

---

# **Role of Information Systems In The Development of Drug Treatment Policies**

---

**Prepared for  
Inter-American Drug Abuse Control Commission  
9<sup>th</sup> Demand Reduction Expert Group Meeting  
September 29<sup>th</sup> – October 1<sup>st</sup> 2009  
Mexico**

**Terrance Fountain**

---

# Presentation Outline

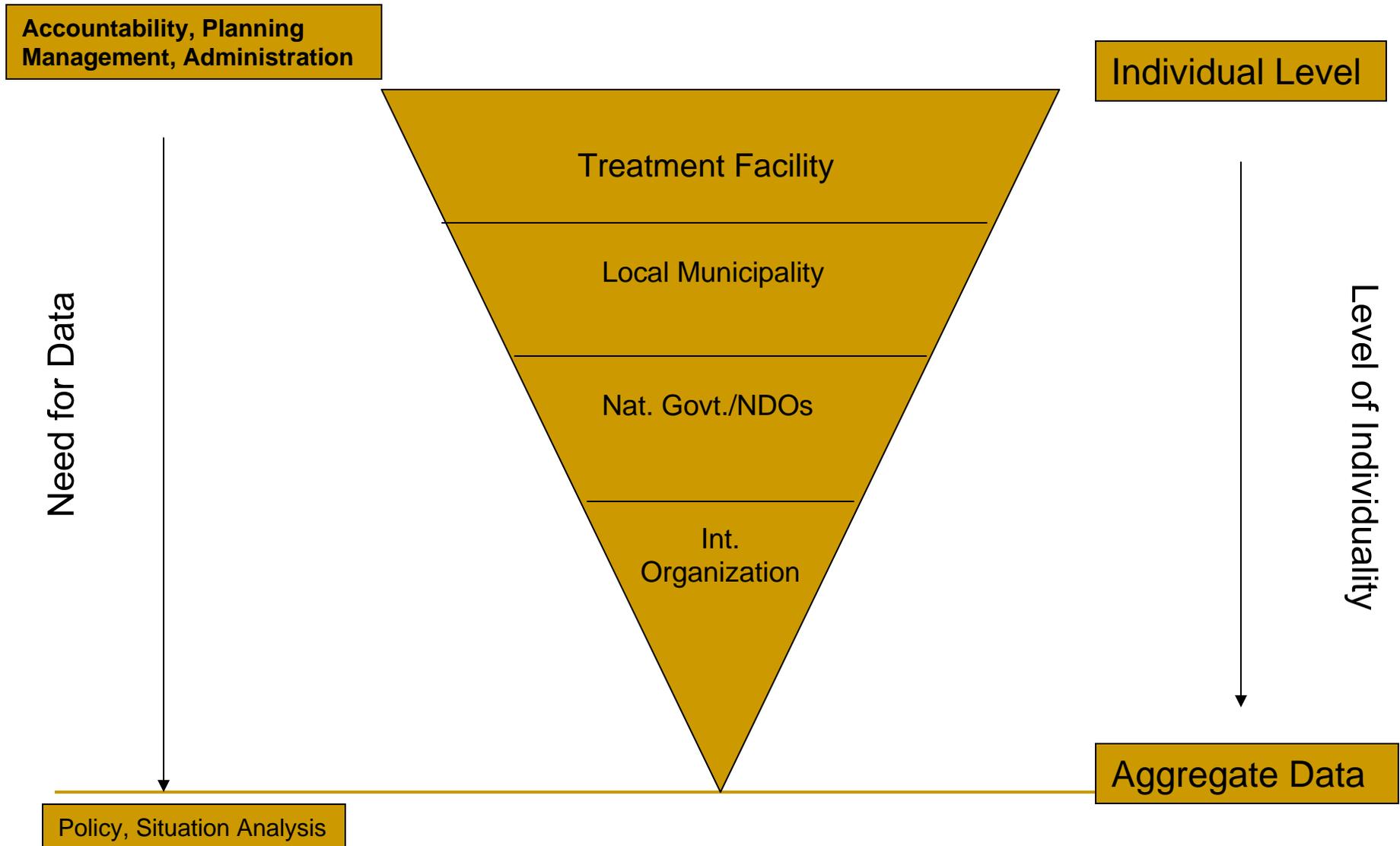
- n Uses of Drug Treatment Facility Information
  - n Problems Related to Information Systems in Treatment Facilities
  - n Opportunities for Improvement
-

