DUAL DIAGNOSIS EVENT

30.03.11

Scott Payne

Medical Lead

City and South CDTS

Strathdee et al 2002

- Rates of DD in 5 Rx settings:
  - Primary Care
  - Drug / alcohol
  - Psychiatric I/P
  - Psychiatric community
  - Forensic
- Brief screening tool
- If positive both – detailed assessment (MINI + others)
  - DD highly prevalent across range of treatment settings
  - Substance misuse services
    - 83% indication DD
    - majority mild / mod (55% anxiety, 41% depression)

Weaver et al 2003 - COSMIC

- 4 centres
- Prevalence of co-morbidity
- ? Identified
- Potential for x-referral

COSMIC

- Substance Misuse Services
- Census – 1645
- Interview – 278
- 75% at least one psychiatric disorder

COSMIC

	Drug	Alcohol
Personality Disorder	37%	53%
Affective Disorder / Anxiety	68%	81%
Severe anxiety	19%	32%
Mild depression	40%	47%
Severe Depression	27% (10% hrp)	34% (13% hrp)
Psychosis (schizophrenia / bipolar / non – specific)	8%	19%

COSMIC

- 20% contact psychiatric services
- 59% 'high referral potential'

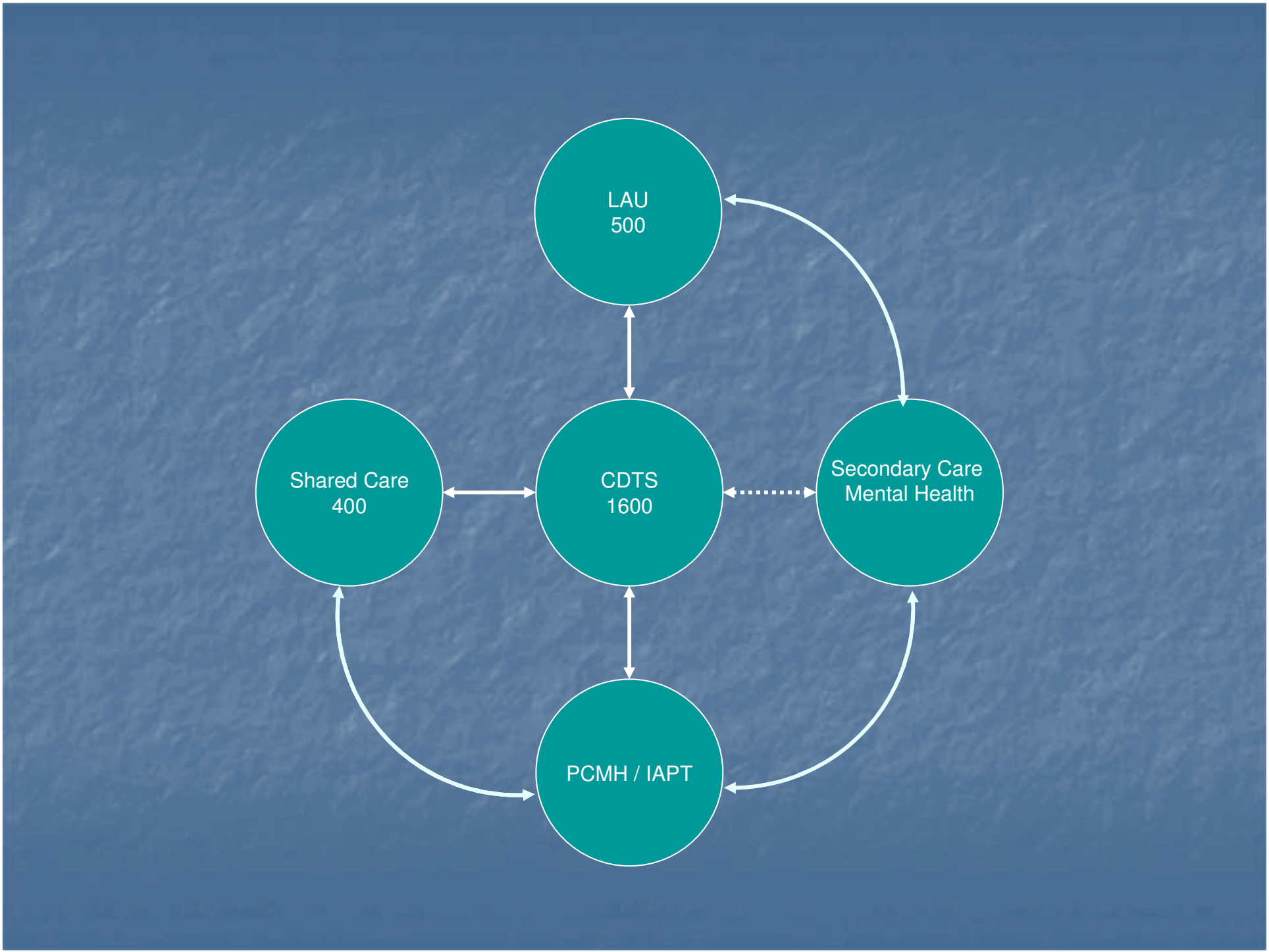
- Detection:
- Sensitivity - 38% psychosis
  - 27% affective disorder
- Specificity - 90%

