台灣成癮學會
Taiwanese Society of Addiction

臺北市立聯合醫院
TAIPEI CITY HOSPITAL

毒品施用者緩起訴附命戒癮治療評估與處置

臺北市立聯合醫院松德院區
成癮防治科主任
張祐銘

臺北市立聯合醫院松德院區
Taipei City Psychiatric Center
積極、合作、專業、品質

TADD 臺灣酒駕防制社會關懷協會
TAIWAN AGAINST DRUNK DRIVING

講者簡歷

- 臺北市立聯合醫院松德院區成癮防治科主任 主治醫師
- 臺灣成癮學會第4屆副秘書長
- 臺灣酒駕防制社會關懷協會第4屆理事

毒品施用者處遇沿革

1998年
毒品危害防制條例第20條

2008年
毒品危害防制條例第24條修正

（楊士隆、李思賢、朱日僑，2013）

機構性消極監禁

國內

1935年 刑法第 262 條	對吸食鴉片或施打嗎啡或使用高根、海洛因或其化合質料者，處 6 月以下有期徒刑、拘役或 500 元以下罰金
1955年 肅清煙毒條例第 9 條	施打毒品、吸食毒品或鴉片者，處 3 年 以上、7 年以下有期徒刑；吸用蘇煙或抵癮物品者，處 1 年以上 3 年 以下有期徒刑

國際

1961年	麻醉藥物公約
1971年	精神藥物公約

機構內戒癮治療

- 1998 年生效之「毒品危害防制條例」第 20 條

- 毒品犯可由檢察官應聲請法院裁定入勒戒處所**觀察、勒戒**，其期間不得**逾二月**。觀察、勒戒後，檢察官認無繼續施用毒品傾向者，應即釋放，並為**不起訴**之處分或**不付審理**之裁定。
- 認有繼續施用毒品傾向者，檢察官應聲請法院裁定入戒治處所**強制戒治**，其期間為**六個月以上**，至無繼續強制戒治之必要為止。

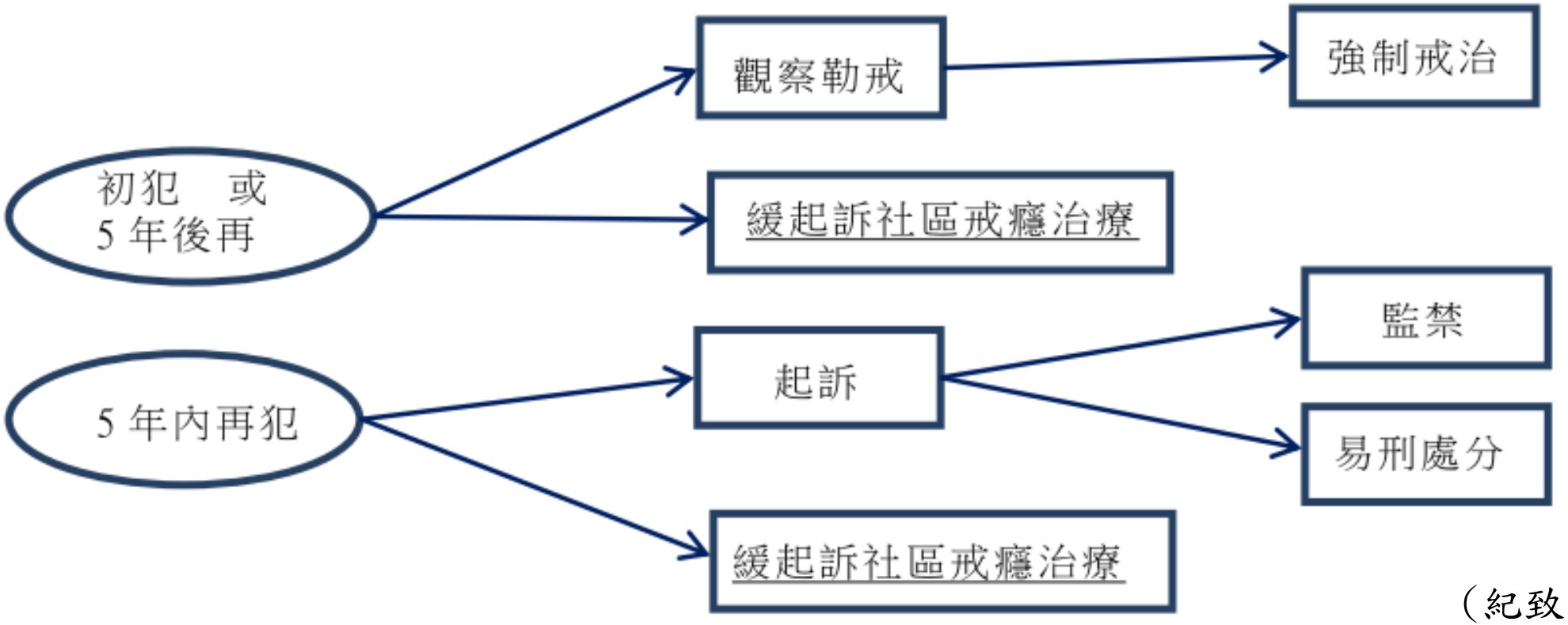
社區內戒癮治療

- 2008 年生效之「毒品危害防制條例」第 24 條修正條文
- 毒品犯之初犯、五年內再犯施用第一級毒品和第二級毒品罪者，都可由檢察官為「附帶命其完成戒癮治療之緩起訴處分」，至此確立了緩起訴醫療處分的法源
- 緩起訴附命完成戒癮治療(簡稱**緩護療**)

第 4 條	醫療機構置有曾受藥癮治療相關訓練之精神科專科醫師、藥師、護理人員、臨床心理師、職能治療人員及社會工作人員各一名以上，且其精神科專科醫師領有管制藥品使用執照者，得向中央衛生主管機關申請認定為戒癮治療機構（以下稱治療機構）。前項人員每年應接受藥癮治療相關繼續教育八小時。
第 7 條	戒癮治療之期程以連續一年為限。
第 8 條	接受戒癮治療者於治療前應由治療機構評估後，視需要進行下列檢驗、檢查： 一、尿液毒品及其代謝物檢驗。 二、肝功能檢驗。 三、B 型肝炎表面抗原及其抗體檢驗。 四、C 型肝炎抗體檢驗。 五、人類免疫缺乏病毒感染檢驗。 六、梅毒血清檢驗。 七、胸腔 X 光檢查。 八、心電圖檢查。
第 9 條	治療機構於戒癮治療期程屆滿後七日內，應對接受戒癮治療者進行尿液毒品與其代謝物檢驗及毛髮毒品殘留檢驗；或於戒癮治療期程屆滿後十五日內，每隔三至五日，連續對接受戒癮治療者進行尿液毒品及其代謝物檢驗三次。其檢驗結果均呈陰性反應者，視為完成戒癮治療。
第 12 條	被告於緩起訴期間，有下列情形之一者，視為未完成戒癮治療，得撤銷緩起訴處分： 一、於治療期間，無故未依指定時間接受藥物治療逾七日。 二、於治療期間，無故未依指定時間接受心理治療或社會復健治療逾三次。 三、對治療機構人員有強暴、脅迫、恐嚇等行為。 四、於緩起訴期間，經檢察機關或司法警察機關採尿送驗，呈毒品陽性反應。

毒品戒癮治療實施辦法及完成治療認定標準

毒品施用者司法處遇分流圖



（紀致光，2015）

美國藥物法庭

- 三個主要目標
  1. 降低再犯率
  2. 減少參與者的藥物使用
  3. 參與者的康復

- 84 %的毒品法庭畢業者在畢業後第一年沒有被再次逮捕(re-arrest)，72.5 %在畢業兩年內沒有被再次逮捕。
- 成本效益分析發現：每投資 1 美元在毒品法庭，即可為刑事司法系統帶來 2.21 美元的效益。

