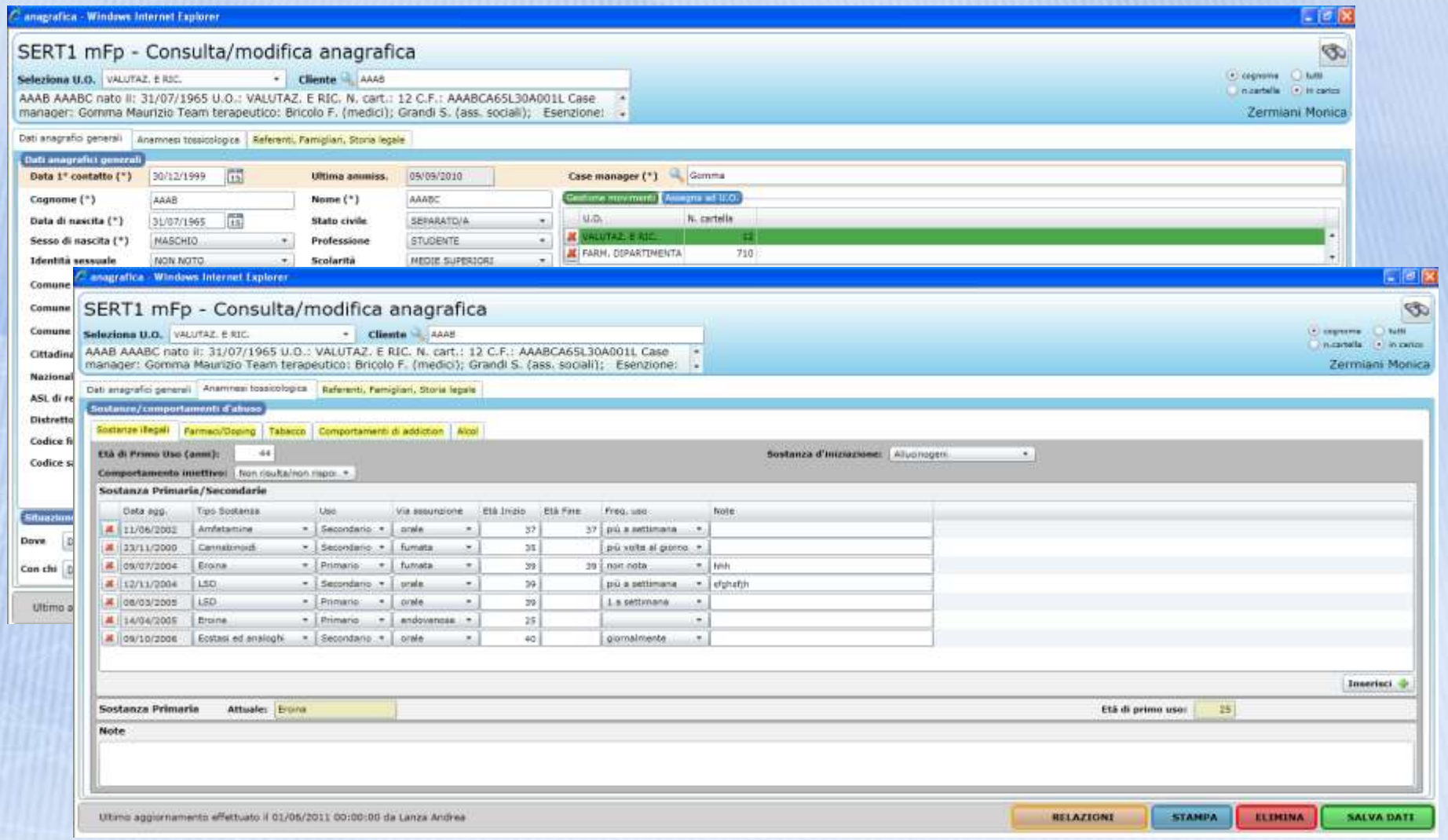
With this dynamic view, you can monitor key data on the patient, without having to log in each area one by one.

It represents a snapshot of the last movements, the used substances, the clinical diaries, the diagnoses, the activities and the drugs administered.