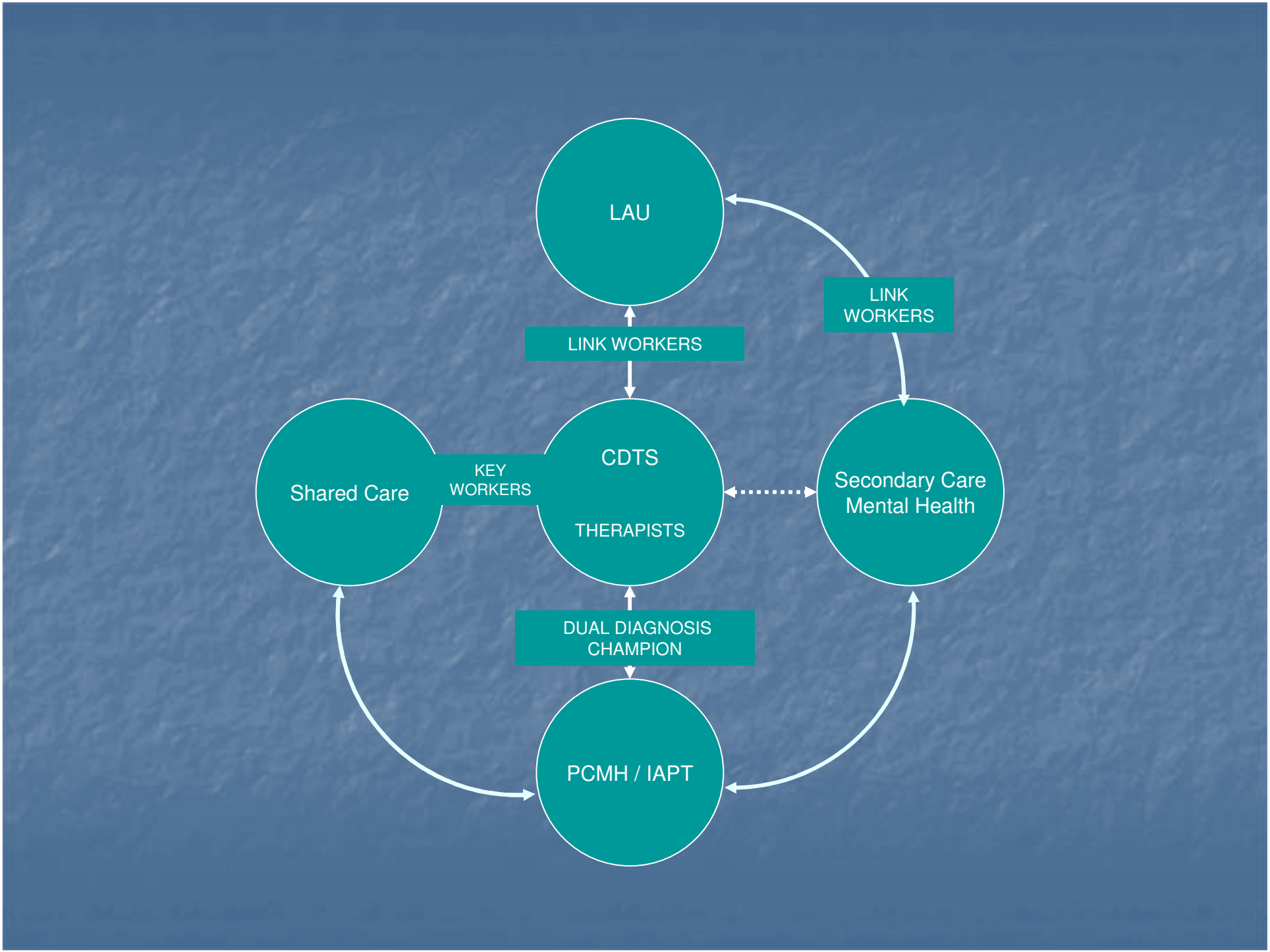
Torrens et al 2011

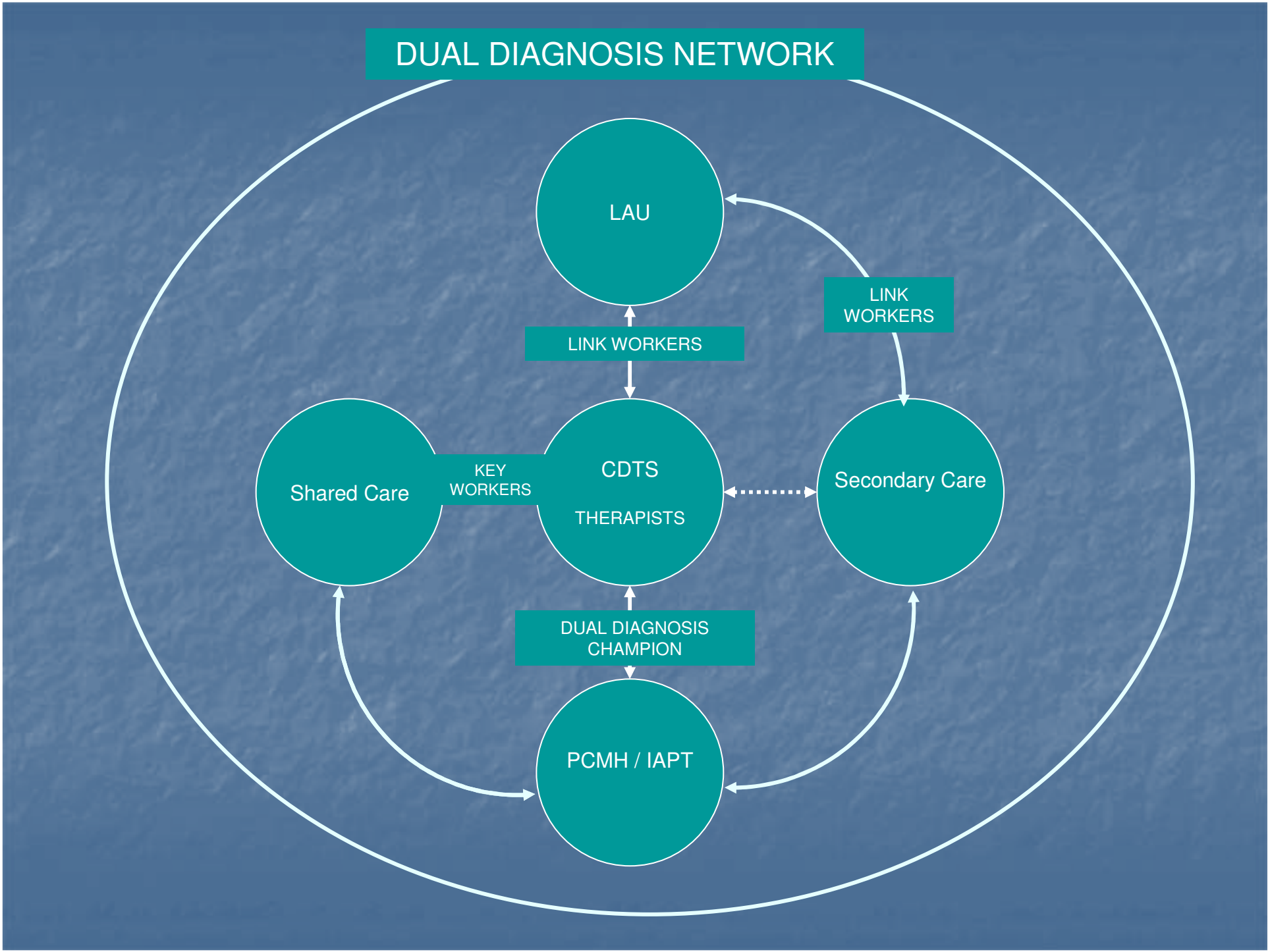
Drug and Alcohol Dependence 113 (2011) 147–156

- 629 drug users – in and out of Rx
- Psychiatric co-morbidity: Substance-induced versus independent disorders
- Psychiatric Research Interview for Substance and Mental Disorders (PRISM)

- Lifetime prevalence of Axis I disorders was 41.8%
- Most independent - 63.9%
  - Mood disorders 27% (10% vs. 17%)
  - Anxiety 15% (1.1% vs. 14.3%).
  - Psychotic disorders 7% (5% vs. 2%)
- Substance induced mood disorders were greatest among ecstasy users (27%) and lowest among methadone-maintenance patients (4.8%).
- Independent mood disorders were greatest among inpatients to the detoxification unit (30.4%) and lowest among patients initiating methadone treatment (13.2%).


LAU
500
Shared Care
400
CDTS
1600
Secondary Care
Mental Health
PCMH / IAPT


LAU
LINK WORKERS
LINK WORKERS
Shared Care
KEY WORKERS
CDTS
THERAPISTS
Secondary Care Mental Health
DUAL DIAGNOSIS CHAMPION
PCMH / IAPT


DUAL DIAGNOSIS NETWORK
LAU
LINK WORKERS
LINK WORKERS
Shared Care
KEY WORKERS
CDTS
THERAPISTS
Secondary Care
DUAL DIAGNOSIS CHAMPION
PCMH / IAPT

Screening tools

- National guidelines support use of brief screening tools in primary care and mental health services
- Quality and Outcomes Framework:
  - Screening (2 or 3 question PHQ) for DM and CHD
  - Assessment of severity once diagnosed with depression / anxiety – informs Rx / stepped care approach
  - PHQ / HAD / BDI / GAD7
  - Also 5-12 week Fup
- PHQ / GAD - used to determine appropriate Rx, monitor progress and step patients up in IAPT

Maisto and Kivlahan, Int J Mental Health and Addiction (2008); 6:32-36

- Current practice in USA for screening in SUD services
- Comprehensive survey of over 13,000 services
  - Provide in-house psychiatric Rx – 62% screen
  - No in-house Rx – 26% screen
  - No standardisation in tools used – variety of (validated and non validated) instruments
- Barriers
  - Lack of staff time / high patient case load (need for brief and valid screening instruments)
  - Lack of psychiatric expertise / training
  - Separate funding SUD and mental health services

Validation of screening tools in co-morbid population

- Vary in type of drug use, timing (pre / post detox), setting, cut off scores
- ? Generalisability
- Most require training / cost / not brief

Screening for common mental health disorders in Community Drug Treatment Services - preliminary results from the Case Finding and Co-morbidity in Addiction Services (CCAS) project

Jaime Delgaldillo, Scott Payne, Dawn Jessop, Stuart Gore (SLCDTS)
Prof Simon Gilbody, Prof Christine Godfrey, Veronica Morton (University of York)
Paula Singleton (Leeds Met University)

Aims

- To test the validity and reliability of PHQ-9 and GAD-7 in Community Drug Treatment Services
- Explore factors that may impact on psychometric properties of the tests to inform optimal utilisation e.g timing, cut off scores, substance use
- To determine if using brief questionnaires as a method of assessing mental health is acceptable to patients and cost efficient

Service Implications

- To inform mental health screening in drug treatment population
- To accurately determine the prevalence of CMD in CDTS
- To offer support to clients identified as having CMD
- To help standardise liaison & referral between substance misuse and mental health services
- Identify any gaps in treatment provision
- To inform commissioning of treatment services (design / staff skill mix)

Methods

Sample: Patients currently involved with City & South CDTS. Exclusion: severe mental illness.

Recruitment: Via routine appointments and drop-in. £10 voucher incentives.

First phase

- Recruit cross sectional group with variable lengths of time in treatment
- Fill in self-completed MHQ
  - PHQ 9 and GAD 7
  - dependency score
  - stability of medication / titration status
  - TOPS – drug and alcohol use, self rating psychological state
  - receiving treatment (anti-depressants)
- Followed by diagnostic interview CIS-R (1 hr)
- After assessment see therapist, information & support offered: self-help and mental health support options

Second phase

- Prospective cohort
- 60 participants asked to complete MHQ again after 4 weeks

Third phase

- 20 participants asked for feedback via telephone
- Weighted sample – male / female and pos / neg
- 20 semi-structured interviews and transcripts

- Cost analysis

Data analysis 1

- Results of MHQ (+ -) compared to results of Diagnostic Interview
- Statistical tests to determine: sensitivity, specificity, predictive power at different cut off points. ROC curves and AUC (accuracy of tests)
- Likelihood ratios of having condition with pos / neg score on each test
- Logistic regression to explore patterns and investigate predictive power of diagnostic tests in presence of other co-variates that may explain discrepancies between correlations

Data analysis 2

- Comparative analysis of base-line and Fup scores (agreement test:retest)
- Give adjusted ratio – indicate reliability of tests after repeated testing
- Further correlation / logistic regression analysis