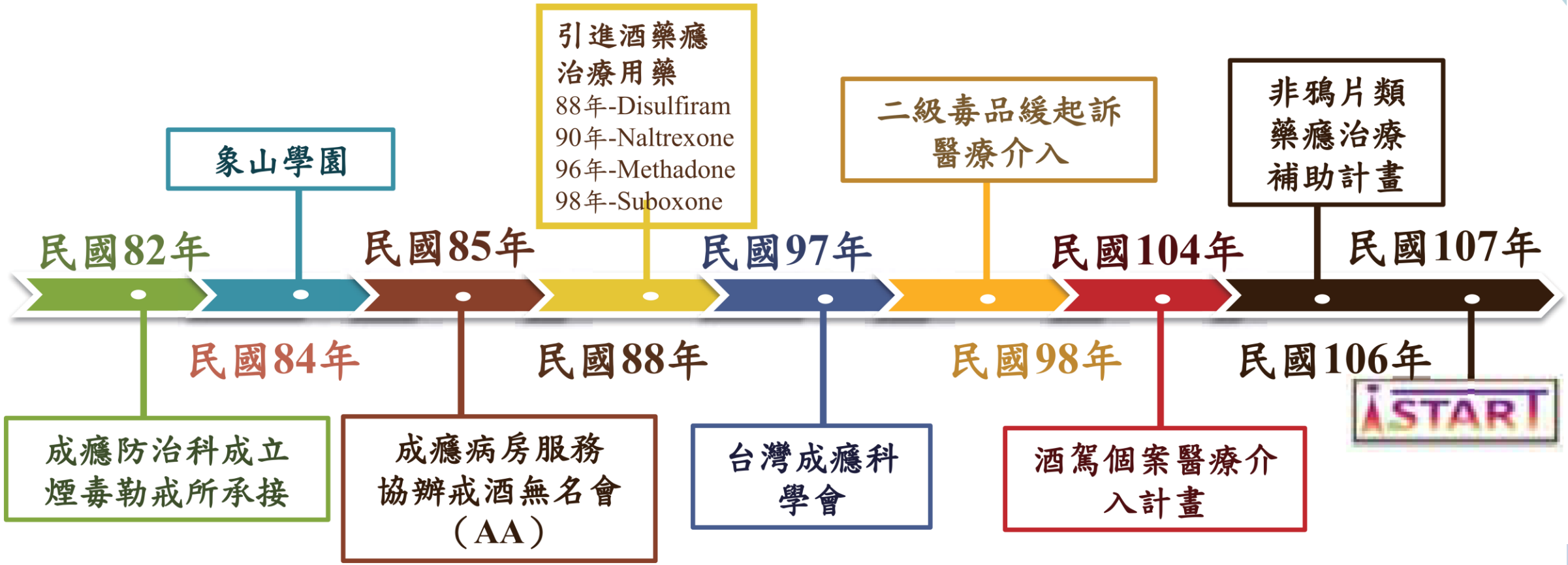
毒品法庭降低再犯率

Drug Courts' Effects on Criminal Offending for Juveniles and Adults

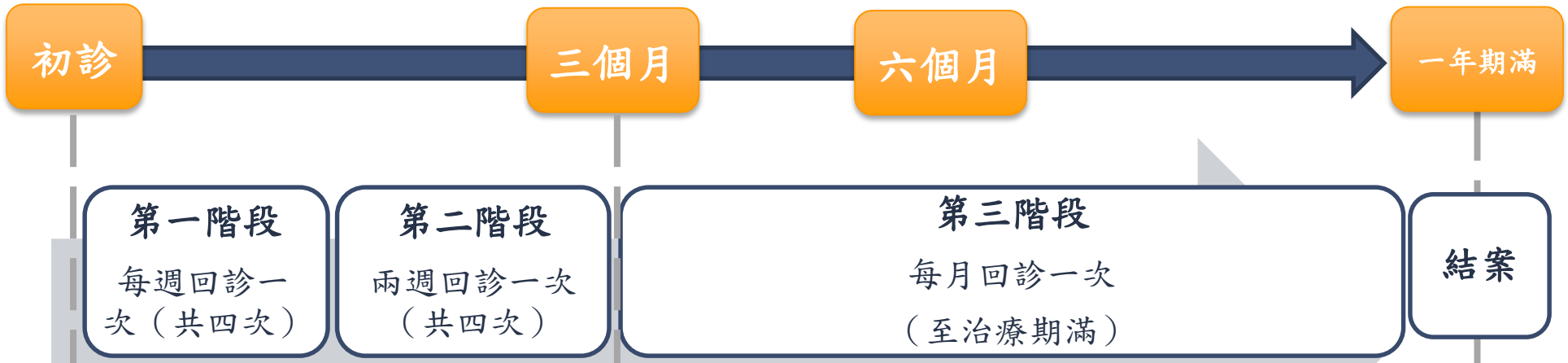
Ojmarrh Mitchell ✉, David B. Wilson, Amy Eggers, Doris L. MacKenzie

- 154 studies included in the meta-analysis (~2011)
- 成人毒品法庭減少三年再犯率 50% → 38%
- 青少年毒品法庭減少三年再犯率 50% → 43.5 %

臺北市立聯合醫院松德院區成癮防治科



醫療流程



個管師初診評估：
簡短介入、藥癮衛教、治療動機評估、提供建議

醫療初診評估：精神科診斷及共病、理學及實驗室檢查、藥物及心理治療、暴力及自殺風險評估

醫師個別會談、動機式晤談
尿液篩檢以了解物質使用情形
個管師定期電話追蹤
定期量表評估：渴癮量表、憂鬱與焦慮量表

轉介象山學園
密集個管追蹤、個別心理治療、團體心理治療、家族治療、職能復健
精神科住院或急診醫療

初次就診流程與內容

- 個案至成癮科門診報到
- 說明成癮治療期程及注意事項
- 個案評估
- 簡短介入 & 成癮物質衛教
- 醫師診斷性會談
- 生理醫學相關檢驗

個案定期返診

- 個案至成癮科門診報到
- 尿液篩檢
- 診(前)後簡短介入
- 醫師醫療評估

藥癮個案簡短介入

回顧、統整與建議

個管師說明「衛教單張」的內容。
充實個案對成癮物質的認識及危害性。
說明戒癮治療的內涵與意義。

鼓勵戒除並定期回診

鼓勵個案定期回診。
協助個案整理出戒癮困難的原因並鼓勵與醫師討論。

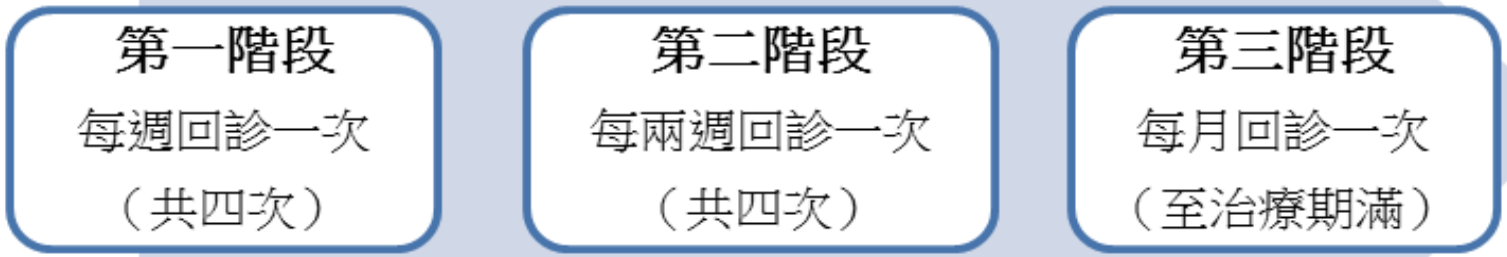
鼓勵調整生活並持續追蹤

鼓勵個案紀錄使用成癮物質的用藥線索，並思考如何避免。
請個案思考可以如何調整生活作息，培養休閒興趣。

權宜管理(Contingency management)

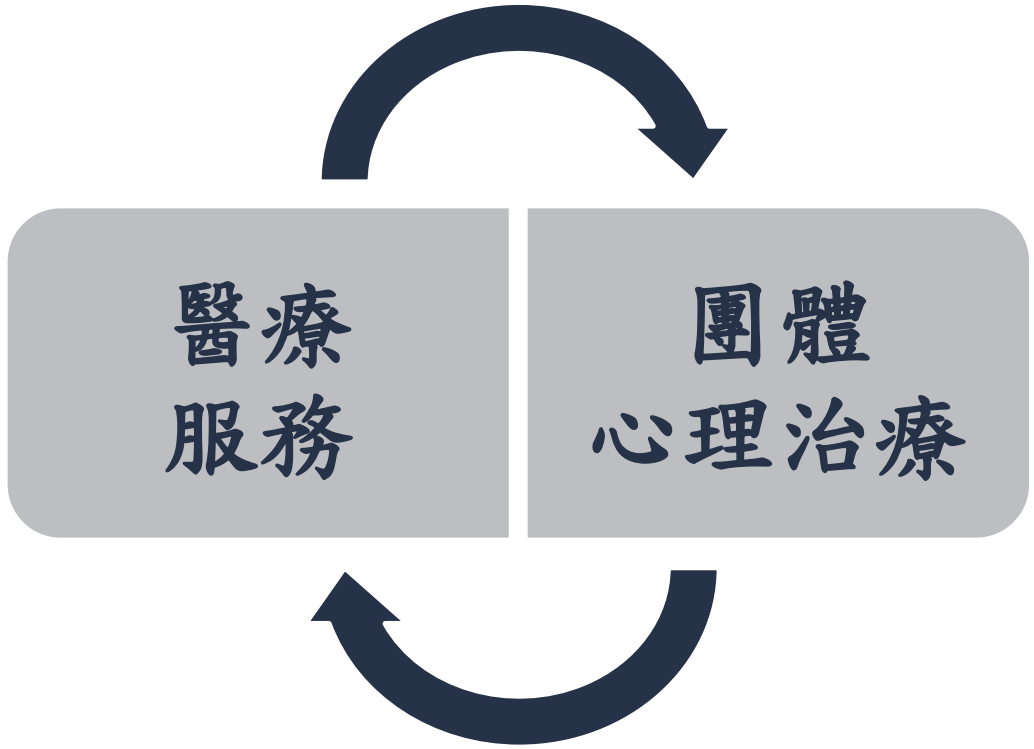
- 權宜管理是基於行為學派Skinner的理論，是一種利用增強(reinforcement)與懲罰(punishment)來改變行為的歷程。

