



# Developing an instrument for collecting activity data on psychiatric inpatient wards: the Client Services Receipt Inventory-Inpatient (CITRINE)

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CITRINE instrument is part of the PERCEIVE research programme - *Patient Involvement in Improving the Evidence Base on Inpatient Care* which:

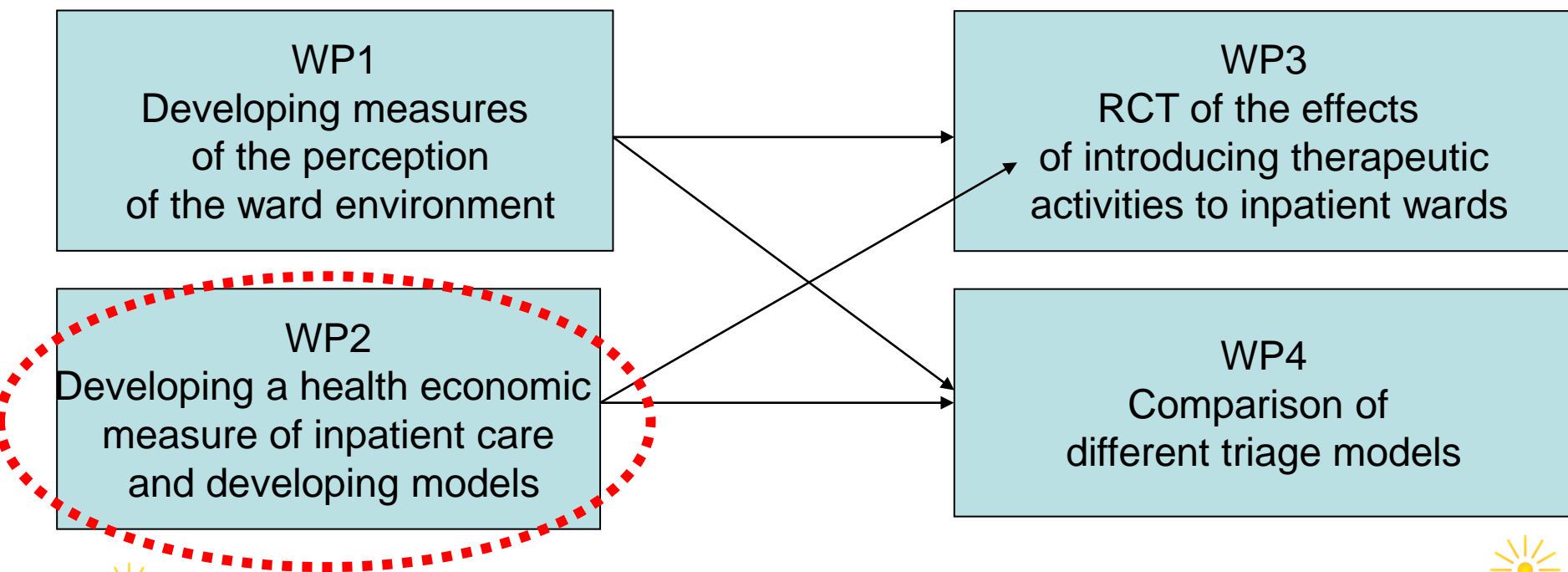
- Looks at the therapeutic environment on inpatient psychiatric wards.
- Emphasises service user views and also incorporates feedback from staff.
- Creates new questionnaires so the ward environment can be assessed.
- Compares ward admission systems and enables staff teams to perform therapeutic interventions on the wards.



Mental health nursing, on the horizon - or in clear focus?

- PERCEIVE is taking place in 16 acute mental health wards in the South London boroughs of Lambeth, Lewisham, Southwark and Croydon

## Different work packages





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## *Client Services Receipt Inventory—Inpatient (CITRINE):*

### **Objectives:**

- ☐ To measure the care contacts and therapeutic activities of patients using inpatient care.
- ☐ To use it to establish a more precise costing of inpatient psychiatric services.
- ☐ To allow the views of professionals, service users and experts to shape the development and final version of the questionnaire.



## *Client Services Receipt Inventory—Inpatient (CITRINE):*

### **Method**

- ☐ The Client Services Receipt Inventory (CSRI) questionnaire was used as a guide.
- ☐ The CSRI is a convenient way of recording service utilisation over a retrospective period of time (typically 3-12 months) in community-based services.
- ☐ It is designed to be completed in a 10-20 minute interview or to be self-completed by individuals.
- ☐ This tool has been used in around 200 studies.



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# *Client Services Receipt Inventory—Inpatient (CITRINE)*

## **Method**

- ☐ Literature review.
- ☐ Interviews with healthcare professionals working on inpatient psychiatric wards.
- ☐ Expert consultation.
- ☐ Feasibility study.
- ☐ Focus groups with staff members.
- ☐ Reliability study.



## ❑ **Literature review** (Sharac et al, *Epidemiologia e Psichiatria Sociale* 2010)

- Revealed different methodologies for measuring activity: interviews/questionnaires, audits of attendance registers, and observations of patients and staff.
- Interview/questionnaire format is the most appropriate.

## ❑ **Interviews** with healthcare **professionals** working on inpatient psychiatric wards (2 ward managers, 3 OTs, 1 nurse and 1 TBC).