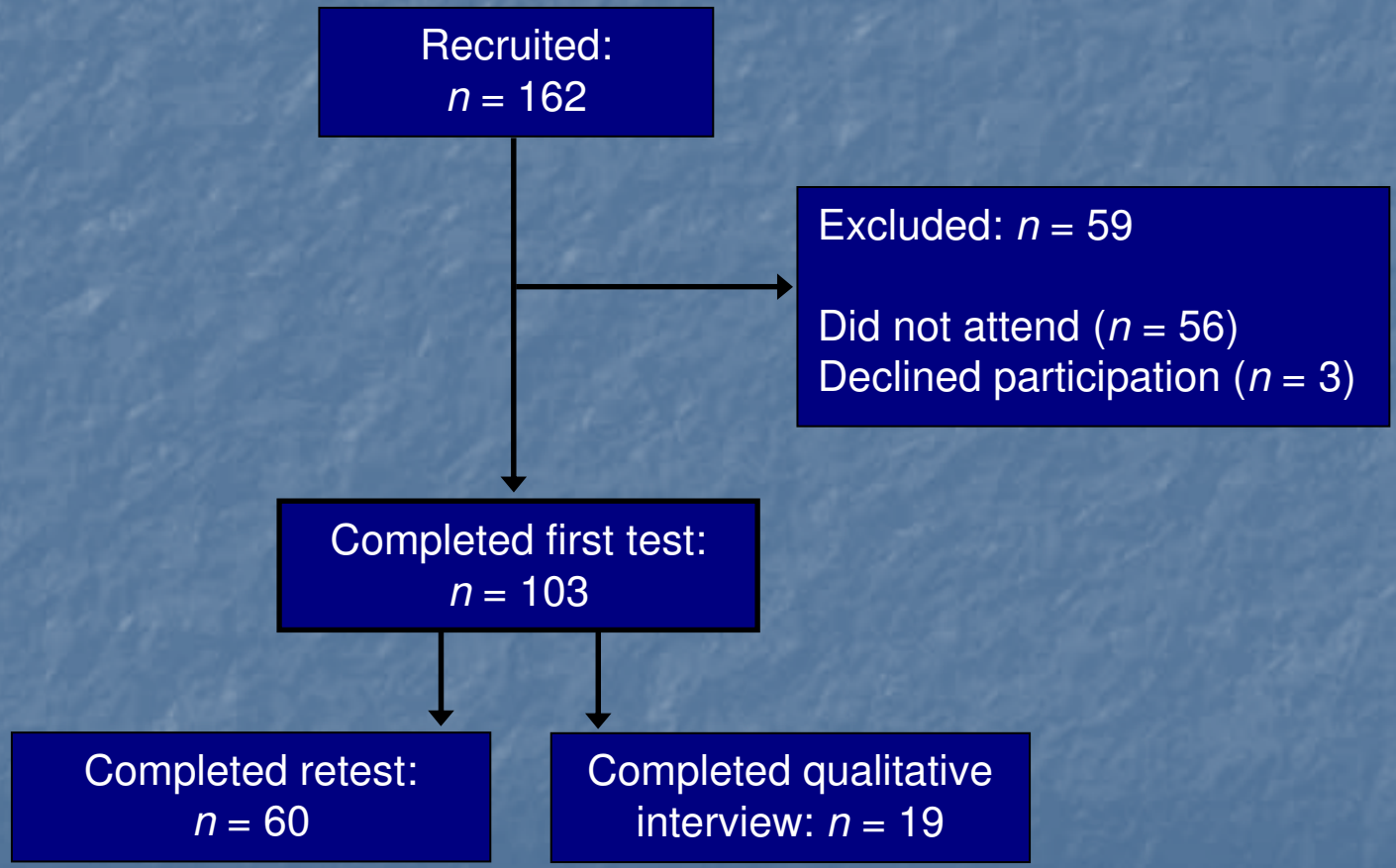
Data analysis 3

- Thematic analysis (N-vivo)
- Identify primary concerns and categories (open coding) – cross link categories to create concepts (axial coding) – cross link concepts to generate themes (selective coding)
- Themes - represents some level of patterned response or meaning within the data set.
- 4 researchers – split into 2 groups then together

- Cost calculation of alternative assessment methods (MHQ vs CIS-R)
- Accuracy (PPV) vs implementation costs

Validity, Reliability and Acceptability of PHQ-9 and GAD-7 in Community Drugs Treatment Services

Progress:
Oct 2009 – Oct 2010



Sample Characteristics

DEMOGRAPHICS

Mean Age: 35

Gender: M (77%) F (23%)

TIME IN TREATMENT

Mean: 18 months

<4 weeks: 17%

<12 weeks: 27%

52% <12 months> 49%

MEDICATION

Stable dose: 53%

Reducing: 21%

Increasing: 21%

No medication: 5%

Anti-depressants: 26%

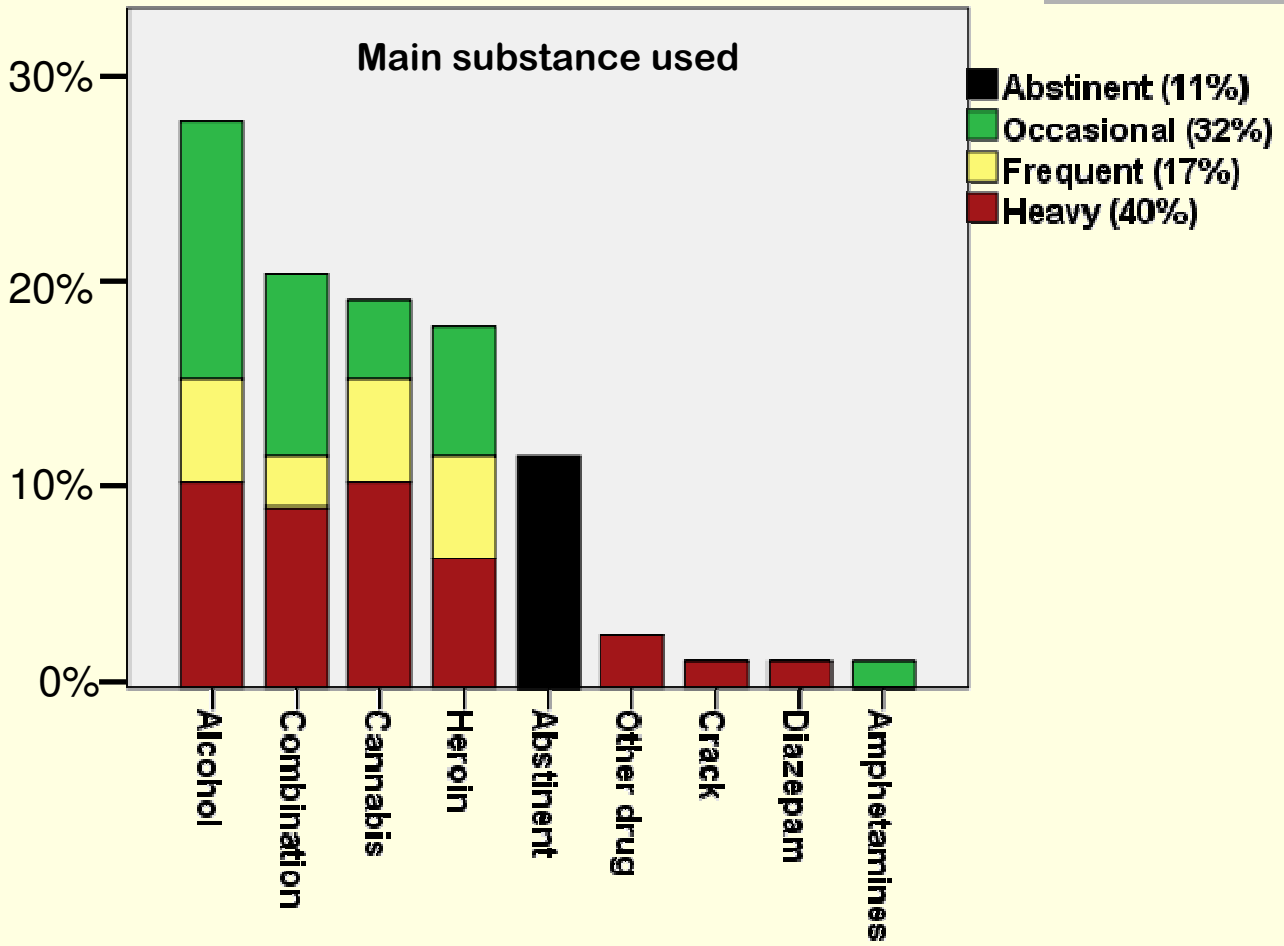
SEVERITY OF DEPENDENCE SCALE

Mild: 20%

Moderate: 40%

Severe: 40%

Substance Use



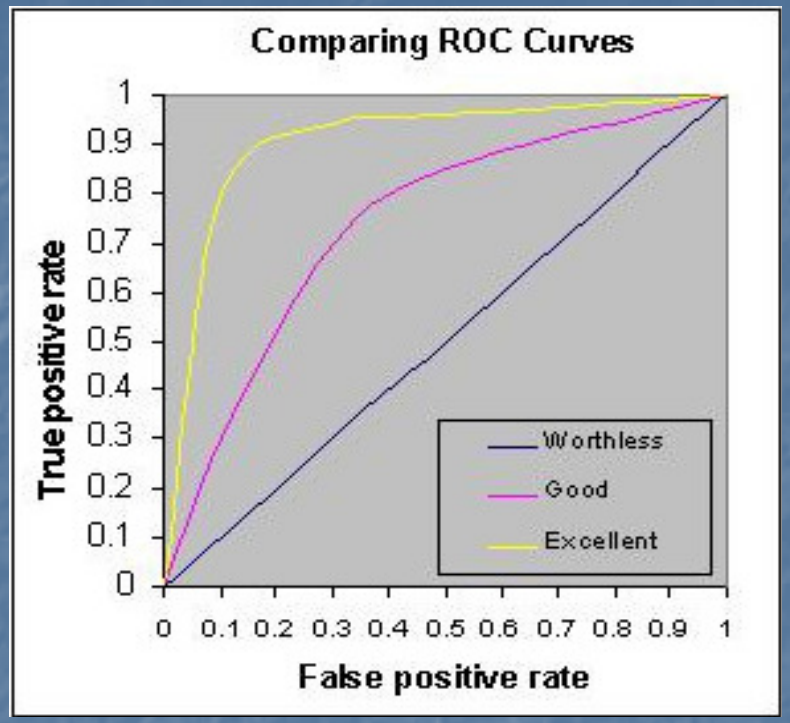
Alcohol: 60% **Poly: 61%** **Injecting: 32%**