- 以松德院區二級毒品緩起訴醫療服務內容設計為例：



權宜管理(Contingency management)

雙重治療管道



醫師/護理：
醫療評估、門診心理治療
個管師：
簡短介入、治療費補助

解癮協會：
正念班團體

尿液篩檢減免

Contingency management的實證證據

Summary of the evidence of interventions to reduce stimulant use

Psychosocial Intervention	Effect	Size of effect	Level
Contingency management	↓	**2.22 (1.59-3.10)**	**A**
Peer-based support groups (12 step programs, NA)	↓?	Insufficient evidence[SUB]	B
Family interventions, multi-systemic therapy	↓?	No pooled estimate available	B
Other law enforcement interventions	?	Drug courts 1.49 (0.88 – 2.53)[AMPH]	D
Screening and brief intervention	✕	0.97 (0.77-1.22)	B
Motivational enhancement therapy[#]	✕	1.16 (0.95 – 1.42)	B
Self-help interventions	✕	0.13 (-0.05-0.31)	A
Self-help interventions involving peers	✕	0.75 (0.30-1.86)	A
Cognitive behaviour therapy	✕	1.17 (0.79-1.74)	A
Community reinforcement approach	✕	2.10 (0.67-6.59)	A
Acceptance and commitment therapy	✕	0.73 (0.26–2.07) compared to CBT	B
Meditation-based therapies	✕	1.37 (0.48-3.93)	A
Therapeutic communities	✕	1.05 (0.87-1.27)[COC]	C

Medical intervention for deferred prosecution

Patients' duty

What they need to do

- Cooperate with medical staff
- Attend the intervention program regularly
- Receive random urine drug tests

What we serve

Outpatient sessions

- Monday to Friday, 09:00 a.m. - 12:00 noon
- Three psychiatrists per session

Staff

- **Psychiatrist**: diagnostic interview, medical assessment
- **Case manager**: brief intervention, motivate to change

Regular report to the Prosecutors Office

Psychiatrist

✓Diagnostic interview

- Physical illness
- Psychiatric illness
- Risk evaluation (violence, suicide)

Laboratory examination

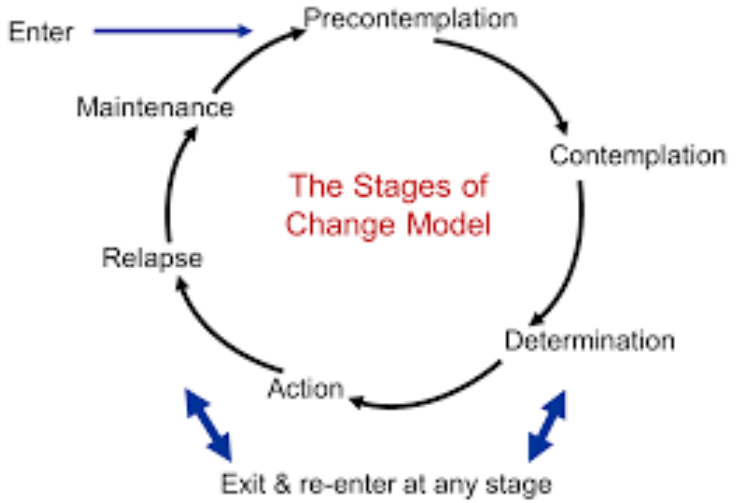
- EKG, chest X-Ray
- Blood tests (including bloodborne diseases)
- Urine drug tests

Medical treatment

- Psychotropics for psychiatric illnesses
- Anti-vial treatment for HBV, HCV, HIV…

Motivational interviewing

- Individualized education: how the brain works
- Stage of change
- High risk situations
- Stress-coping skills



Case manager

Assessment

- Addiction severity
- Support system
- Risk factors for relapse

Brief intervention

- Therapeutic alliance
- Feedback, advise and support
- Skills of refusal

Periodical assessment

- Data collection
- Implication for policy making

Addiction Severity rating

CRAVING Severity (visual analog scale)

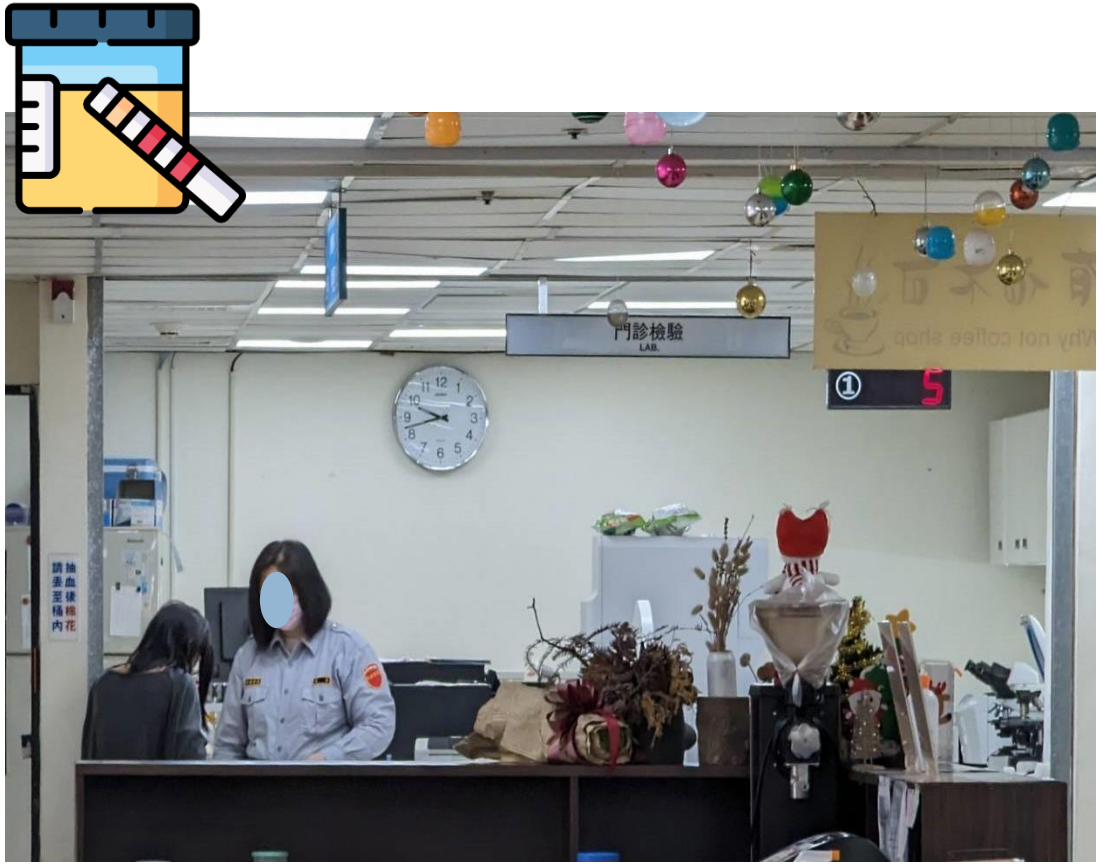
MOTIVATION to change

RISK of harming themselves or others

Refer to ISTART for further intervention if needed

個管師初評	Craving Severity	□H □L	轉介意願：	□高 □不排斥□抗拒
	建議轉介象山學園：	□是□否	自殺傷人之虞：	□有 □無
	□象山學園收案醫令0000T15 □個案考慮中，給予簡介傳單。 □其他備註：			

How do they **take urine tests?**



Urine drug tests under the monitoring of our security staff

↓

Urine test results within 15-30 minutes (enzyme-linked immunosorbent assay, ELISA)