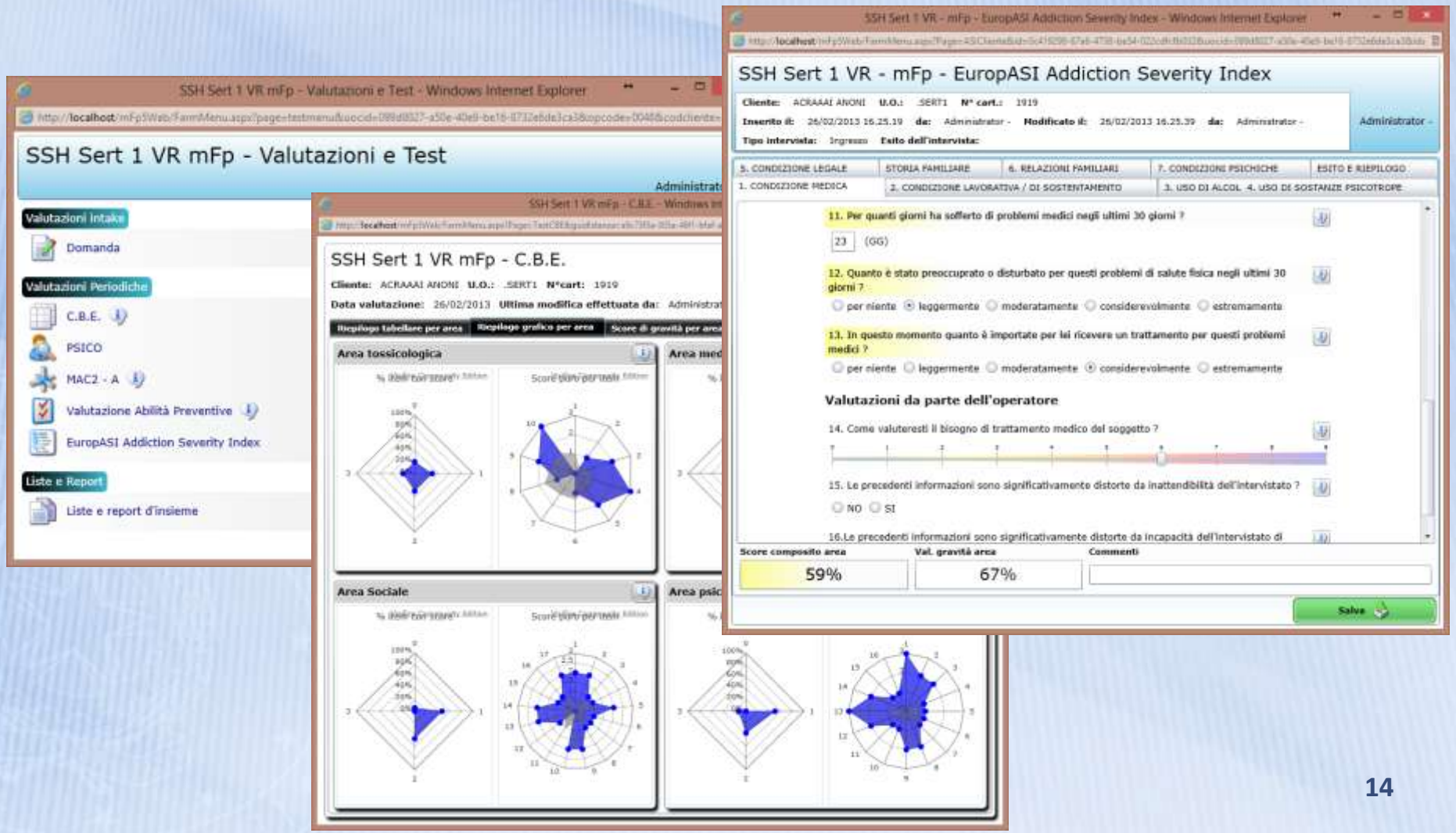
A graph clearly shows the outcome of the pharmacological treatments, showing the free days from illegal drugs in green for the four previous quarters.



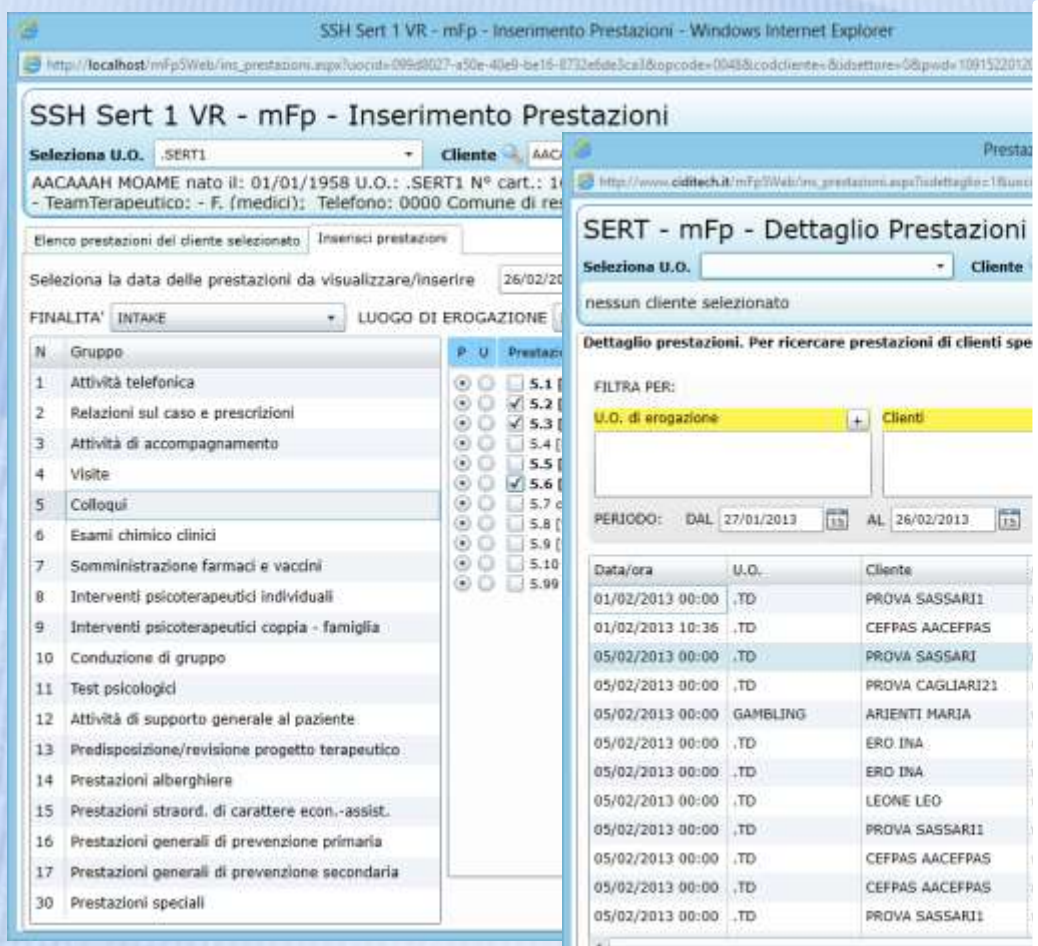
Multifunctional platform – User details / Movement