---

# Selected Treatment Information Stakeholders

- n The information desired of treatment related institutions differ according to the type of institution requesting the information.
    - q Treatment Facility
    - q Local Government Agency
    - q National Agencies (Drug Observatories, Drug Commissions)
    - q International Organizations
      - n CICAD, OIDA
      - n CARICOM
      - n PAHO
      - n UNODC
-

# Required Treatment Centre Information According to Type of Agency



---

# National Organizations (NDOs) Treatment Information Needs

- n Situational Analysis/Snapshot – Driven by reporting obligations and stakeholder needs
    - q National
      - n Policy
      - n Planning
    - q International
  
  - n National registry of clients in treatment
-

---

# International Organizations Treatment Information Needs

- n Country Situational Analysis (Macro)
    - q CICAD (OID);
    - q UNODC;
    - q PAHO.
  
  - n Evaluation of country's efforts (Macro)
    - q CICAD
  
  - n Recommendations
    - q CICAD
-

---

# **Treatment Facility Information Needs:**

## **Information needed to design and implement a comprehensive policy on drug treatment**

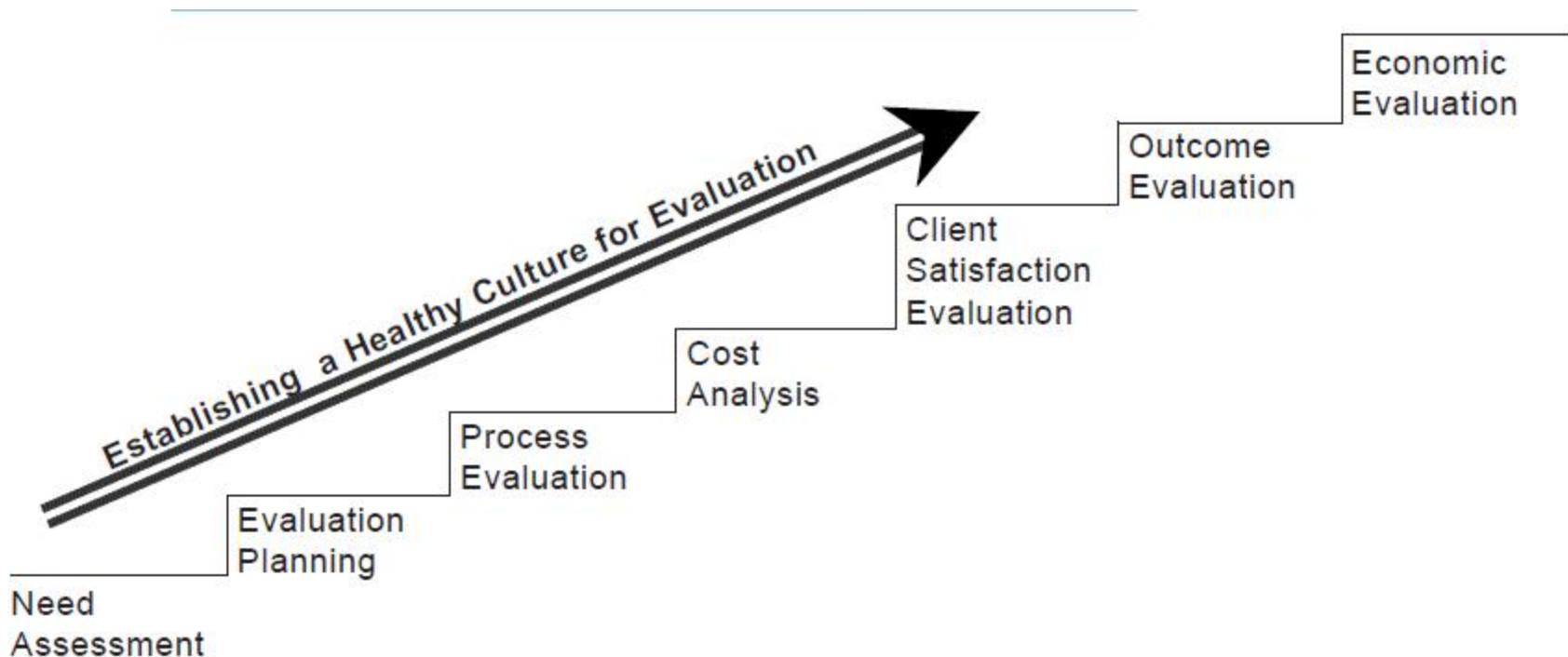
- n Screening
    - q Who needs treatment; where are they identified;
  - n Treatment Plans
    - q Intake Assessment and Diagnosis
    - q Individualized Patient Care
  - n Record Keeping
    - q Legal Requirement
    - q Planning Purposes
      - n Staffing Levels
      - n Bed Capacity
    - q Administrative Purposes
      - n Program Evaluation
      - n Accountability
-