↓

Discussion with the doctor based on the test results

Brief Intervention
for whose urine test is positive

Brief Intervention and Consulting Desk
From Mon. to Fri.
09:00-12:00

Content

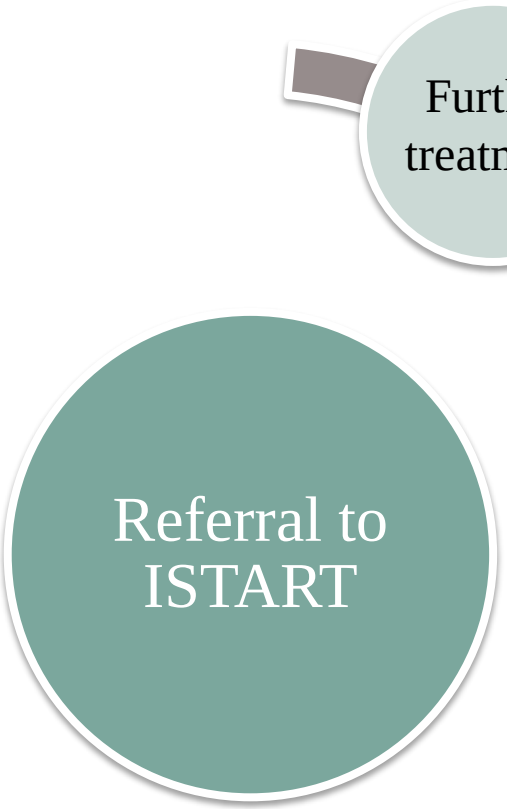
- Five principles of relapse prevention
- Relaxation technique
- Stress-coping strategies
- Emotion awareness and recognition
- Lifestyle modification

臺北市立聯合醫院 TAIPEI CITY HOSPITAL

Matrix model in TCPC

Intensive Case Management program

象山學園



Further treatment

- Individual and group psychotherapy
- Occupational therapy
- Family and couple therapy
- Case management

Government institutions

Connections to

- Taipei Government Suicide Prevention Center
- Center for Prevention of Domestic Violence and Sex Assault

NGOs

Referrals to

- Therapeutic Community
- Halfway house

Medical Institutions

Transfer to

- Psychiatric clinics or psychotherapy centers
- Medical centers and regional hospitals for physical illnesses

Treatment Modality

Group psychotherapy

- **Dialectical behavior therapy**
- Led by 2 **board-certified psychiatrists**
- **6** sessions in total

Treatment Modality

- **Psychotherapy**

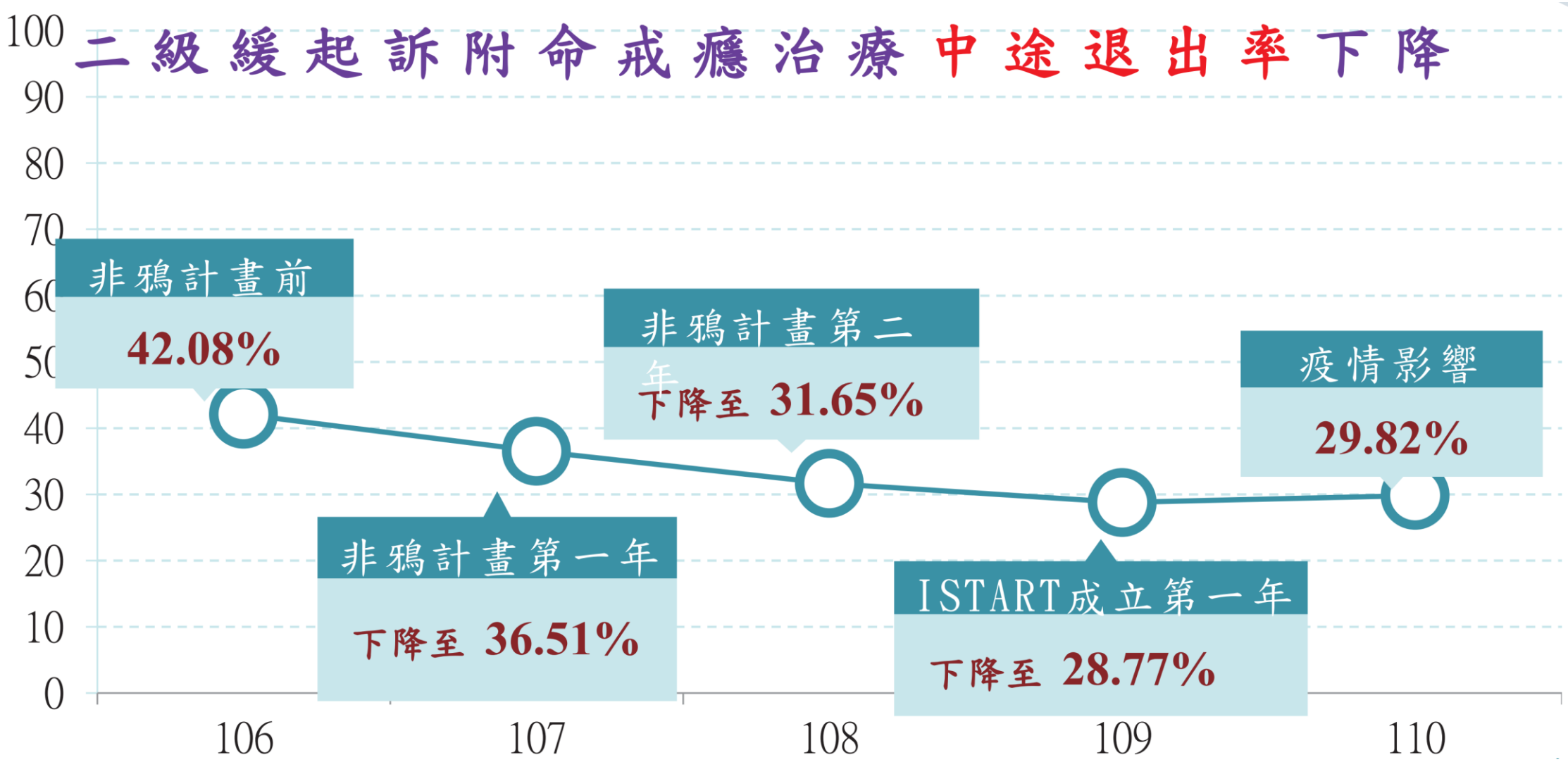
- **Family therapy**

Treatment Modality

Inpatient department

Outpatient department

二級緩起訴附命戒癮治療中途退出率下降



醫療模式是否對甲基安非他命使用者有效

- 台灣使用盛行率最高的非法藥物
- 缺乏有效的藥物治療
- 以非藥物治療為主

- 緩起訴附命戒癮治療
  - 預測完成的因子
- 高強度的個案管理模式是否有效
  - 成癮嚴重度
  - 心理健康問題

Prevalence of substance use among participants in the 2018 National Survey of Substance Use in Taiwan (N = 18626)

	Lifetime use		
Type of substance	n	$\%_{wt}$	(S.E.)
Illicit drugs/Inhalants use			
Any illicit drug/inhalant	262	1.46	(0.11)
Methamphetamine	75	0.42	(0.06)
Ketamine	76	0.40	(0.06)
Ecstasy	67	0.36	(0.05)
Marijuana	60	0.32	(0.05)
Drugs in drink sachets	34	0.18	(0.04)
Nitrous oxide	19	0.14	(0.04)
Heroin	21	0.09	(0.02)

(Wu et.al., unpublished data)

Funding

- Ministry of Science and Technology, Taiwan
  - 106-2314-B-532-010-MY2 (Lian-Yu Chen)
  - 110-2628-B-532-001 (Lian-Yu Chen)
  - 109-2314-B-532-0041 (Ming-Chyi Huang)
  - 110-2314-B-532-005-MY3 (Ming-Chyi Huang)
- Taipei City Government, Taiwan
  - TPECH 11001- 62-003 (Ming-Chyi Huang)
  - TPECH 11101-62-029 (Ming-Chyi Huang)

Method

- METH user
- Joint legal–medical treatment program
- Referred from the Taiwan Taipei District Prosecutors Office
- 2016-2018
- N = 449

- Demographic, psychiatric, substance use characteristics

- More than half have severe METH dependence
- Nearly 20% have moderate to severe depression