Multifunctional platform – Clinical Management



Multifunctional platform – Operational management



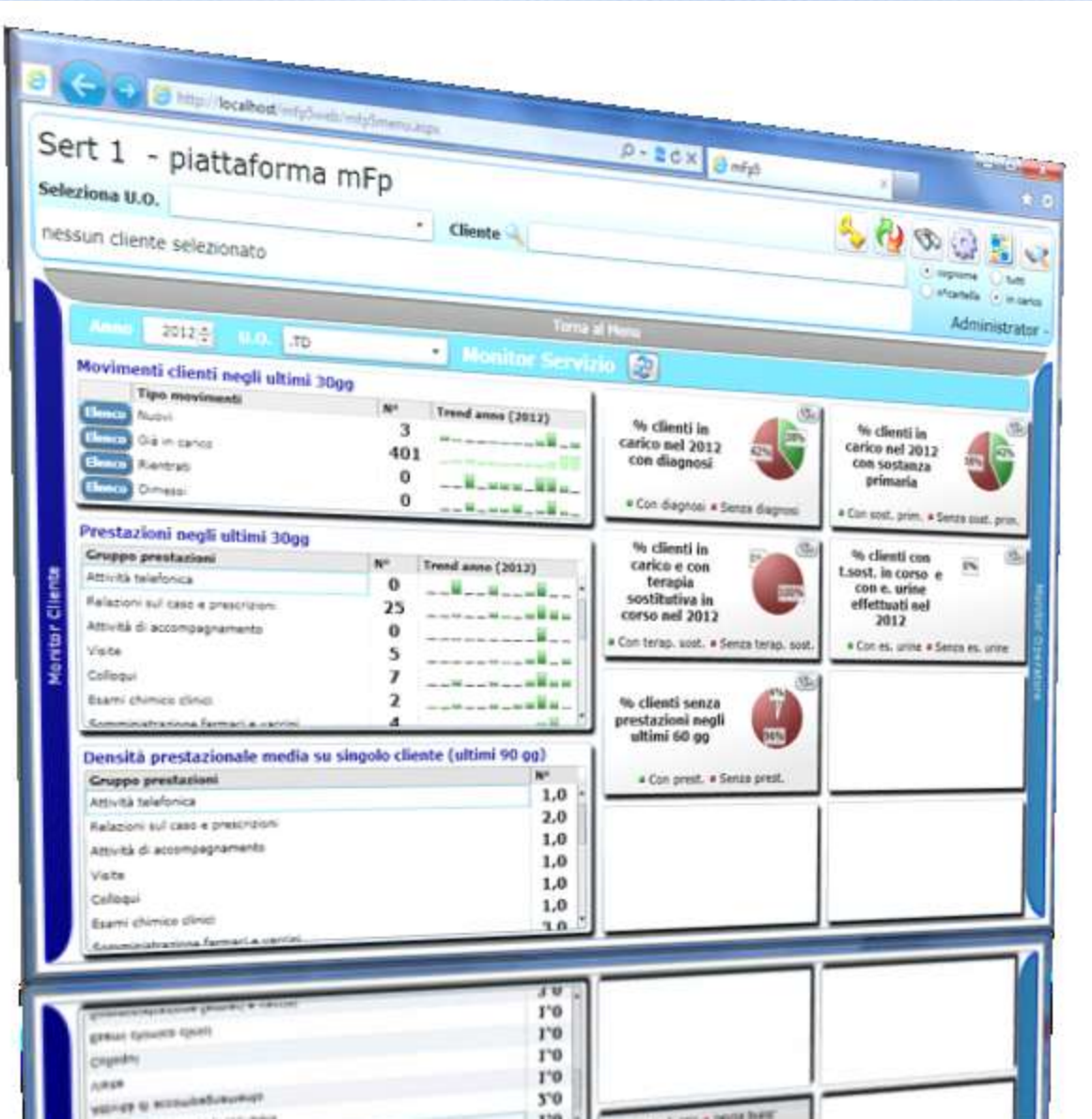
Key issue is the monitoring of daily activities and performance of each local center operator.

mFp 5.0 allows you to record the activities of the patients during the day, according to a national encoding ("Sesit") adopted by all services for addictions in Italy. **This is completely configurable**, so every Nation can have its own dictionary.

All entered data **feeds a database** that can be analyzed with the powerful tools contained in the report area for all intended uses.