---

# WHO Specialized Evaluation Workbooks

- n Workbook 3: Needs Assessment Evaluations
  - n Workbook 4: Process Evaluations
    - q Questions about coverage at the activity, service, or agency level
    - q Questions about coverage at the system level
    - q Questions about treatment process at the activity, service, or agency levels
  - n Workbook 5: Cost Evaluations
    - n to trace the resources used under different circumstances
  - n Workbook 6: Client Satisfaction Evaluations
    - n the extent to which treatment activities have met with client expectations
  - n Workbook 7: Outcome Evaluations
    - n it must measure how clients and their circumstances have changed; and
    - n it must show that the treatment experience has been a factor in causing this change
  - n Workbook 8: Economic Evaluations
    - n involves identifying, measuring, valuing and comparing costs and outcomes of alternative interventions
-

# A Stepped Model of Treatment Service or System Evaluation



---

# Problems Related to Treatment Information

- n Inadequate Patient Data Forms
    - q Intake Assessment
      - n inadequate drug history; inadequate drug/addiction severity information;
    - q Limited Treatment Tracking Information;
      - n Detox → Ward → Follow-up
      - n Number of hours of group and individual counseling, life skills training, etc
  - n Incomplete Medical Records – Professionals refusal to complete forms
  - n Concurrent but separate Data Systems
    - q Social Workers; Medical Records;
  - n Limited processing of and analysis of Treatment information
    - q Plenty hardcopies, no software,
  - n Lack of use of information by administration results in less than ideal appreciation for information and support for the system.
    - q Limited resources, starts/stops
  - n **Unclear policies leading to a disconnect between institution information needs and captured information.**
-

---

# Quality of Data: Reliability

n **Reliability** - confidence with which data is known to be correct. It is determined by two factors:

- q **Accuracy**
  - q **Completeness**
-

---

# Quality of Data: Accuracy

- n **Accuracy** - degree to which data is in accordance with the truth. It is the combination of two factors:
    - n **Precision** - exactness with which data is recorded
    - n **Validity** - certainty of data being correct
-

---

# Quality of Data: Completeness

- n **Completeness** - proportion of total information known
    - q All required information captured and recorded by all personnel;
-

**SANDILANDS REHABILITATION CENTRE  
PSYCHIATRIC SOCIAL SERVICES  
PSYCHOSOCIAL HISTORY**

**WARD:**  
**DATE:**

**NAME:** (FULL NAME)

**RECORD NUMBER:**

**DATE OF BIRTH:**

**AGE:**

**PLACE OF BIRTH:**

**NATIONALITY:**

**ADDRESS:** (DETAILED AS POSSIBLE - # ON HOUSE, COLOUR, DIRECTIONS)

**TELEPHONE:**

**OCCUPATION:** (PROFESSION, EMPLOYMENT - STUDENT SCHOOL)

**RELIGION:** (DENOMINATION - NAME OF CHURCH)

**MARITAL STATUS:**

**NAME OF SPOUSE:**

**ADDRESS:**

**TELEPHONE:** (HOME, WORK, CELL)

**NEXT OF KIN/SIGNIFICANT OTHER:**

**RELATIONSHIP:**

**ADDRESS:**

**TELEPHONE:**

**INFORMANTS:**



# Opportunities for Improvement



---

# EU-LAC

The EU-LAC Initiative aims to contribute to improved policy decisions on the quality and coverage of drug treatment, rehabilitation and harm reduction for diverse populations in the European Union and Latin America and the Caribbean to ensure that the care provided to them is appropriate.