Mental Health

Common Mental Disorders (CMD)	%
Depression	49
Generalised anxiety disorder	30
Mixed anxiety and depressive disorder	26
Panic disorder	7
Social Phobia	7
Non-specified Neurotic Disorder - mild	5
Agoraphobia	3
Other specific (isolated) phobia	3
OCD	1

No CMD: 30% **One CMD: 70%** **More than 1 CMD: 65%**

Assessing diagnostic test accuracy:



Area under the ROC curve (AUC) indicates:

.90-1 = excellent (A)
.80-.90 = good (B)
.70-.80 = fair (C)
.60-.70 = poor (D)
.50-.60 = fail (F)

PHQ-9 and GAD-7 in Primary care

PHQ-9 (UK)

AUC=0.94, Cut-off ≥10 Sensitivity=92%, Specificity=78%
(Gilbody et al, 2007)

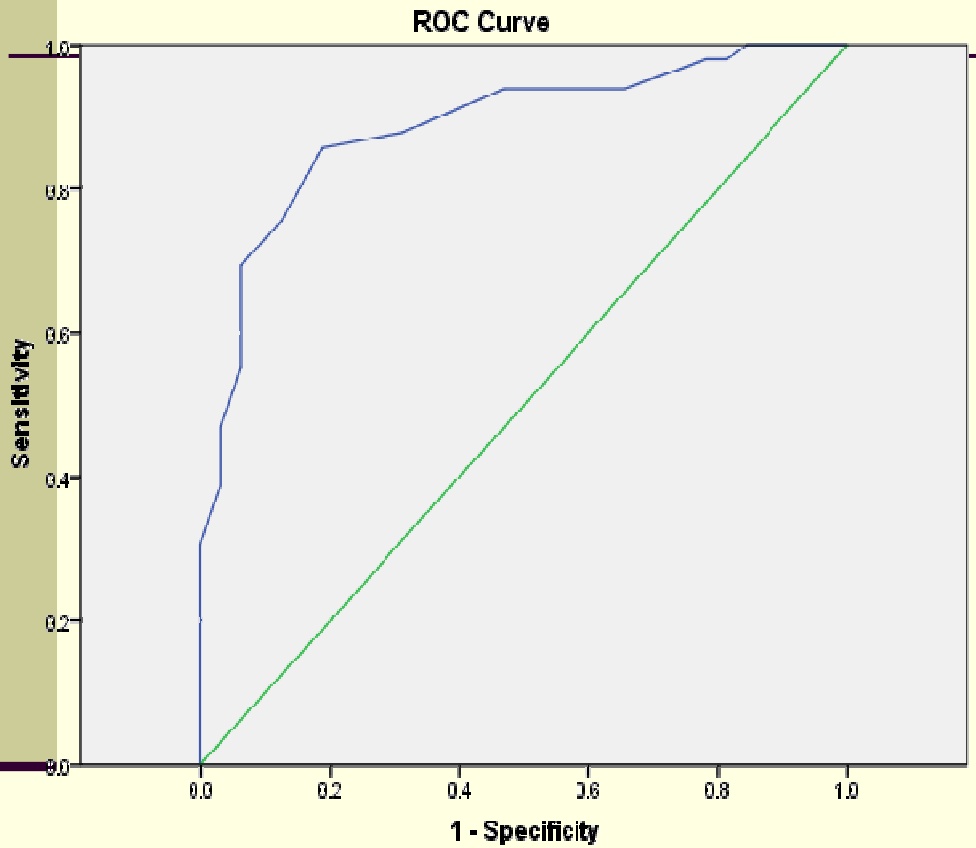
GAD-7 for Generalised Anxiety (USA)

AUC=0.91, Cut-off ≥10 Sensitivity=89%, Specificity=82%
(Spitzer et al, 2006)

GAD-7 for Any Anxiety Disorder (USA)

AUC=0.91, Cut-off ≥8 Sensitivity=92%, Specificity=76%
(Spitzer et al, 2006)

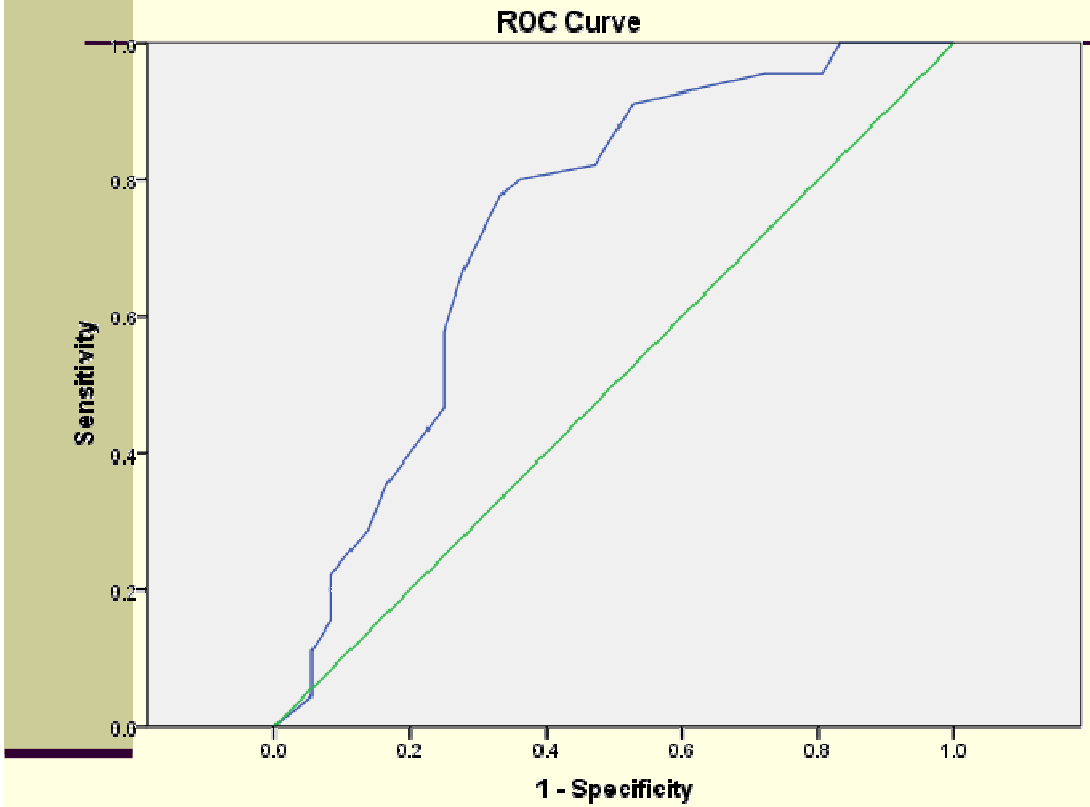
PHQ-9



ROC values		
Cut-off	Sensitivity	Specificity
10	0.94	0.53
11	0.88	0.69
12	0.86	0.81
13	0.76	0.88
14	0.69	0.94

AUC = 0.89 (95% CI= 0.81 – 0.96)
Predictive values: PPV = 87.5%, NPV = 78.8%, +LR = 4.6
Test-retest reliability: ICC = 0.80
Logistic regression: r^2 = .399