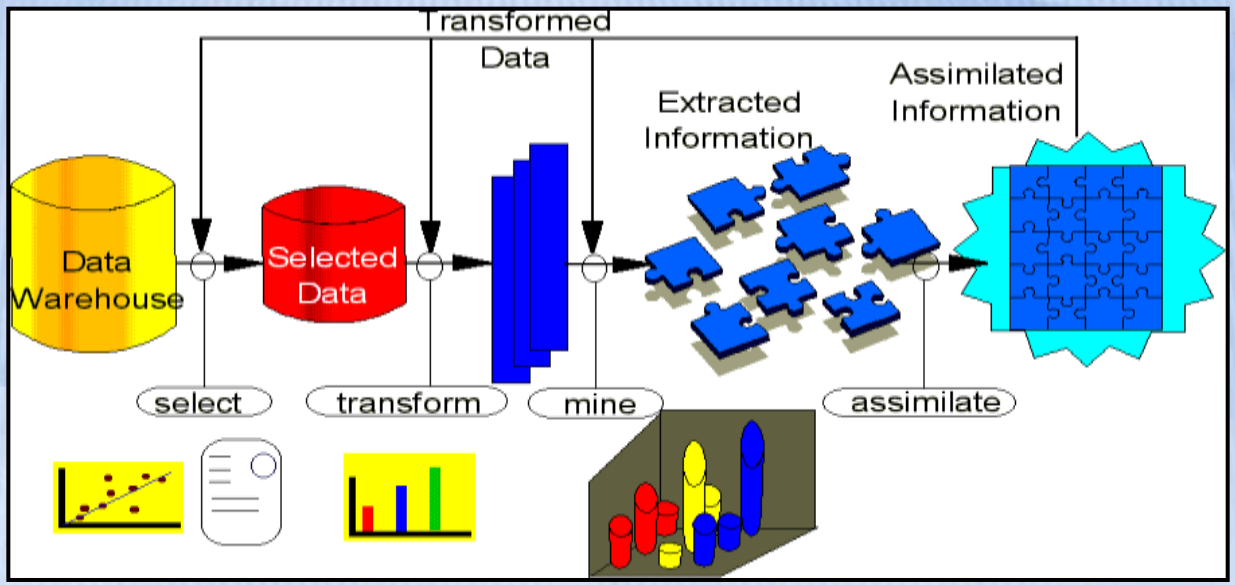
Monitor 3D – global view

In this view, you can see the main indicators of how things are going globally in your local center.
You can see numeric data, like the new patients of the last 30 days, or the number of activities recorded.
You can also see, on the right, some important "quality" indicators (presence of ICD-9 diagnosis, presence of activities in the last 60 days, and more).



mFp – Web Reporting

Through the various reports contained in the mfp platform we obtain very useful data for a drug-addiction Department, generated by means of daily management of work processes.



mFp clearly and automatically highlights aspects that were previously obtainable only with great effort and manual data mining.

Multifunctional platform – System components

Web Reporting

Outcome Project – Principal Aim

Creation of a multicentric system for monitoring treatments and evaluating treatments outcomes in relation to the intervention received.

1. **drug free treatment days**
2. **adherence to medication administration/dispensing**
3. **adherence to urine drug tests.**

Rational – Starting Point

- *In Italy the majority of patients of drug services are heroin dependent (70%)*
- *The most frequent treatment is pharmacological associated with psychosocial intervention (66,6%)*
- *Methadone and buprenorphine are used in 75,1% and 13,6% respectively of phamacological treatment.*

Report to Italian Parliament, 2012

Outcome Project – Objectives

To assess the effectiveness of different kinds of pharmacological treatments currently used in clinical units for addiction

6 Regions, 31 Addiction Departments

8.700 subjects in 2011, 8.500 in 2010, 10.000 in 2009
in pharmacological treatment (methadone and buprenorphine) for heroin dependence

Presented:
Report to Italian Parliament in the years 2009, 2010, 2011
APA, Philadelphia, 2012

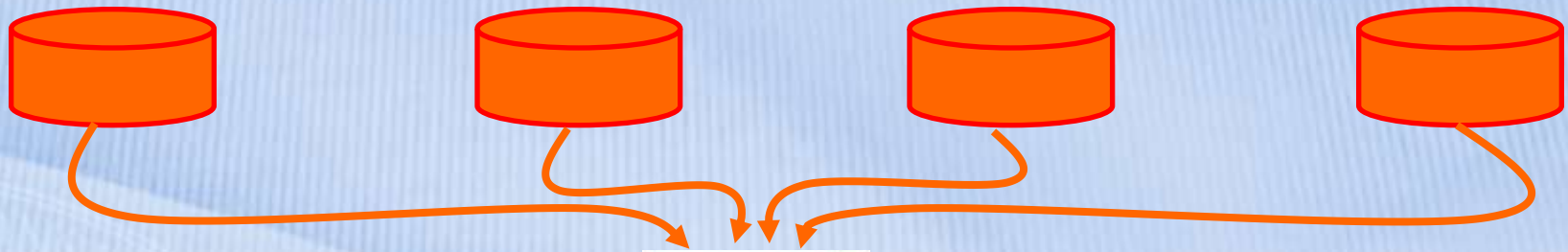
Multifunctional platform (mFp) – *Outcome Exctractor*