- Relapse rate: 37.8%
  - ➢ Defined as urine test (+) for METH

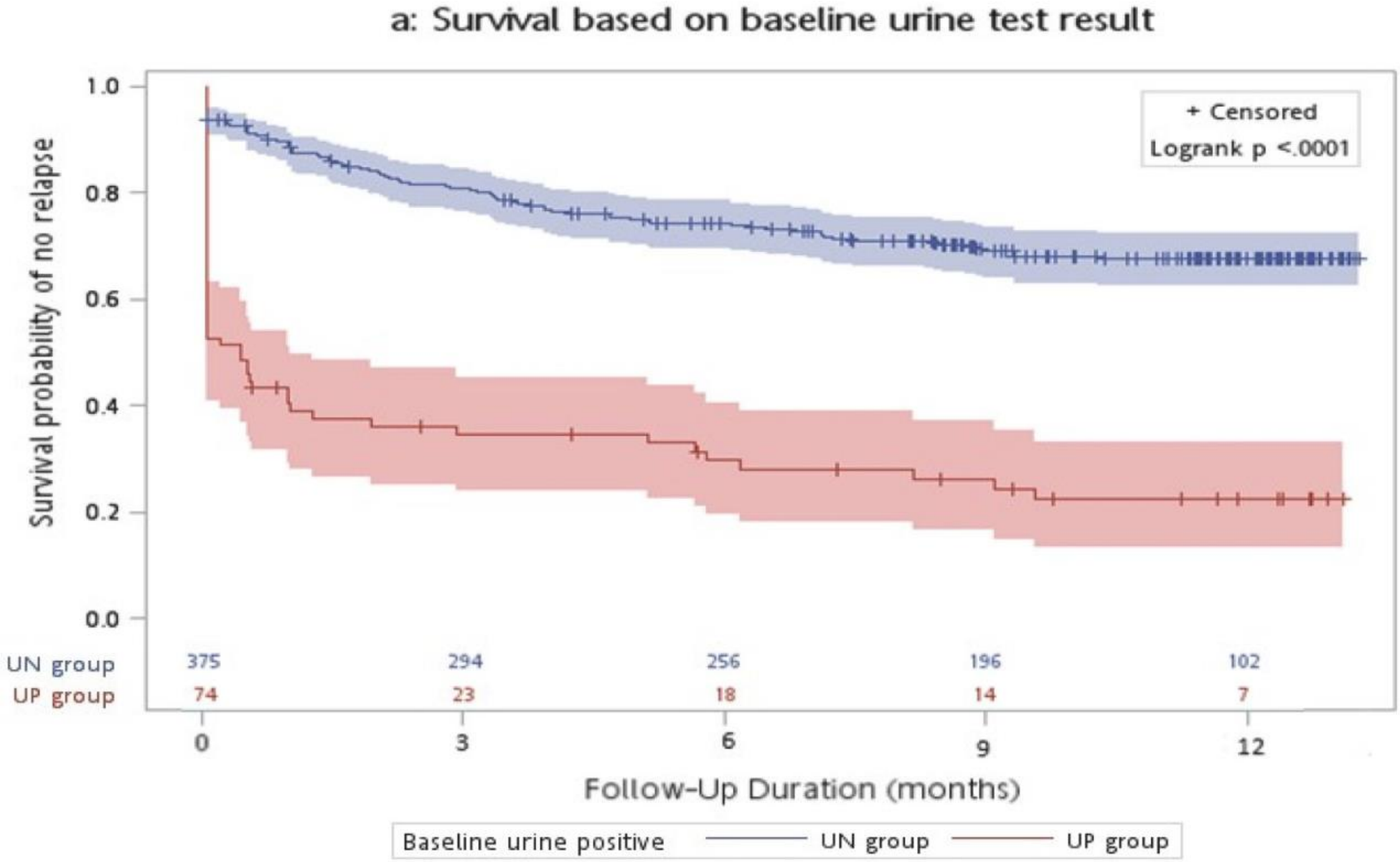
- Complete rate: 77.8%
  - ➢ Non-complete: defined as those who failed to attend > 13 sessions (about 80 % of required sessions) or stay < 12 months

Age, mean ± SD	35.3 ± 9.3
Male, n (%)	424 (94.4)
Married, n (%)	58 (13.2)
Did not complete high school, n (%)	207 (46.9)
Employed, n (%)	400 (95.0)
BDI score, mean ± SD	11.1 ± 10.4
≥20 (moderate-to- severe), n (%)	82 (18.3)
<20 (minimal-to-mild), n (%)	367 (81.7)
BAI score, mean ± SD	6.1 ± 8.2
≥16 (moderate-to- severe), n (%)	48 (10.7)
<16 (minimal-to-mild), n (%)	401 (89.3)
SWLS score, mean ± SD	20.9 ± 7.4
Age of first METH use, mean ± SD	29.9 ± 10.3
Months of METH use, mean ± SD	61.7 ± 96.1
Polysubstance use	101 (22.5)
SDS score, mean ± SD	4 ± 2.5
≥4 score	241 (53.7)
VAS for craving, mean ± SD	13.8 ± 19.39
Baseline urine positive for METH, n (%)	74 (16.5)
Non-completers, n (%)	104 (23.2)

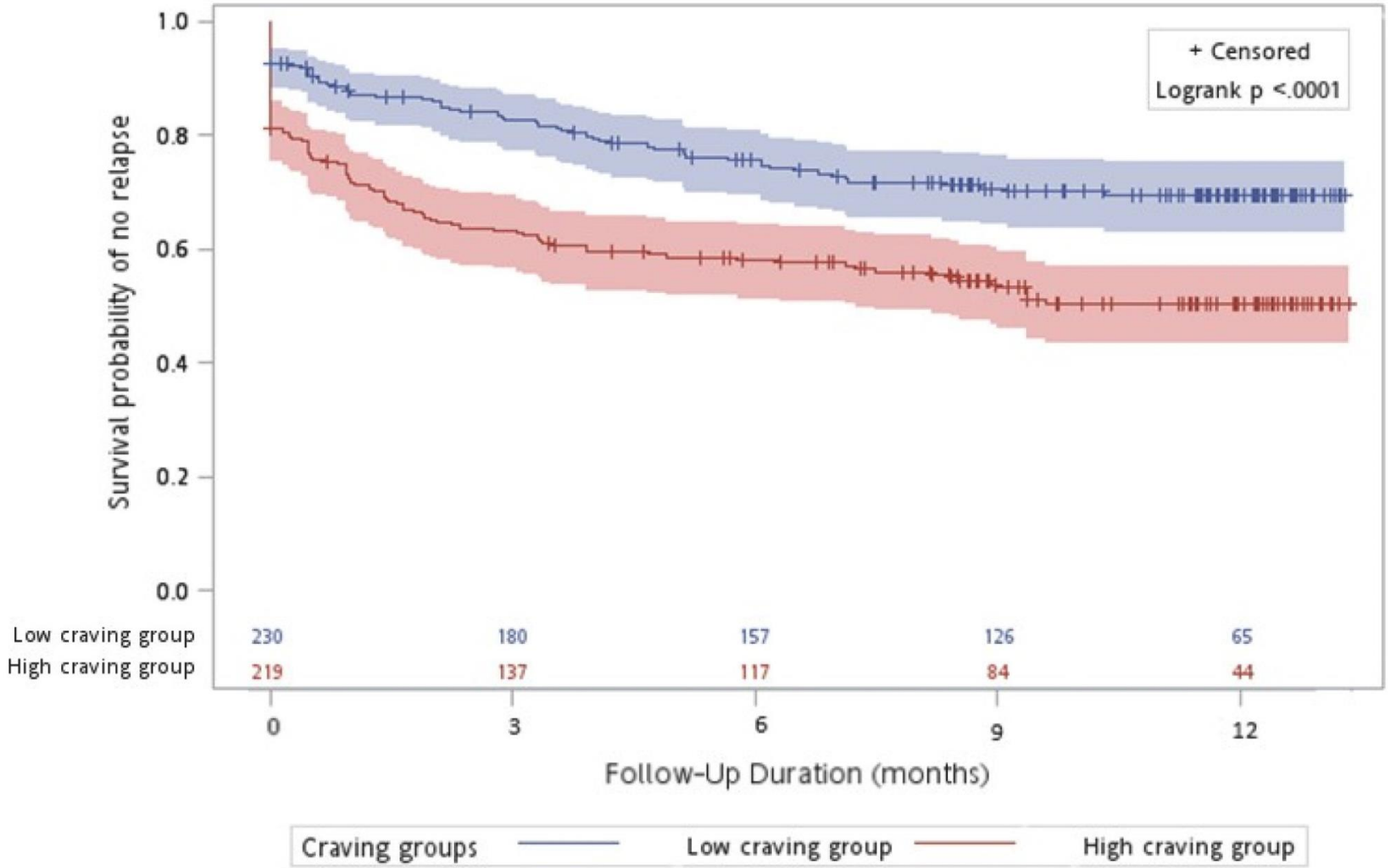
Cox proportional hazards models to examine factors associated with time to relapse into METH use (N = 449)