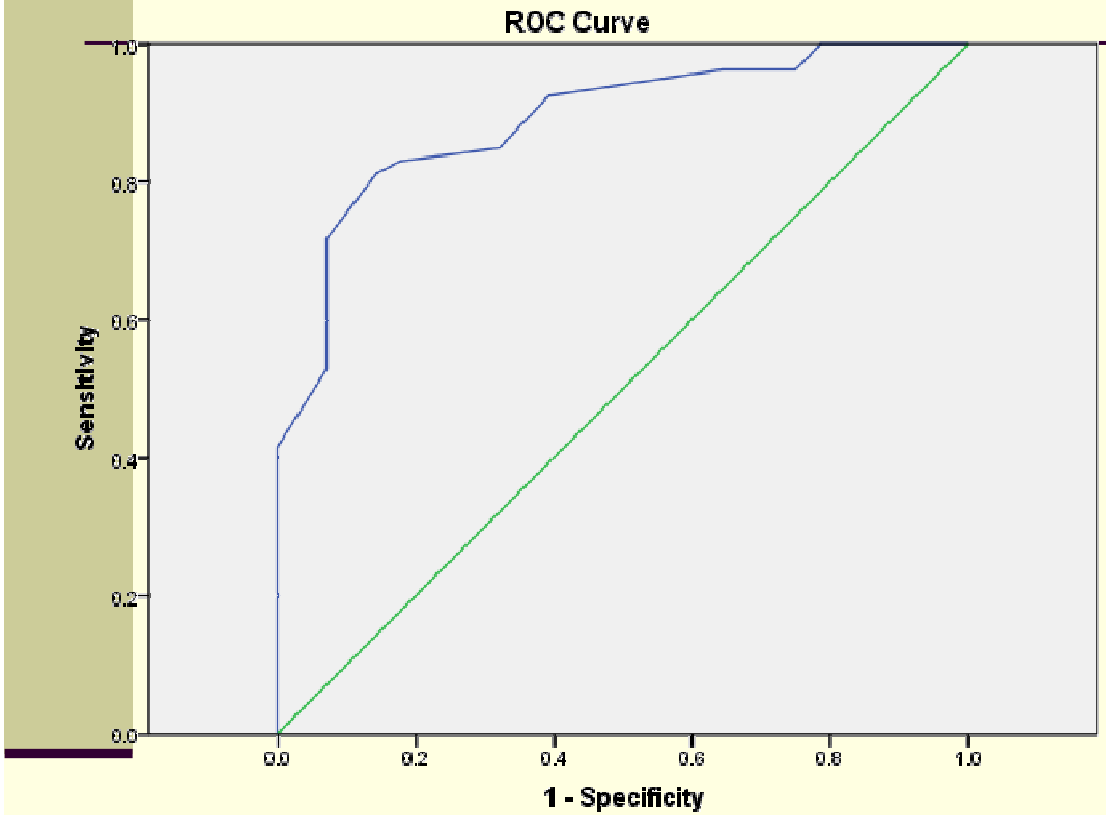
GAD-7: for generalised anxiety



ROC values		
Cut-off	Sensitivity	Specificity
6	0.91	0.47
7	0.82	0.53
8	0.80	0.64
9	0.78	0.67
10	0.67	0.72

AUC = 0.74 (95% CI= 0.62 – 0.85)
Predictive values: PPV = 73.5%, NPV = 71.9%, +LR = 2.2
Test – retest reliability: ICC = 0.85
Logistic regression: r2 = .146

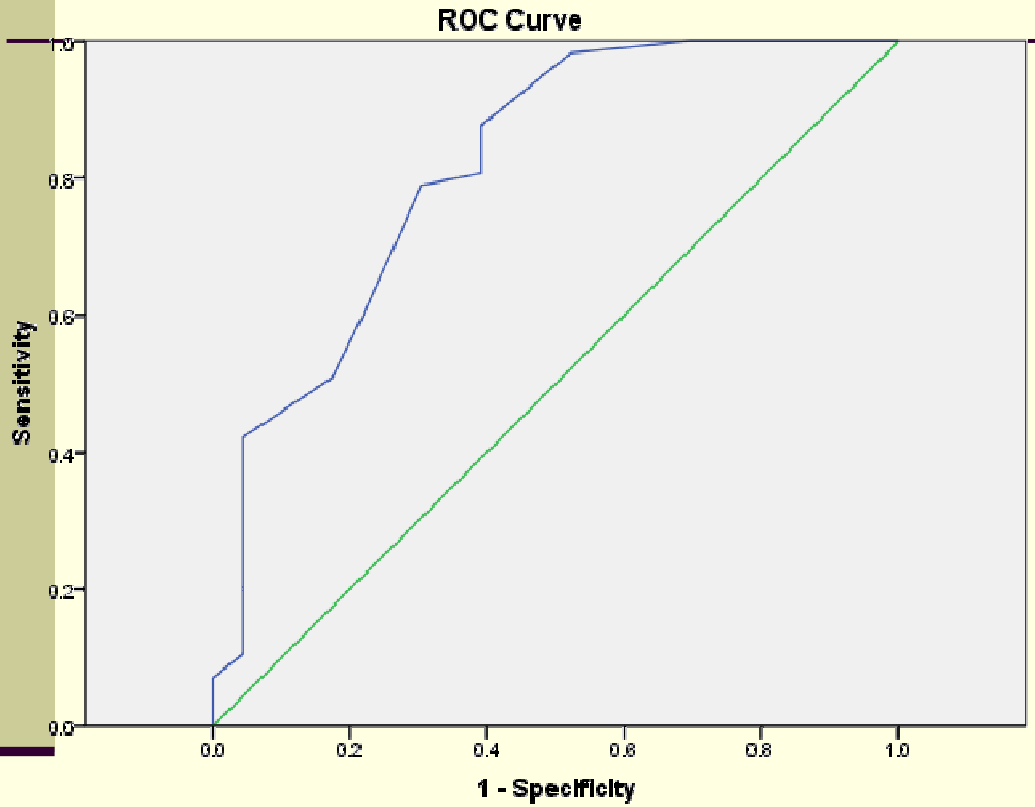
GAD-7: for any anxiety disorder



ROC values		
Cut-off	Sensitivity	Specificity
7	0.85	0.68
8	0.83	0.82
9	0.81	0.86
10	0.72	0.93
11	0.62	0.93

AUC = 0.89 (95% CI= 0.82 – 0.96)
Predictive values: PPV = 89.8%, NPV = 71.9%, +LR = 4.6
Test – retest reliability: ICC = 0.399

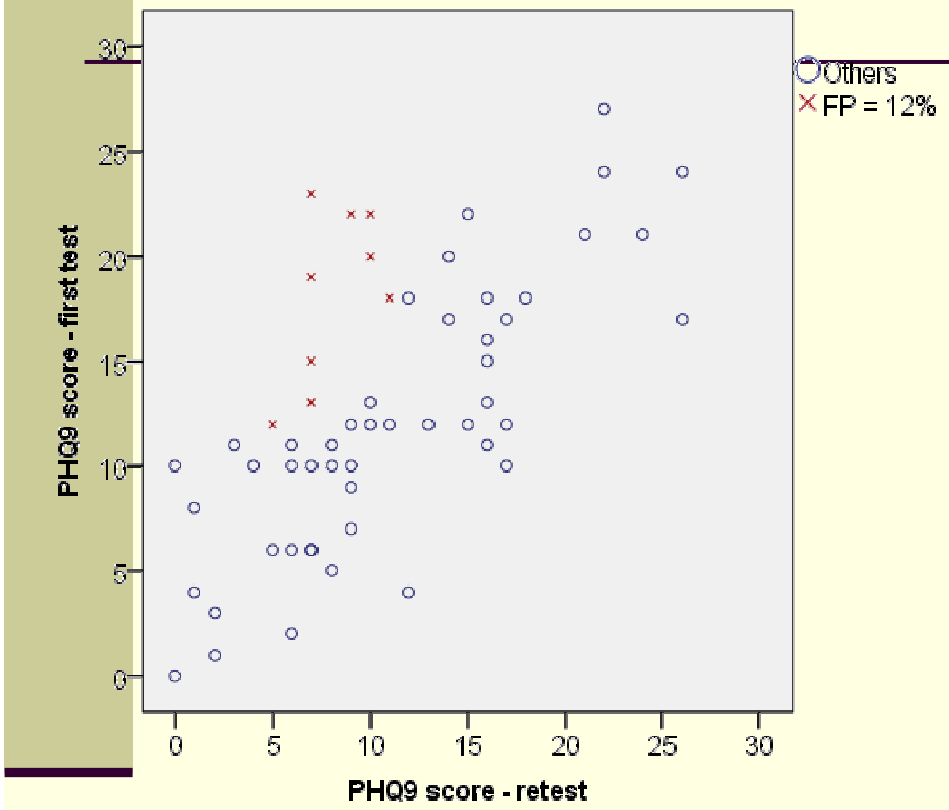
TOP: Self reported mental health scale (0 – 20)

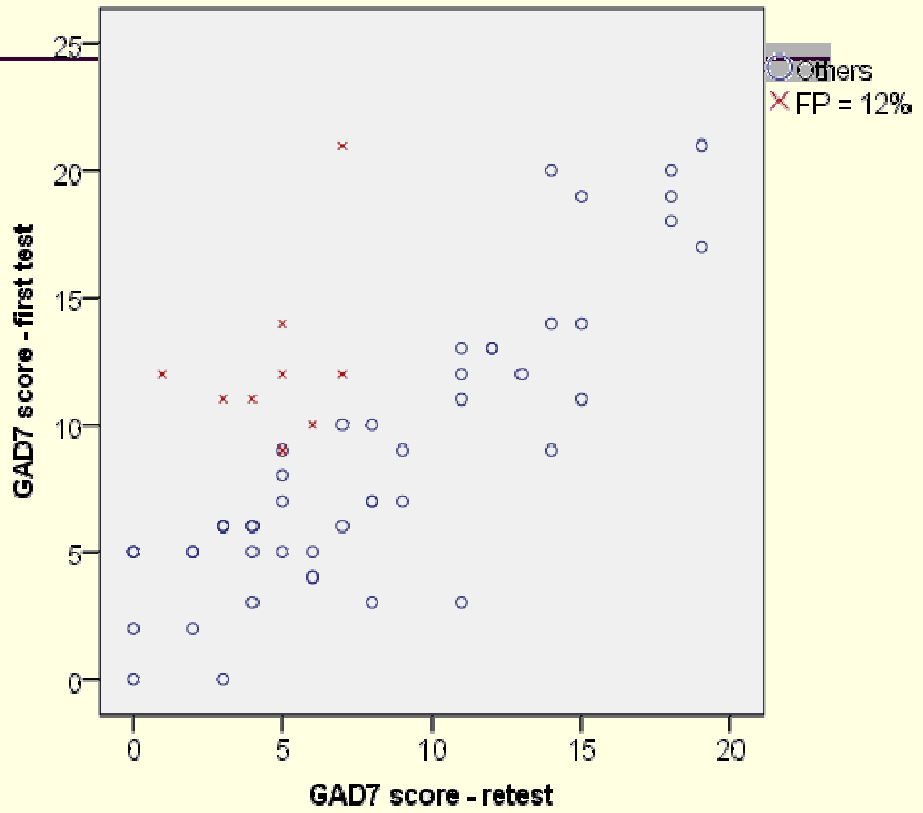


ROC values		
Cut-off	**Sensitivity**	**Specificity**
9	0.51	0.83
10	0.60	0.78
11	0.79	0.70
12	0.81	0.61
13	0.84	0.61