U.O. 1

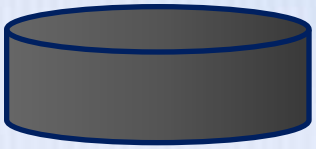
U.O. 2

U.O. 3

U.O. n



EXTRACTOR APPLICATION

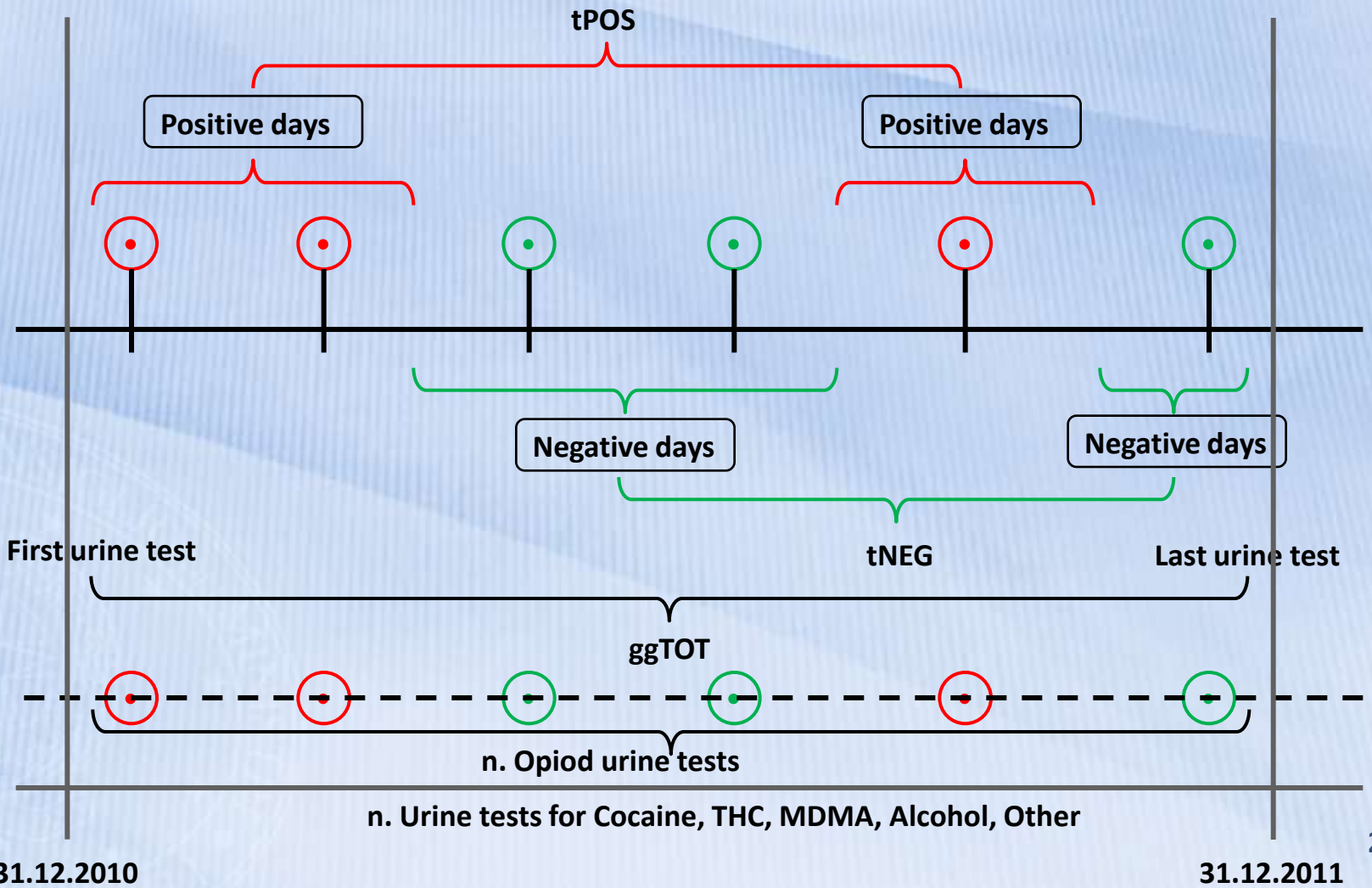


OUTCOME DATABASE

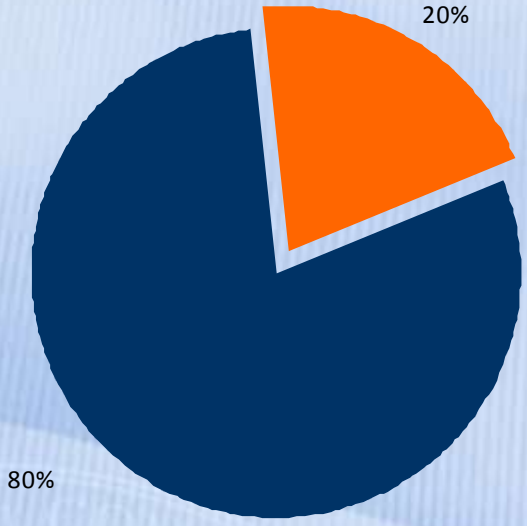
Multifunctional platform – Outcome – Output single record Exctractor

- Pharmacological prescription
- type of drug
- dosage
- length of prescription
- type of program
- scheduling of urine