	Univariate model	
	HR (95 % CI)	*p*
Demographic factors		
Age ≤ median 35 y/o (ref: >35 y/o)	1.03 (0.76–1.4)	0.833
Male (ref: female)	1.21 (0.6–2.46)	0.597
Marital status (ref: married)		
Unmarried	1.00 (0.63–1.57)	0.994
Other	1.27 (0.7–2.29)	0.432
Number of years of education ≤ 12 (ref: >12)	1.61 (1.18–2.18)	**0.002**
Employed (ref: unemployment)	0.66 (0.29–1.49)	0.316
Psychological symptoms factors		
Moderate-to-severe depression (BDI score ≥ 20) (ref: BDI < 20)[a]	1.95 (1.38–2.78)	**<0.001**
Moderate-to-severe anxiety (BAI score ≥ 16) (ref: <16)[b]	1.86 (1.23–2.8)	**0.003**
SWLS score	0.97 (0.96–0.99)	**0.012**
Substance use-related factors		
Age of first METH use	0.98 (0.96–0.99)	**0.004**
Months of METH use	1.002 (1.001–1.003)	**0.003**
Polysubstance use (ref: no polysubstance use)	1.45 (1.04–2.03)	**0.029**
SDS score ≥ 4 (ref: <4)[c]	1.18 (0.87–1.6)	0.279
VAS for Craving (score)	1.19 (1.12–1.27)	**<0.001**
High craving group (ref: low craving group)[d]	2.00 (1.47–2.73)	**<0.001**
Baseline urine positive for METH (ref: negative for METH)	4.17 (3–5.79)	**<0.001**

	Multivariate model			
	aHR[e] (95 % CI)	*p*	aHR[f] (95 % CI)	*p*
Demographic factors				
Age ≤ median 35 y/o (ref: >35 y/o)	0.82 (0.52–1.29)	0.387	0.81 (0.52–1.29)	0.377
Male (ref: female)	1.42 (0.57–3.55)	0.455	1.35 (0.54–3.4)	0.522
Marital status (ref: married)				
Unmarried	1.02 (0.53–1.96)	0.957	1.07 (0.56–2.06)	0.835
Other	1.06 (0.63–1.8)	0.816	1.11 (0.66–1.86)	0.707
Number of years of education ≤ 12 (ref: >12)	1.28 (0.87–1.88)	0.204	1.34 (0.91–1.98)	0.133
Employed (ref: unemployment)	0.92 (0.39–2.12)	0.835	0.85 (0.37–1.97)	0.7
Psychological symptoms factors				
Moderate-to-severe depression (BDI score ≥ 20) (ref: BDI < 20)[a]	1.18 (0.72–1.92)	0.515	1.19 (0.73–1.92)	0.488
Moderate-to-severe anxiety (BAI score ≥ 16) (ref: <16)[b]	0.72 (0.39–1.32)	0.287	0.81 (0.45–1.46)	0.486
SWLS score	0.99 (0.97–1.02)	0.523	0.99 (0.97–1.02)	0.553
Substance use-related factors				
Age of first METH use	1 (0.97–1.02)	0.690	0.99 (0.97–1.02)	0.618
Months of METH use	1 (1–1)	0.398	1 (1–1)	0.384
Polysubstance use (ref: no polysubstance use)	1.36 (0.91–2.03)	0.133	1.35 (0.91–2.01)	0.137
SDS score ≥ 4 (ref: <4)[c]	0.93 (0.65–1.33)	0.677	0.92 (0.65–1.32)	0.664
VAS for Craving (score)	1.01 (1–1.02)	**0.008**	–	–
High craving group (ref: low craving group)[d]	–	–	1.71 (1.19–2.46)	**0.004**
Baseline urine positive for METH (ref: negative for METH)	3.85 (2.61–5.68)	**<0.001**	85 (35.74–202.2)	**<0.001**


a: Survival based on baseline urine test result
Survival probability of no relapse
1.0
0.8
0.6
0.4
0.2
0.0
+ Censored
Logrank p <.0001
UN group
UP group
375
294
256
196
102
74
23
18
14
7
0
3
6
9
12
Follow-Up Duration (months)
Baseline urine positive
UN group
UP group

b: Survival based on baseline craving severity for METH (High vs. low craving)



Method

- METH user
- Intensive Case Management (ICM) program
- 2016-2018
- N = 124 (31 ICM group, 93 TAU group)　　TAU: treat as usual

The ICM group

- Less duration of METH use

- More mental health problems
  - Suicide
  - Depression
  - Anxiety
  - Bipolar or schizophrenia

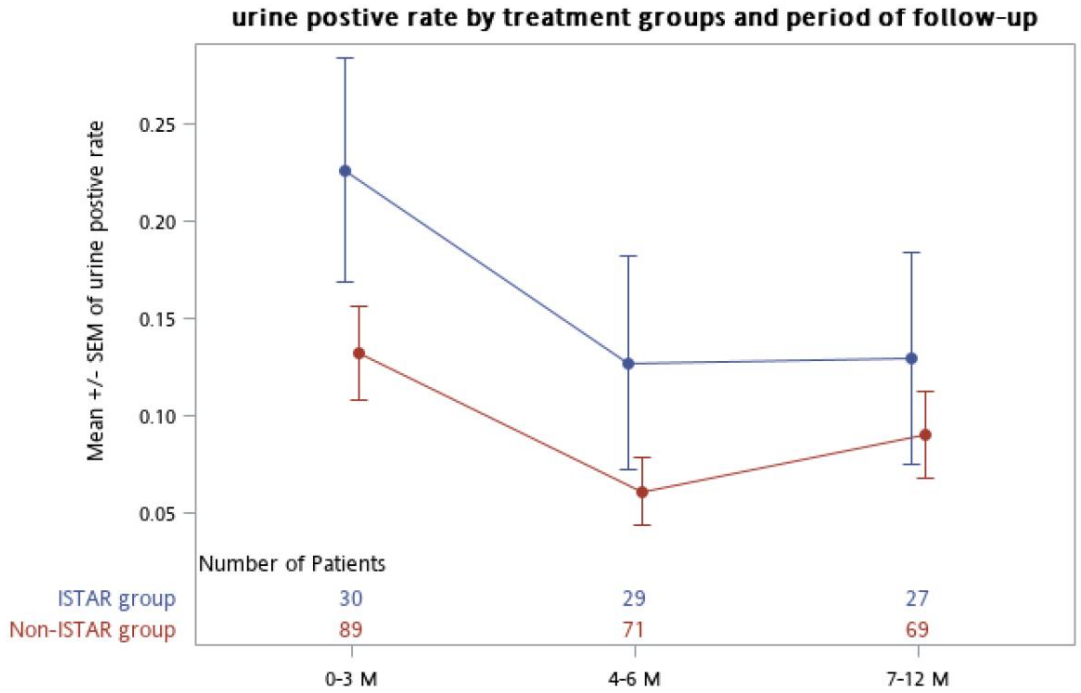
	ICM group (N=31)	TAU group (N=93)	P value
Demographic related variables			
Age (years), Mean ± SD	36. 64±9.12	36.69±8.85	0.99
Sex (male), n (%)	31(100)	93(100)	1
Less than and equal to high school, n (%)	12(38.71)	50(53.76)	0.15
Married, n (%)	3(9.68)	11(11.96)	0.24
Employed, n (%)	27(93.10)	89(97.80)	0.20
Substance use-related variables			
Age of first use (years), Mean ± SD	30.12±10.11	26.64±9.25	0.08
SDS score, Mean ± SD	5.93±2.52	5.36±2.51	0.28
VAS for craving score, Mean ± SD	2.44±2.83	2.26±2.54	0.74
Urine test positive at baseline, n (%)	10 (32.26)	25(26.88)	0.56
Duration of meth use (years), Mean ± SD	5.94±6.13	9.58±9.49	**0.02**
Multiple drug use, n (%)	14(45.16)	28(30.11)	0.13
AUDIT score, Mean ± SD	2.51±5.55	2.58±5.43	0.95
FTQ score, Mean ± SD	2.52±3.91	2.83±2.89	0.64
History of induced psychosis after meth use, n (%)	9(31.03)	12 (14.29)	0.05
History of suicide (yes), n (%)	8(25.18)	10(10.75)	**0.04**
Psychiatric medical history (yes), n (%)	16(53.33)	14(15.05)	**<0.01**
Depression	9(29.03)	7(7.53)	**<0.01**
Anxiety	6(19.35)	4(4.3)	**<0.01**
Bipolar or schizophrenia	4(12.9)	3(3.23)	0.06
SWLS score, Mean ±SD	19.87±6.99	21.13±7.16	0.40
BSRS score, Mean ± SD	6.35±5.41	4.83±4.54	0.13
Treatment completion (yes), n (%)	24(77.42)	62(66.67)	0.26
Relapse during the treatment period, n (%)	18(58.06)	56(60.22)	0.83