- q Working Group 1. Improving drug treatment public policies and inter-agency cooperation in EU and LAC cities;
  - q Working Group 2. Improving drug treatment services in EU and LAC cities;
    - n Formulation of local drug treatment strategies;
    - n **Improvement of patient information and data collection systems;**
    - n Improvement of local treatment capacities for specific needs, including high risk population and socially-excluded groups, rehabilitation and aftercare programs
  - q Working Group 3. Treatment Alternatives to Incarceration for Drug-Dependent Offenders.
-

---

## **EU-LAC COLLABORATIVE ACTIONS - Action 3**

### **Improvement Of Patient Information And Data Collection Systems**

#### Activity 3.1.

Technical meeting to compare and develop a record-keeping system for patients in drug treatment, based on existing systems. (*meeting*)

#### Activity 3.2.

Seminar to share the record-keeping system with participating cities-countries (*workshop*)

#### Activity 3.3

Implementation of the record-keeping system

#### Activity 3.4

Preparation and publication of guidelines on developing a drug treatment record-keeping system at the local level

---

---

# Genesis of Bahamas' Involvement in EU-LAC

- n Limited Screening Opportunities to Identify Patients in need of Treatment;
    - q Referrals limited, primarily, to those already identified as drug users/abusers;
      - n Judicial system; schools; health care system; etc
  
  - n Lack of Required Information to conduct:
    - q Process Evaluations
      - n Pre-Treatment Factors
      - n Drug Severity Index
      - n Specific treatment services provided
    - q Outcome Evaluation (2000 Study)
      - n Limited/No opportunities for continuity of care post discharge
        - q Limited contact
-

---

# Practical Benefits of EU-LAC

- n Information Management
    - q EU-LAC Forms
  - n Exposure
    - q Edinburg
      - n “Shared Services Software” - Screening
    - q Bergin Early Warning System
      - n Drug Information Network – Incorporation of qualitative, quantitative and Second-hand data
  - n Sharing
    - q Gotenburg Prison Policy
-



# EU-LAC DRUG TREATMENT CITY PARTNERSHIPS



## DRUG TREATMENT REGISTRATION FORM

This information is being collected for research purposes only. Your confidentiality will be respected.