Outcome – Methodology



Main Results – Percentage of heroin "drug free" users



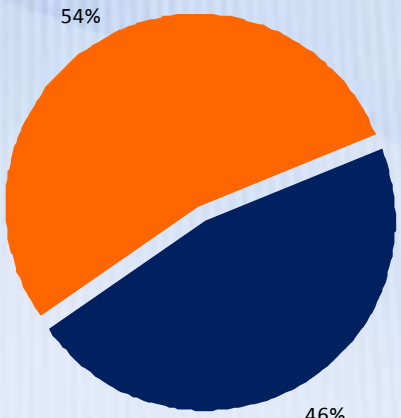
Total clients 8,723

Outcome indicator: drug free treatment days

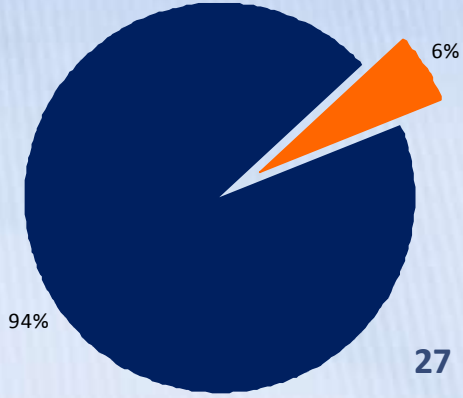
- No Responders: up to 30% "Drug free" days
- Low Responders: from 30% to 60% "Drug free" days
- Responders: Over 60% "Drug free" days