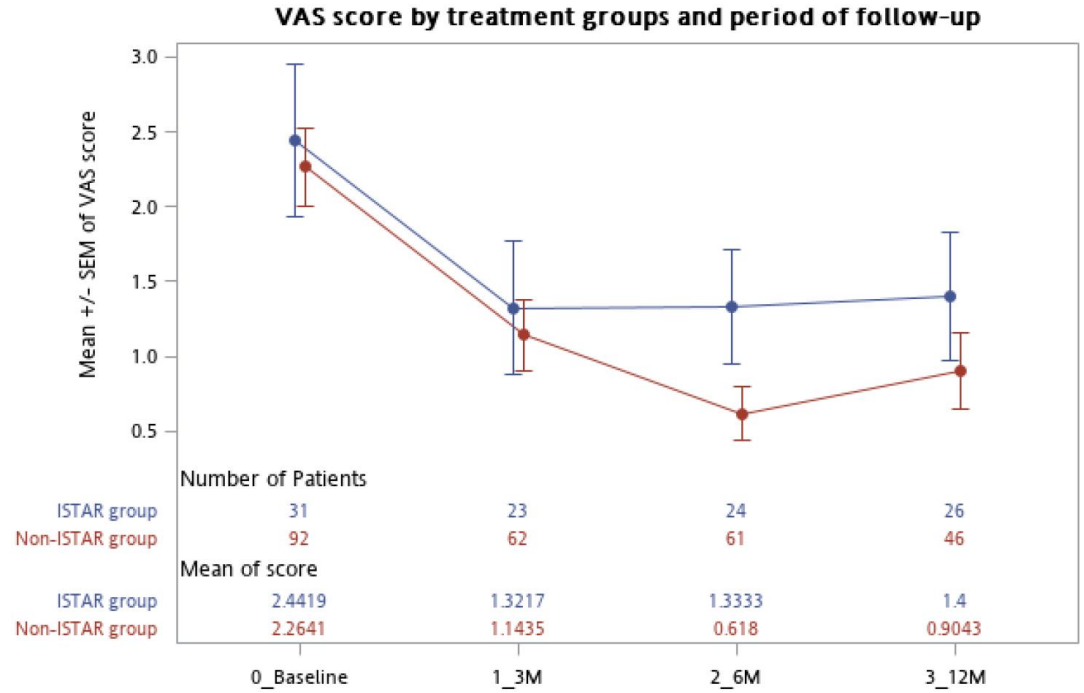
Effects of treatment on outcome variables over time assessed by a GEE-modelling approach

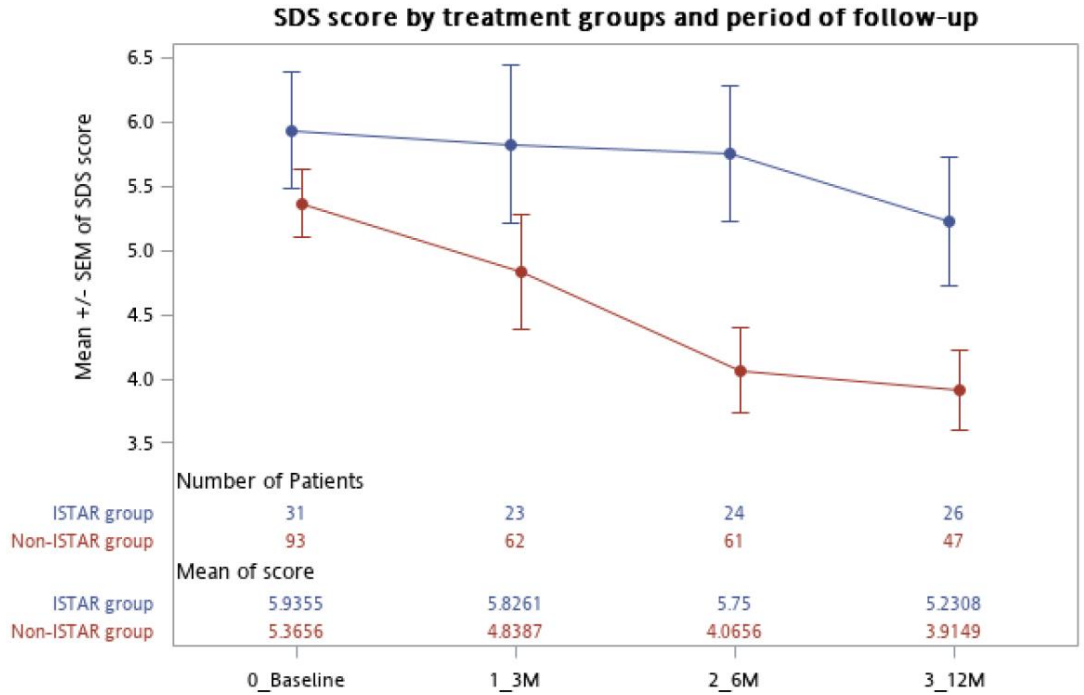
	Estimate	*p*
Urine positive rate		
ISTAT group (ref= non-ISTAT group)	0.096	0.12
Time (ref= 0-3 months)		
4-6 months	-0.054	**0.03**
7-12 months	-0.038	0.25
Interaction effect (ref= non-ISTAT group *0-3 months)		
ISTAT group*4-6 months	-0.045	0.26
ISTAT group*7-12 months	-0.053	0.28
SDS		
ISTAT group (ref= non-ISTAT group)	0.6386	0.23
Time (ref= baseline)		
3 months	-0.597	0.17
6 months	-1.299	**<0.01**
12 months	-1.155	**<0.01**
Interaction effect (ref= non-ISTAT group *baseline)		
ISTAT group*3 months	0.617	0.31
ISTAT group*6 months	1.403	**0.02**
ISTAT group*12 months	0.673	0.23

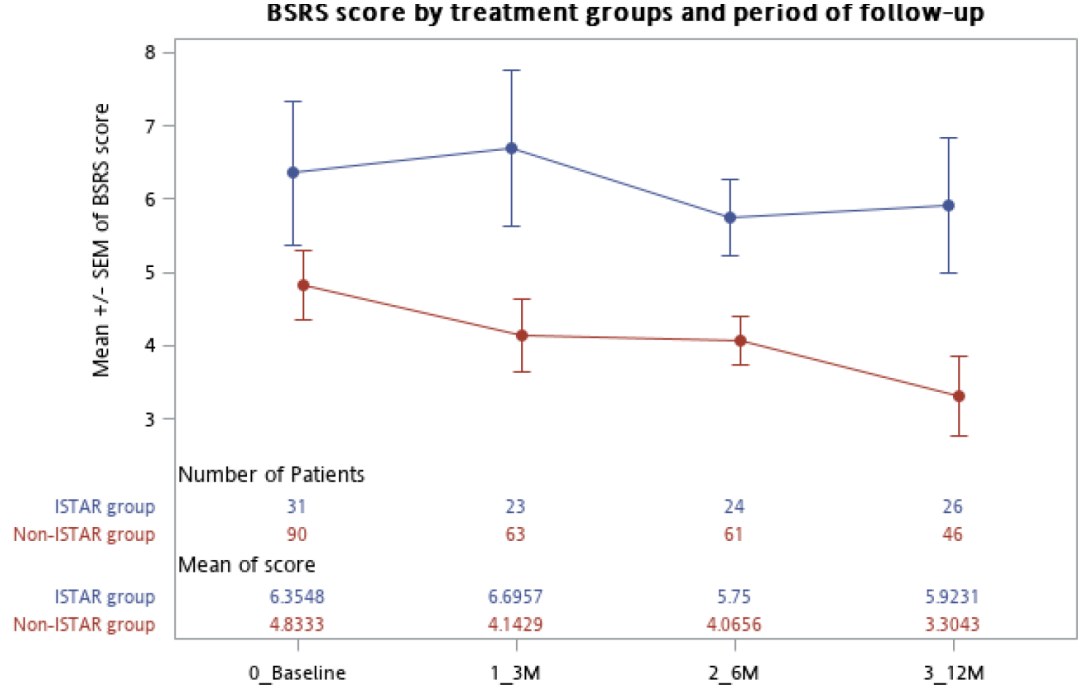
Effects of treatment on outcome variables over time assessed by a GEE-modelling approach