**Form Number**

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"><b>1. Country/City</b></td> <td style="width: 25%;"><input style="width: 90%;" type="text"/></td> <td style="width: 25%;"><input style="width: 90%;" type="text"/></td> <td style="width: 25%;"></td> </tr> <tr> <td><b>3. Date of Interview</b></td> <td><input style="width: 20%;" type="text"/></td> <td><input style="width: 20%;" type="text"/></td> <td><input style="width: 20%;" type="text"/></td> </tr> <tr> <td></td> <td style="text-align: center;"><b>Day</b></td> <td style="text-align: center;"><b>Month</b></td> <td style="text-align: center;"><b>Year</b></td> </tr> </table>	<b>1. Country/City</b>	<input style="width: 90%;" type="text"/>	<input style="width: 90%;" type="text"/>		<b>3. Date of Interview</b>	<input style="width: 20%;" type="text"/>	<input style="width: 20%;" type="text"/>	<input style="width: 20%;" type="text"/>		<b>Day</b>	<b>Month</b>	<b>Year</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 75%;"><b>2. Reporting Center Code</b></td> <td style="width: 25%;"><input style="width: 90%;" type="text"/></td> </tr> <tr> <td colspan="2"><b>4. Patient code</b> <input style="width: 90%;" type="text"/></td> </tr> <tr> <td colspan="2" style="font-size: small;">(for internal use only) Optional</td> </tr> <tr> <td><b>6. Age</b></td> <td><input style="width: 40%;" type="text"/></td> </tr> </table>	<b>2. Reporting Center Code</b>	<input style="width: 90%;" type="text"/>	<b>4. Patient code</b> <input style="width: 90%;" type="text"/>		(for internal use only) Optional		<b>6. Age</b>	<input style="width: 40%;" type="text"/>									
<b>1. Country/City</b>	<input style="width: 90%;" type="text"/>	<input style="width: 90%;" type="text"/>																												
<b>3. Date of Interview</b>	<input style="width: 20%;" type="text"/>	<input style="width: 20%;" type="text"/>	<input style="width: 20%;" type="text"/>																											
	<b>Day</b>	<b>Month</b>	<b>Year</b>																											
<b>2. Reporting Center Code</b>	<input style="width: 90%;" type="text"/>																													
<b>4. Patient code</b> <input style="width: 90%;" type="text"/>																														
(for internal use only) Optional																														
<b>6. Age</b>	<input style="width: 40%;" type="text"/>																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"><b>5. Gender</b></td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 20%;">1. Male</td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 20%;">2. Female</td> </tr> </table>	<b>5. Gender</b>	<input type="checkbox"/>	1. Male	<input type="checkbox"/>	2. Female	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="4"><b>8. Where have you lived for most of the last 30 days?</b></td> </tr> <tr> <td style="width: 30%;">Family home</td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 30%;">Shelter/refuge</td> <td style="width: 10%;"><input type="checkbox"/></td> </tr> <tr> <td>Own home</td> <td><input type="checkbox"/></td> <td>Squatting</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Rental house flat apartment</td> <td><input type="checkbox"/></td> <td>Homeless</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Rooming/boarding house</td> <td><input type="checkbox"/></td> <td>No response</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Other (specify)</td> <td colspan="3"><input style="width: 90%;" type="text"/></td> </tr> </table>	<b>8. Where have you lived for most of the last 30 days?</b>				Family home	<input type="checkbox"/>	Shelter/refuge	<input type="checkbox"/>	Own home	<input type="checkbox"/>	Squatting	<input type="checkbox"/>	Rental house flat apartment	<input type="checkbox"/>	Homeless	<input type="checkbox"/>	Rooming/boarding house	<input type="checkbox"/>	No response	<input type="checkbox"/>	Other (specify)	<input style="width: 90%;" type="text"/>		
<b>5. Gender</b>	<input type="checkbox"/>	1. Male	<input type="checkbox"/>	2. Female																										
<b>8. Where have you lived for most of the last 30 days?</b>																														
Family home	<input type="checkbox"/>	Shelter/refuge	<input type="checkbox"/>																											
Own home	<input type="checkbox"/>	Squatting	<input type="checkbox"/>																											
Rental house flat apartment	<input type="checkbox"/>	Homeless	<input type="checkbox"/>																											
Rooming/boarding house	<input type="checkbox"/>	No response	<input type="checkbox"/>																											
Other (specify)	<input style="width: 90%;" type="text"/>																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2"><b>7. Residence (last 30 days) and Nationality</b></td> </tr> <tr> <td colspan="2"><b>7a. Residence</b></td> </tr> <tr> <td style="width: 70%;">City or town where you currently live</td> <td><input style="width: 90%;" type="text"/></td> </tr> <tr> <td colspan="2"><b>7b. Nationality</b></td> </tr> <tr> <td><input style="width: 90%;" type="text"/></td> <td><input style="width: 90%;" type="text"/></td> </tr> </table>	<b>7. Residence (last 30 days) and Nationality</b>		<b>7a. Residence</b>		City or town where you currently live	<input style="width: 90%;" type="text"/>	<b>7b. Nationality</b>		<input style="width: 90%;" type="text"/>	<input style="width: 90%;" type="text"/>																				
<b>7. Residence (last 30 days) and Nationality</b>																														
<b>7a. Residence</b>																														
City or town where you currently live	<input style="width: 90%;" type="text"/>																													
<b>7b. Nationality</b>																														
<input style="width: 90%;" type="text"/>	<input style="width: 90%;" type="text"/>																													

---

# EU-LAC DRUG TREATMENT REGISTRATION FORM

- n Demographics
  - n Referral Mechanism
  - n Treatment History
  - n Drug Use History
    - q Commencement
    - q Last 30 days
  - n Judicial Information
  - n Contagious Disease History
  - n Prescribed Treatment Type
-

---

# Single Shared Assessment Software System

The Single Shared Assessment Software System is an internet-based web application which allows workers from the Substance Misuse Directorate to record on computer the information currently being gathered in paper form during a Single Shared Assessment with a client.