- Information collected on all types of activities offered to service users.
- Information used as the basis for the questionnaire.



## ❑ **Expert consultation**

- The first draft was submitted for comments and suggestions to a group of experts in inpatient care.
- Advice provided on the wording of some questions and how to reduce the length of the questionnaire.

## ❑ **Feasibility study** (25 service users)

- Acceptability, opinion on the difficulty of the questionnaire, the feasibility of it in terms of duration, and to provide general feedback on weaknesses and areas to improve
- The list of group activities was amended and questions on contacts with members of staff was also shortened.





## ❑ **Focus groups with staff members** (OTs and Nursing staff)

- **OTs**
  - Presence of a nurse/OT during the interview.
  - Showing the patient the activities timetable of the ward during the interview (adopted).
  - Asking for contacts with specific named persons rather than by profession (adopted).
- **Nursing**
  - Use of both the register of the activities and the electronic records (EPJS) would improve the quality and validity of the information.
  - Reward to SUs for the participation.
  - Presence of a staff member may prevent some patients from participating and be difficult to operationalise.



# Survey of Inpatient Activities and Services Receipt

Joint RCN Mental Health Nursing Conference and Exhibition

Liverpool, 5 -6 March 2010

Ward: \_\_\_\_\_

Patient ID number: \_\_\_\_\_

We are interested in finding out what activities patients have been to in the last 7 days. We would also like to find out what staff members patients have seen. Please use a copy of the ward's activity timetable if it would help remind you about activities you have participated in.

## Section 1: Group activities on the ward

Please indicate what activities you have taken part in since last \_\_\_\_\_ by filling out the table below.

Please list the <u>activities</u> you have taken part in:	How many times <u>since last</u>	Extra notes (researcher use only)
<u>Activities that take place at the ward</u>		
<input type="checkbox"/> Community Meeting		
<input type="checkbox"/>		
<input type="checkbox"/>		

<u>Activities that take place at the OT resource centre/gym/swimming pool/community/...</u>		
<input type="checkbox"/>		
<input type="checkbox"/>		

## Section 2: Meeting with staff members

Please note any individual meetings you have had with any of the staff members listed below. You do not need to include times where other patients have been involved e.g. in a therapeutic group.

### One-on-one time with nurses:

Please indicate if you have spent one-on-one time with a nurse since last \_\_\_\_\_ by filling out the table below:

	How many times?	On average, for about how long ?
One-on-one time with nurses, other nursing staff or health care assistants		_____minutes

### Other professionals:

Please indicate if you have met with the following staff members since last \_\_\_\_\_ by filling out the table below:

Position	How many times?	On average, for about how long ?
Psychiatrist or consultant		_____minutes
Other doctor		_____minutes
Occupational therapist		_____minutes
Care coordinator (includes telephone conversations)		_____minutes



Please indicate if you have met with any other staff (not nurses) since last \_\_\_\_\_  
*e.g. pharmacist, chaplain, psychologist, hairdresser, dentist, physiotherapist, optician,  
chiropodist, advocate, solicitor*

Professional	How many times?	On average, for about how long?	Where did you meet?
		_____minutes	<input type="checkbox"/> On the ward <input type="checkbox"/> Off the ward
		_____minutes	<input type="checkbox"/> On the ward <input type="checkbox"/> Off the ward

**Thank you for taking part in our survey!**



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❑ **Reliability study** – Assessment of level of agreement between CITRINE information and other sources

A) For 41 SUs, information on activities obtained from the OTs and nursing staff contacts from the patient's records (Electronic Patient Journey System, EPJS)

Mean number of activities and nursing contacts by source

	CITRINE	OT/Electronic patient record
Activities	5.1	3.8
contacts with nursing	2.8	3.2

▪ The correlation coefficients between SUs information and the data provided by OT/EPJS were **0.74** for activities and just **0.05** for nursing staff contacts



B) For 22 SUs, staff contacts and activities were collected through direct observation for a period of 14 hours and compared to a one-day version of CITRINE questionnaire

	Nursing staff		Other staff		Psychiatrist		Activities	
	Obs.	CTN	Obs.	CTN	Obs.	CTN	Obs.	CTN
SUs with zero contacts	1	14	13	19	15	16	7	6
Mean duration	29.8	7.1	9.1	3.2	5.7	5.7	1.1	1.0
Correlation	0.52		0.45		0.90		0.77	
SUs no differences	2		12		16		12	



## ❑ **Reliability study** - Conclusions

- CITRINE is a good source of information on the number of activities attended by SUs and on contacts with psychiatrists.
- It may provide acceptable information on interactions between SUs and other care staff (OTs, psychologists, social workers, etc).
- It may not accurately measure interactions between SUs and nursing staff:
  - Most common contact, difficulties for accurate recall
  - SUs might report only contacts that they think are significant or meaningful for them
  - Mental health status of some of the SUs can affect their ability to provide reliable information



## **Discussion**

- ❑ Developing the CITRINE questionnaire has involved input from a wide range of people involved in inpatient care.
- ❑ The alternative sources of information have limitations
  - Registers are not designed to record activities
  - Observational data collection is expensive
- ❑ CITRINE questionnaire is a tool that, despite limitations, provides adequate information on the activities that take place within psychiatric wards.
- ❑ Its use is recommended, alone or in combination with other sources, in economic analysis of inpatient care.