VAS for craving score		
ISTAT group (ref= non-ISTAT group)	0.120	0.84
Time (ref= baseline)		
3 months	-1.099	**<0.01**
6 months	-1.692	**<0.01**
12 months	-1.499	**<.001**
Interaction effect (ref= non-ISTAT group *baseline)		
ISTAT group*3 months	0.161	0.81
ISTAT group*6 months	0.743	0.26
ISTAT group*12 months	0.573	0.36
BSRS		
ISTAT group (ref= non-ISTAT group)	1.526	0.16
Time (ref= baseline)		
3 months	-0.607	0.21
6 months	-0.436	0.56
12 months	-1.178	**0.04**
Interaction effect (ref= non-ISTAT group *baseline)		
ISTAT group*3 months	1.536	0.20
ISTAT group*6 months	0.209	0.87
ISTAT group*12 months	1.028	0.36


urine postive rate by treatment groups and period of follow-up
Mean +/- SEM of urine postive rate
0.25
0.20
0.15
0.10
0.05
Number of Patients
ISTAR group 30 29 27
Non-ISTAR group 89 71 69
0-3 M
4-6 M
7-12 M


VAS score by treatment groups and period of follow-up
Mean +/- SEM of VAS score
3.0
2.5
2.0
1.5
1.0
0.5
Number of Patients
ISTAR group 31 23 24 26
Non-ISTAR group 92 62 61 46
Mean of score
ISTAR group 2.4419 1.3217 1.3333 1.4
Non-ISTAR group 2.2641 1.1435 0.618 0.9043
0_Baseline
1_3M
2_6M
3_12M


SDS score by treatment groups and period of follow-up
Mean +/- SEM of SDS score
6.5
6.0
5.5
5.0
4.5
4.0
3.5
Number of Patients
ISTAR group 31 23 24 26
Non-ISTAR group 93 62 61 47
Mean of score
ISTAR group 5.9355 5.8261 5.75 5.2308
Non-ISTAR group 5.3656 4.8387 4.0656 3.9149
0_Baseline
1_3M
2_6M
3_12M

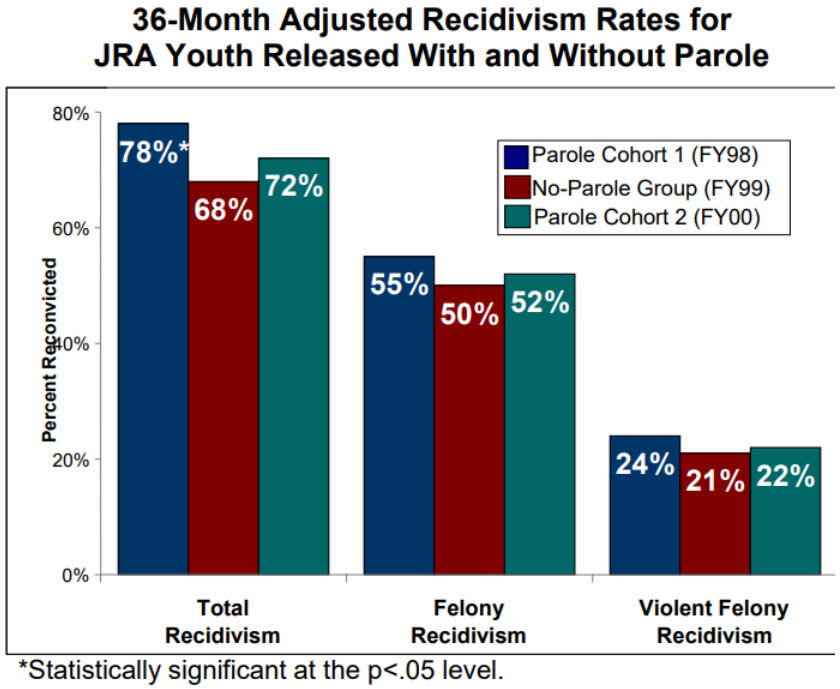

BSRS score by treatment groups and period of follow-up
Mean +/- SEM of BSRS score
8
7
6
5
4
3
Number of Patients
ISTAR group 31 23 24 26
Non-ISTAR group 90 63 61 46
Mean of score
ISTAR group 6.3548 6.6957 5.75 5.9231
Non-ISTAR group 4.8333 4.1429 4.0656 3.3043
0_Baseline
1_3M
2_6M
3_12M

Factors association of relapse METH use for the entire sample (N=124)

Variables	Univariable logistic regression OR (95% CI)	p
ISTAT group vs. non-ISTAT group	0.91 (0.4-2.09)	0.83
Demographic related variables		
Age (years)	1.05 (1.01-1.1)	**0.02**
High school or under (vs. above high school)	4.06 (1.88-8.76)	**<0.01**
Marriage status		
Unmarried vs. married	0.32 (0.08-1.23)	0.10
Others vs. married	0.73 (0.15-3.55)	0.69
Substance use-related variables		
Age of first use (years)	0.97 (0.93-1.01)	0.10
SDS score	1.19 (1.02-1.38)	**0.03**
VAS for craving score	1.46 (1.21-1.76)	**<0.01**
Duration of meth use (years)	1.12 (1.05-1.19)	**<0.01**
Urine test positive at baseline (yes vs. no)	19.31 (4.37-85.38)	**<0.01**
Multiple drug use (yes vs. no)	0.47 (0.22-1.01)	0.05
History of induced psychosis after meth use (yes vs. no)	1.35 (0.5-3.65)	0.56
AUDIT score	0.98 (0.92-1.05)	0.57
FTQ score	1.02 (0.91-1.15)	0.71
History of suicide (yes vs. no)	2.68 (0.83-8.7)	0.10
Psychiatric medical history (yes vs. no)	1.44 (0.61-3.43)	0.40
SWLS score	0.95 (0.9-1)	0.07
BSRS score	1.08 (1-1.18)	0.06
Treatment completion (yes vs. no)	0.81 (0.37-1.78)	0.60

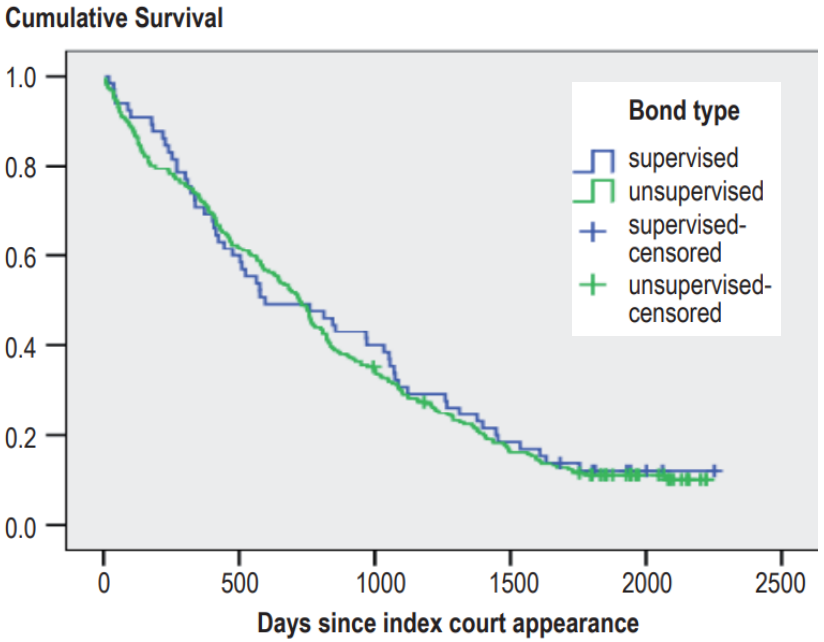
Measuring the effectiveness of intervention programs on recidivism

A **natural experiment** resulted from changes in parole supervision: non-significant



(Drake and Barnoski, 2006)

Using **propensity score matching** to compare supervised and unsupervised bonds: non-significant



(Weatherburn et al., 2008)

Using **regression discontinuity design** to compare supervision or not

Table 1: Estimated effect size of licence supervision for offenders with one or no previous convictions

	Distance in months from 12 month licence threshold	
	3 months	1 month
Difference in 1yr re-offending rate	-0.17** (0.07)	-0.14** (0.07)
Difference in 2yr re-offending rate	-0.20** (0.09)	-0.16** (0.08)
Difference in 3yr re-offending rate	-0.15 (0.10)	-0.13 (0.08)
Sample size	8,356	4,419

** Statistically significant results at the 5% level. The standard errors are in the parenthesis.

(Lai, 2013)

Acknowledgement

- 衛福部心理健康司 陳亮妤司長
- 臺北市立聯合醫院松德院區 黃名琪院長
- 臺北市立聯合醫院松德院區 楊添圍院長
- 臺北市整合性藥癮醫療示範中心 林群執行長
- 馬偕醫學院護理學系 方素真博士
- 臺灣臺北地方檢察署 林達檢察官