---

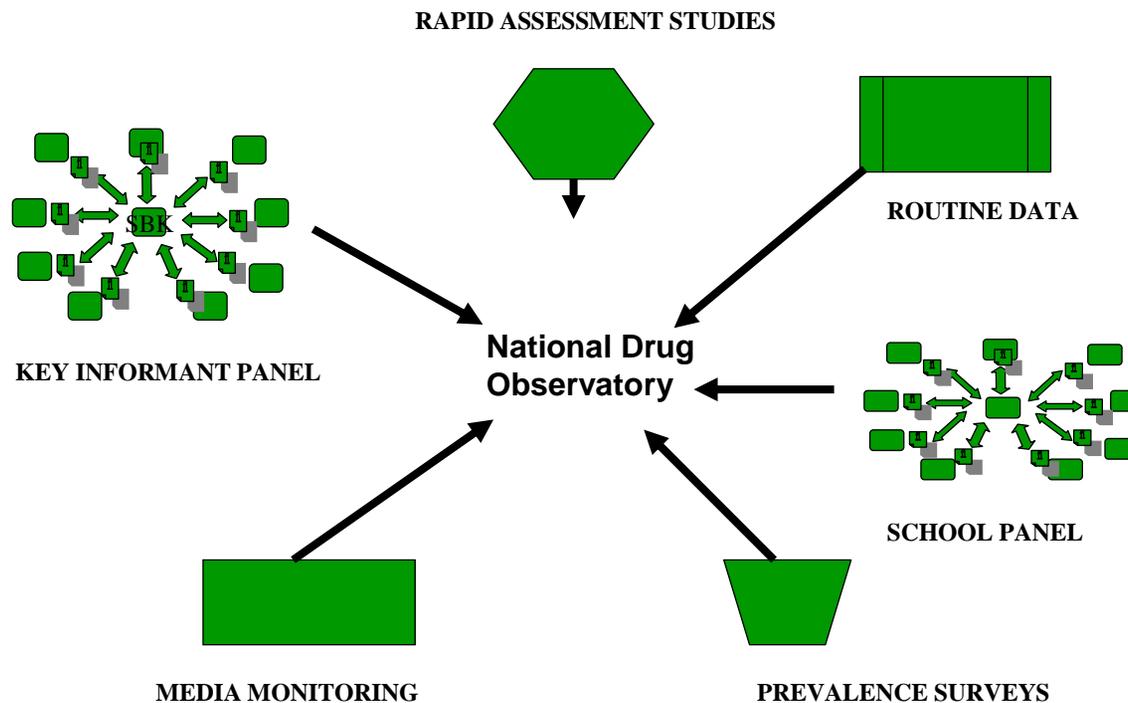
---

# Single Shared Assessment Software System

- n Client Demographics
  - n Main Presenting Problem(s) for Service User (client definition)
  - n Service history
  - n Presenting State at First Contact
  - n Alcohol Use (last week)
  - n Drug Use
    - q Illicit Drug profile (past month)
    - q History of Drug Use
    - q *Name of Drug Age first use Age last use Routes of use comments*
  - n Previous history of treatments and any abstinence
  - n Brief Health History and Current Physical Health
  - n Sexual health
  - n Mental Health
  - n Childcare Information
  - n Criminal Justice Issues
  - n Employment Status
  - n TREATMENT PLAN
    - q Immediate Drug/Alcohol/Poly Drug Needs
    - q Services Required: Alcohol/Drug/Poly Drug
    - q Goal of Care Plan
  - n SEVERITY OF DEPENDENCE SCALE (SDS)
  - n CHRISTO
-

# Bergen Early Warning Network

## Proposed Drug Information Network Design





# ***PATIENT TRACKING SYSTEM***

---

# Patient Tracking Software General Description

- § It is a strategic information Web based software, capable of providing valuable information on the profile of the consultants in a drug treatment and rehabilitation program, including family environment. Even when information is recorded on an individual basis, the profile is a statistical group, which does not mention names or addresses or other private information.
  - § The software plays an important role in other ways (apart from providing valuable statistical information): strengthens the institutions in building a culture of registering information from their patients in a systematic and orderly way, including the development of structured programs in phases or levels and monitoring those programs, both quantitatively and qualitatively.
  - § The software comes with a user manual and training for its operation in the beneficiary institutions, besides the support of CICAD.
-

---

# Conclusions

- n Assess the level of resources and competence;
    - q Staff
    - q IT/IS capabilities
  
  - n Ensure that the type of system given the institutional situation makes economic sense;
    - q Consider patient usage rates/numbers;
  
  - n Ensure that there is a demand for the information and that it will meet the required information needs of all parties;
    - q Buy-in
  
  - n Ensure there is a commitment to the development of the system by all managers and policy makers;
    - q Ensures the use of information
    - q Ensures incorporation into the institutional and national planning process;
-