AUC = 0.82 (95% CI= 0.71 – 0.93)
Predictive values: PPV = 83.6%, NPV = 56%, +LR = 2.1

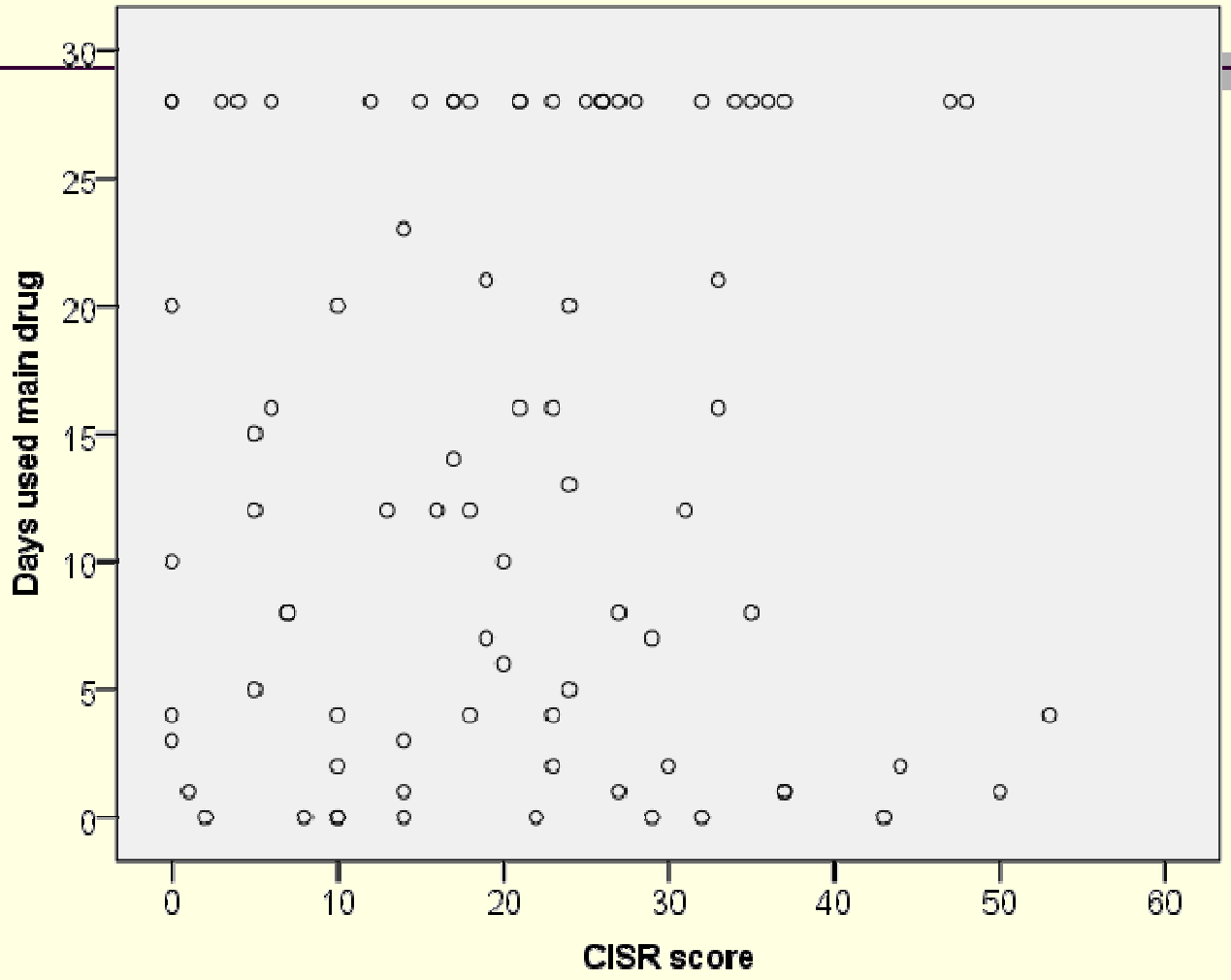
How many scores changed significantly at Retest?





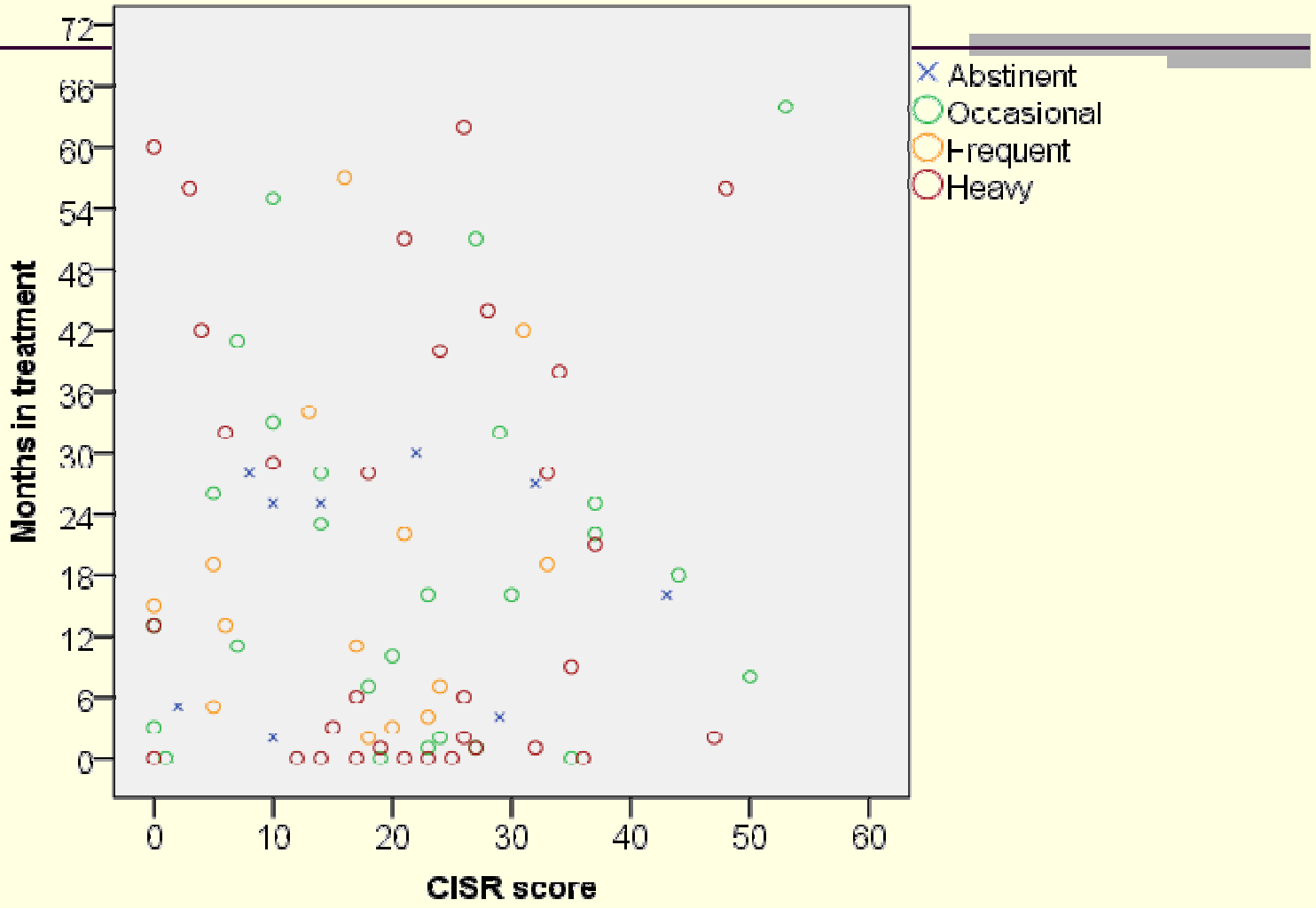
Using criteria for reliable change:
Baseline = above cutoff, retest = below cutoff, change score >=5

Is frequency of drug use associated with mental health?