No Responders

Low Responders



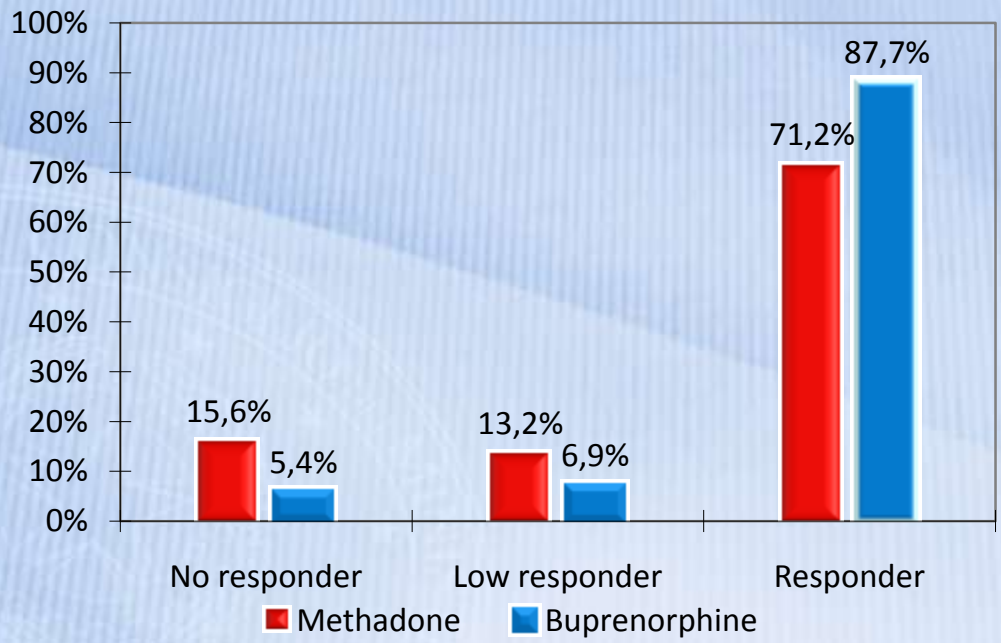
Responders

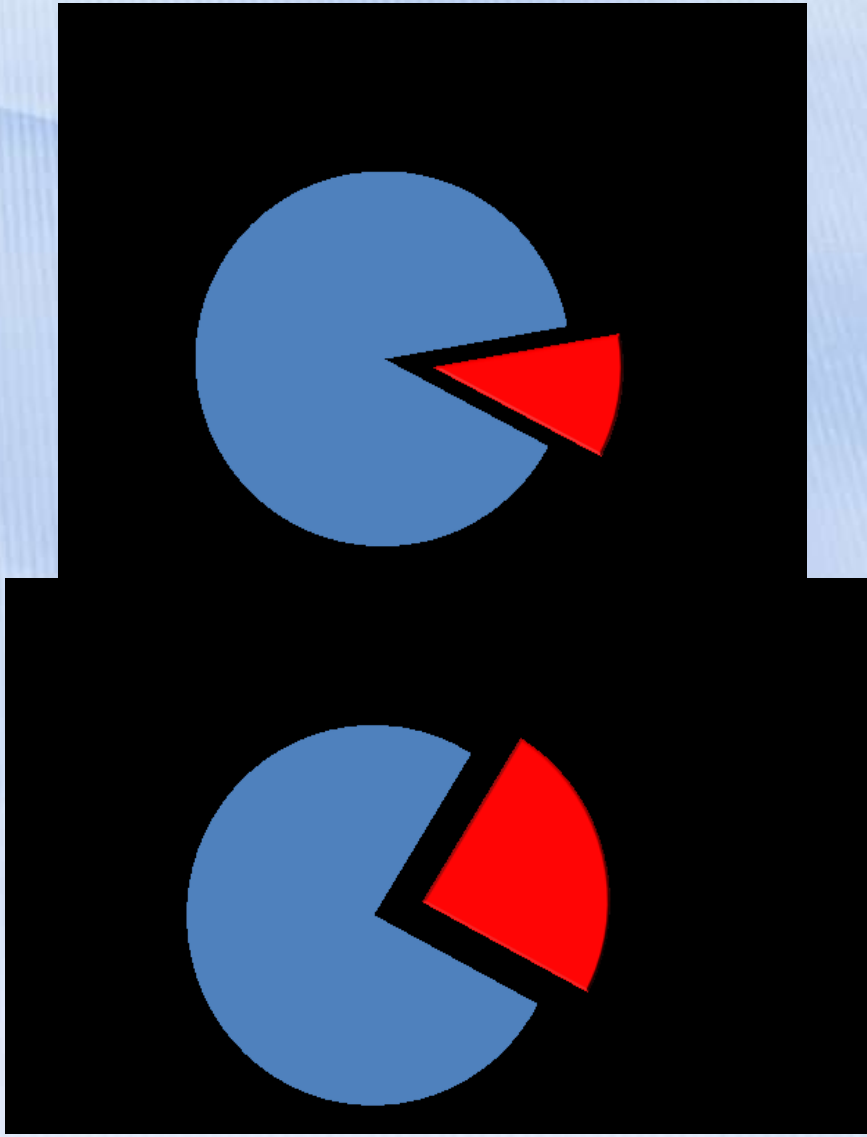


opiod free days no opiod free days

Main Results – Outcome 2012

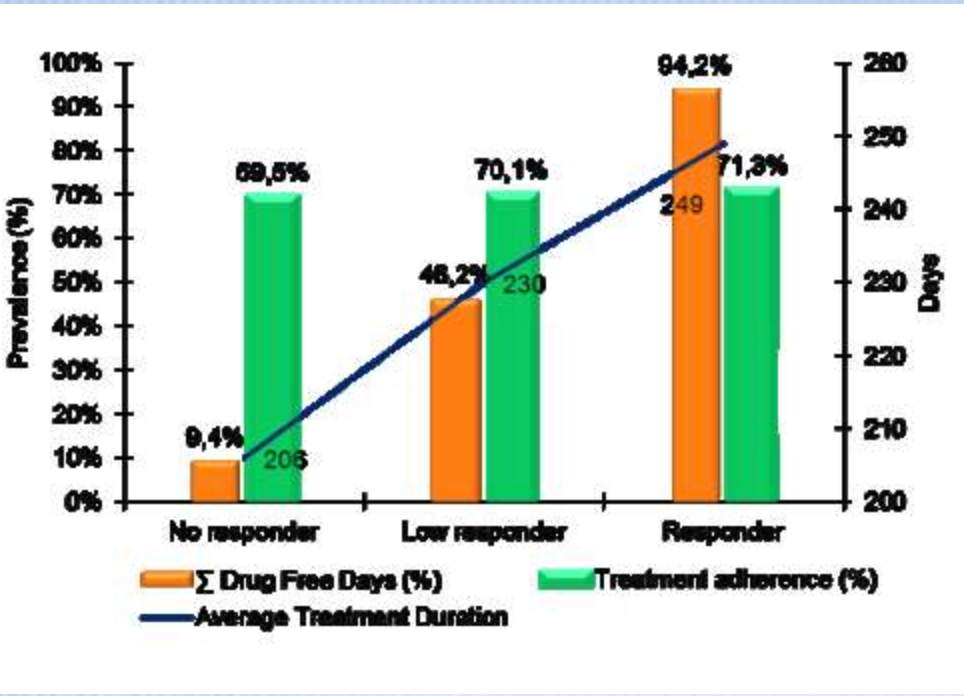
Subject according kind of treatment response and pharmacological treatment (%)