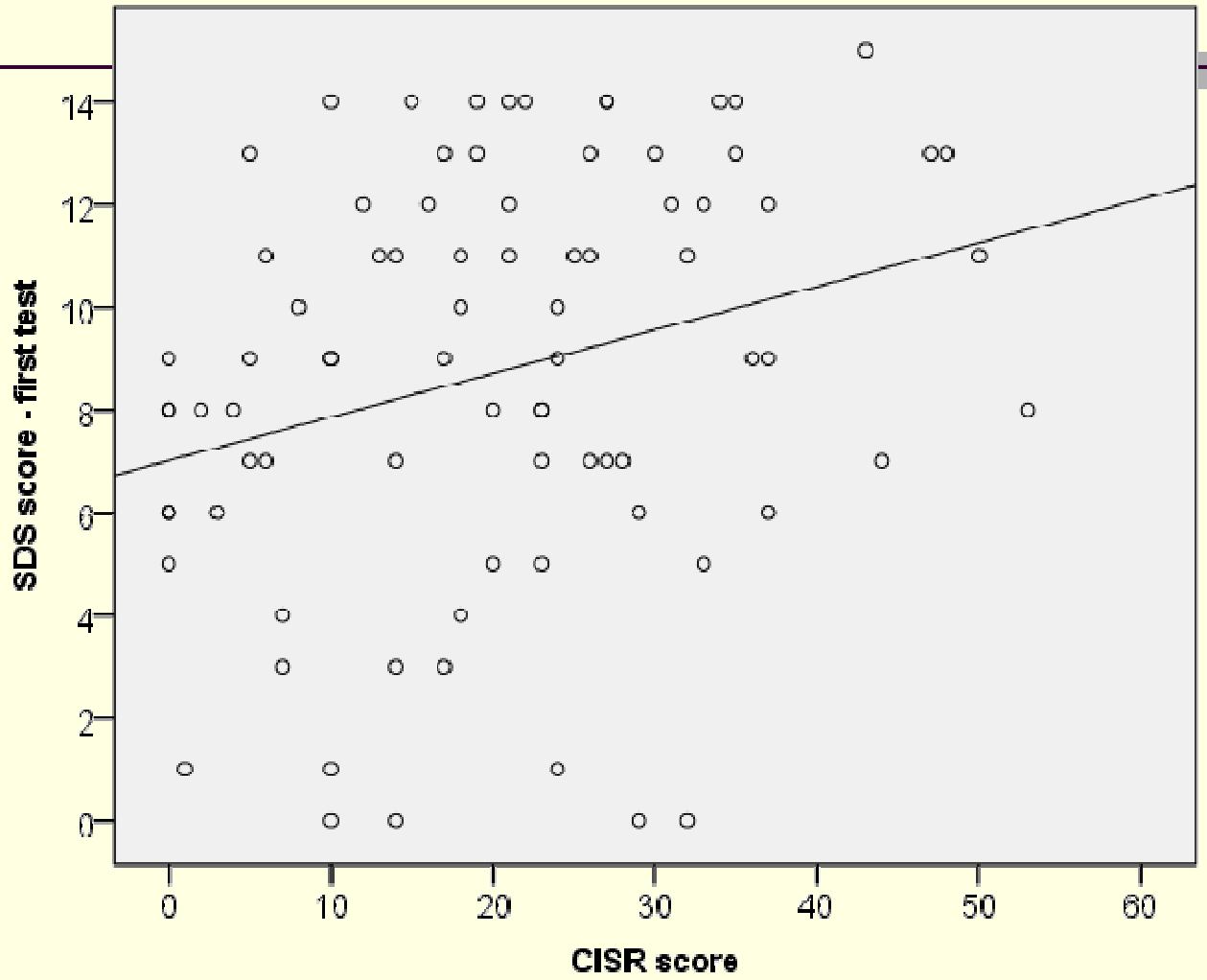
Non-parametric correlation: r (*n* = 81) = .044, *p* = .697

Is time in treatment associated with mental health?



Non-parametric correlation: r (*n* = 81) = .003, *p* = .979

Is Severity of Dependence (SDS) associated with mental health?



Non-parametric correlation: r (*n* = 81) = .288, *p* = .009

Is titration status associated with mental health?

		CISR diagnostic status		
		No diagnosis	Mental disorder	Total
Titration categories:	**Stable or reducing medication** Mean CISR score: 19.18	19	41	60
	Increasing medication Mean CISR score: 24.88	3	14	17
Total		22	55	77

Chi square test (DF=1)=1.28, p=0.26
T-test = -1.59(DF=75), p=0.12

Comparison first 12/52 vs post 12/52 of treatment

	Up to 12/52	Post 12/52
N	21	60
PHQ case	71%	57%
PHQ PPV	87%	88%
GAD case	76%	62%
GAD PPV	100%	85%

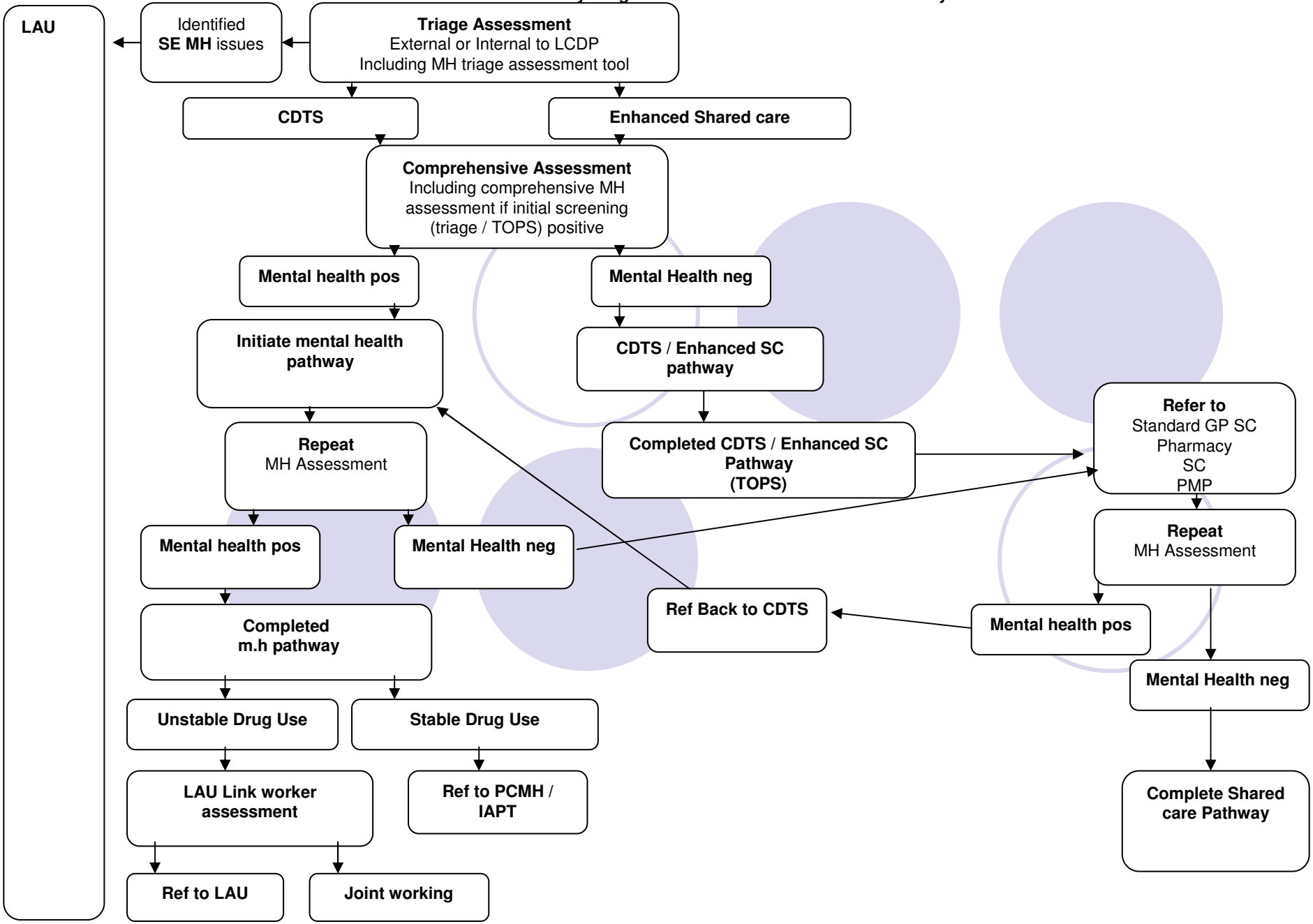
Transcripts

- Generally accepted
- Happy to fill in at service
- Preferable to longer iv
- Seen as being better if not at start of Rx, when have trust of therapist, more intrusive early on
- Contingency issue!
- Feel would improve service offered – detection, treatment, staff awareness / training

Headlines so far

- PHQ 9 / GAD 7 (for all anxiety disorders) pretty much as good in CDTS as primary care population
- TOPS also fairly good
- Acceptable to patients although issues around timing
- Co-morbid population large and heterogenous
- No clear associations between mental illness and:
  - Frequency of substance use
  - Time in treatment
  - Titration status
- Some association with level of dependence
- 10 – 20% improve after 12/52 (although still high prevalence)

Leeds Community Drug Service Mental Health Referral Pathway



CDTS SLA

- Addressing *barriers in access to treatment* for clients in "difficult to reach" groups, including black and minority ethnic communities and *those with dual diagnosis*
- To *identify* people presenting with *mental health related problems*
- To *work closely* with the management of the Community Drug Treatment *Psychosocial Intervention Service*
- Provide supportive interventions for low level transient anxiety and mood disorder affecting individual service users.
- *Protocols* will be agreed by the Service which clearly define the *respective responsibilities* of the Service and other Specialist Drugs Services, including secondary care and *regulate movement* of patients from one service to the other

Leeds Addiction Unit Criteria

- **i)** *People with severe and enduring mental illness*
  - **Included** Service users with a confirmed diagnosis of functional psychosis, schizophrenia or the manic depressive spectrum of disorders, and extending to some individuals with organic brain syndromes. People with residual drug induced psychoses or memory deficits may be included.
  - **Excluded** service users with transient psychotic symptoms related to the pharmacological effects of their substance use.

Leeds Addiction Unit Criteria 2

- **ii)** *People with moderate or severe mental illness other than psychosis*
  - **Included** Service users with depression, anxiety spectrum disorders, obsessive-compulsive disorders, and post traumatic stress disorder where CBT combined with substance misuse management is indicated as the treatment of choice (after primary care management). A number of individuals with learning disabilities also fall within this group.
  - **Excluded** service users with minor disturbances of mental state related to the pharmacological effects of their substance use or where social circumstances are the principal aetiology and 'social treatment' is indicated.

Leeds Addiction Unit Criteria 3

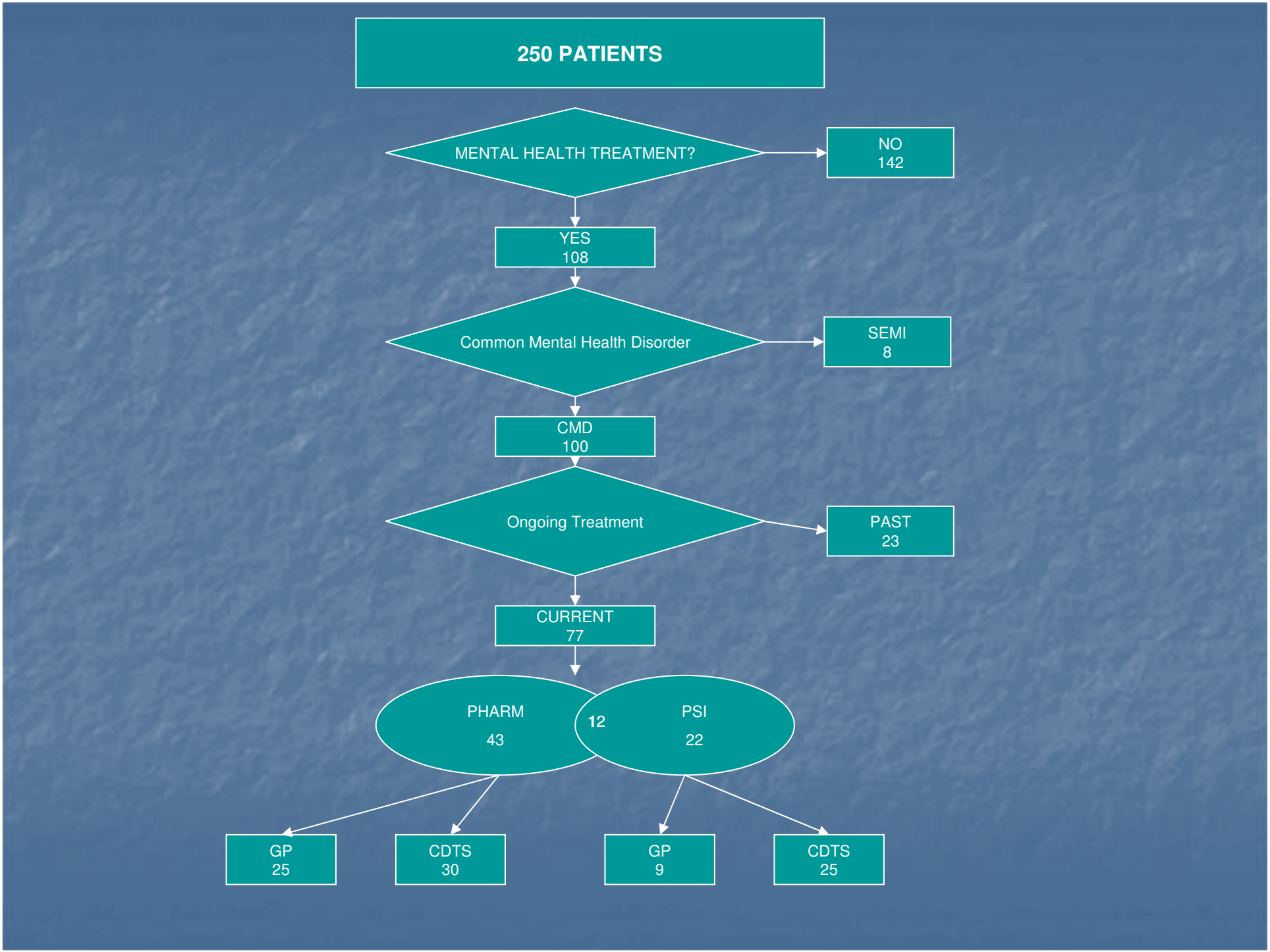
- **iii)** *People with personality disorder*
  - **Included** Service users with borderline personality disorder where substance misuse is also a particularly dominant problem. Other manifestations of personality disorder to be considered on an individual basis.
  - **Excluded** Service users who need to be in a secure environment. All other personality disorder diagnoses will be managed by the city wide service.

IAPT co-morbidity

- Consider barriers that may prevent access
- Referral pathways from substance misuse services should be developed
- "Patients with associated drug and alcohol misuse will be seen once these problems have been assessed and treated by appropriate drug and alcohol agency"
- Exclude – primary acute substance misuse issue

DD website

- http://dual-diagnosis.org.uk/


250 PATIENTS
MENTAL HEALTH TREATMENT?
NO
142
YES
108
Common Mental Health Disorder
SEMI
8
CMD
100
Ongoing Treatment
PAST
23
CURRENT
77
PHARM
43
12
PSI
22
GP
25
CDTS
30
GP
9
CDTS
25

LAU referrals

- Direct
  - People with substance misuse and mental illness may be referred directly from GP's, community mental health teams or from inpatient services. The Becklin Wing (general adult psychiatry) is provided with a service from a senior clinician from the SDS.
- Indirect
  - Referrals to SDS not through the above routes would be made indirectly, via another service, for example, for service users attending a CDS requiring referral to SDS. The SDS holds locality clinics, delivered by an LAU locality link worker, at each CDS.

CDS to LAU

- For new referrals:
  - Mental health issues will be identified at triage stage.
  - On receiving a referral, the CDS will contact Harm Reduction and DIP to ensure a triage has not already been carried out.
  - The person undertaking the triage assessment should be competent and able to complete the mental health assessment and be able to identify severe and enduring mental health issues.
  - If other services are currently involved, e.g. CMHT, the CDS worker completing the triage should contact them for further information.
  - If severe and enduring mental health issues are identified, the CDS worker will discuss with the LAU locality link worker the appropriateness of a referral and they will decide together which service will undertake the comprehensive assessment

CDS to LAU 2

- For existing CDS service users whose mental health deteriorates:
  - the CDS key worker will discuss in their weekly multi - disciplinary team meeting, which will include a medic, the service manager and Dual Diagnosis Lead.
  - If it is agreed that a referral is appropriate, they will make a referral to SDS.
  - The SDS will then offer an assessment which will take place on CDS site.
  - The CDS key worker will ensure the service user attends the SDS appointment, accompanying them if necessary.

CDS to LAU 3

- Following assessment (and discussion with team at SDS), it may be decided that the service user's whole package of care will be transferred to SDS or that the service user may be appropriate for a time - limited package of care, which will be delivered on CDS site.
- Following either intervention, a further assessment will be carried out. If their mental health needs have been met, the service user will be transferred fully back to CDS. If further work is needed around their mental health, a further package of care / transfer will be provided by SDS.

IAPT

- Leeds PCT LIT – pilots in Leeds and NW
- National IAPT – rolling out NICE compliant therapies for common mental health problems (2004) in primary care
- 900,000 extra expected to access services
- £33 mill 08/09, £70 mill 09/10, £70 mill 10/11.
- Half achieving recovery
- 25,000 less on sick pay / benefits
- Rx based on pt need / choice
- Based on evidence of effectiveness
- With suitably skilled and supported staff
- Risk assessment, monitoring and review at all stages

NICE Treatment Recommendations

- NICE anxiety and depression guidelines
  - Phys and psych treatments should be available
  - Stepped care
  - Consider co-morbid factors inc drugs and alcohol
- NICE PSI guidelines
  - Evidence-based psychological treatments (in particular, cognitive behavioural therapy) are recommended to be used for the treatment of co-morbid depression and anxiety disorders for those who have achieved abstinence or are *stabilised* on opioid maintenance treatment
- NICE CG CMD (in development)
  - Identification and pathways
  - Excluded co-morbid patients

NTA pathways guidance / Psychosocial Interventions in Drug Misuse

- Pragmatic step wise approach focussing on the *integration* of both the *substance misuse and common mental health treatments*
- *Categorisation by intensity* may be particularly helpful in facilitating the development of effective treatments of common mental health problems in drug services (through the use of *guided self-help* and other *low-intensity CBT interventions*)
- Successful implementation of evidence-based interventions for common mental health disorders will not only require *trained and competent staff who are adequately supervised* but also requires that systems are in place for the *identification of common mental disorders.*

Co-morbid pharmacotherapy

- Consensus statement BAP
- A/D can improve mood, not necessarily s.use outcomes
- Better if abstinent for longer and depression more severe
- TCADs not recommended due to risks
- 1b evidence / Level B recommendation