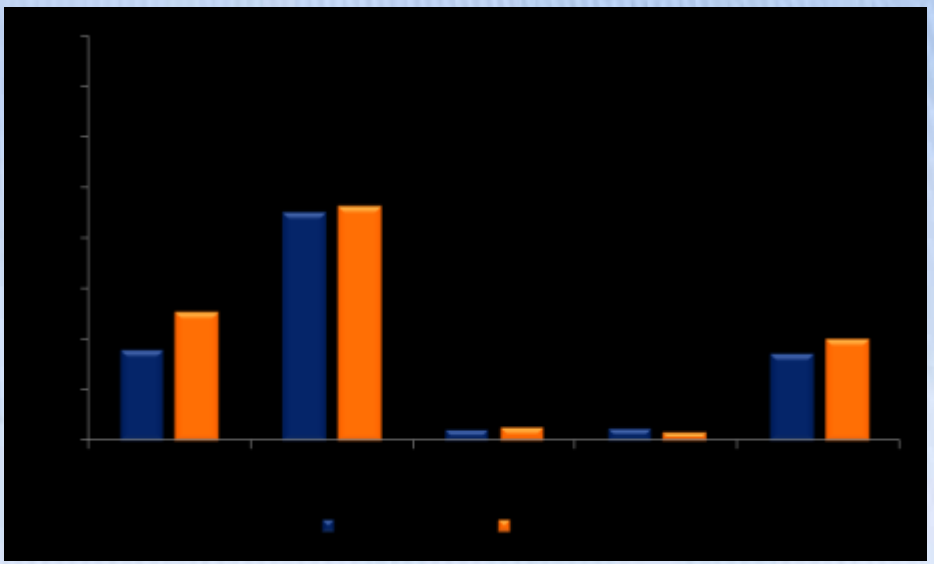


Main results – Outcome 2012

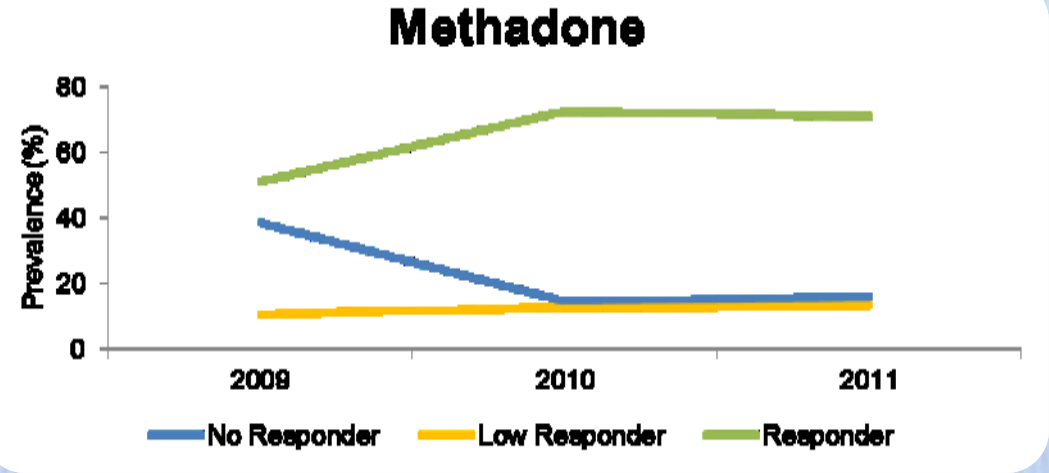
Average duration of treatment, percentage of people with negative tests morphinurias and adherence to treatment



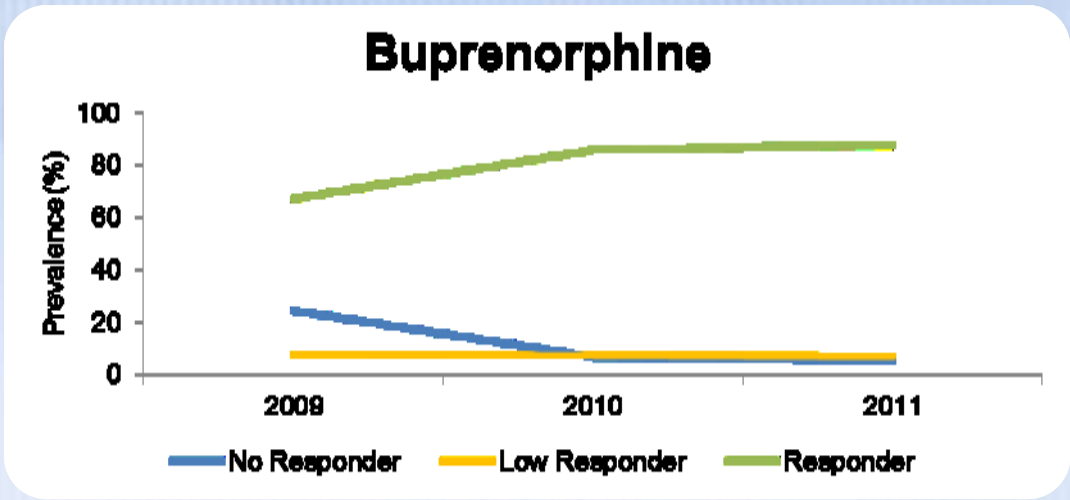
Use of other substances during the "heroin" free period (%)



Main results – Trends Outcome



Subject according kind of treatment response in the years 2009, 2010, 2011 (%)



Observations– Outcome and next steps

- **The study shows how a *clinical management tool* can allow clinical practices (type of therapy, dosages, etc) monitoring and outcomes (abstinence from heroin, concomitant use of other drugs) surveillance.**
- **These jointly support the quality process in public drug addiction treatment centres.**
- **Enhance the database by mean of specific indicators (es. Severity Index, Change's Motivation).**
- **Integrate the observations with the *total number of activities* given for each patient's group.**

Thanks to

- *Department for Antidrug Policies for funding the project*
- *Italian Observatory on Drugs and Drug addiction Department for Antidrug Policies*
- *Robert P. Schwartz, M.D., Friends Research Institute, Baltimore*
- *Operational Network Units: Dipartimento Dipendenze Brescia, Dipartimento Dipendenze Varese, Dipartimento Dipendenze Valcamonica, ULSS 4, Regione Veneto; ULSS 6, Regione Veneto; ULSS 7, Regione Veneto; ULSS 8, Regione Veneto; ULSS 9, Regione Veneto; ULSS 13, Regione Veneto; ULSS 14, Regione Veneto; ULSS 15, Regione Veneto; ULSS 17, Regione Veneto, ULSS 18, Regione Veneto; ULSS 20, Regione Veneto; ULSS 21, Regione Veneto, Dipartimento Dipendenze Savona, Dipartimento Dipendenze Imperia, Dipartimento Dipendenze Genova, Dipartimento Dipendenze Foligno, Dipartimento Dipendenze Perugia, Dipartimento Dipendenze Terni, Dipartimento Dipendenze Macerata, Dipartimento Dipendenze Enna, Dipartimento Dipendenze Ragusa, Dipartimento Dipendenze Messina, Dipartimento Dipendenze Agrigento, Dipartimento Dipendenze Palermo*