Continued care model – practice and data collection

Conor O'Neill

Purpose of talk: 25 minutes

1. Describe a combined Prison Inreach and Court Liaison service model of care used in a remand setting in Ireland

2. Describe a Service Assessment Protocol used to measure outcomes and activity over time in remand settings.

Co-workers

Harry Kennedy
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Mary Fitzpatrick
Fintan Caddow
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Ronan Maher
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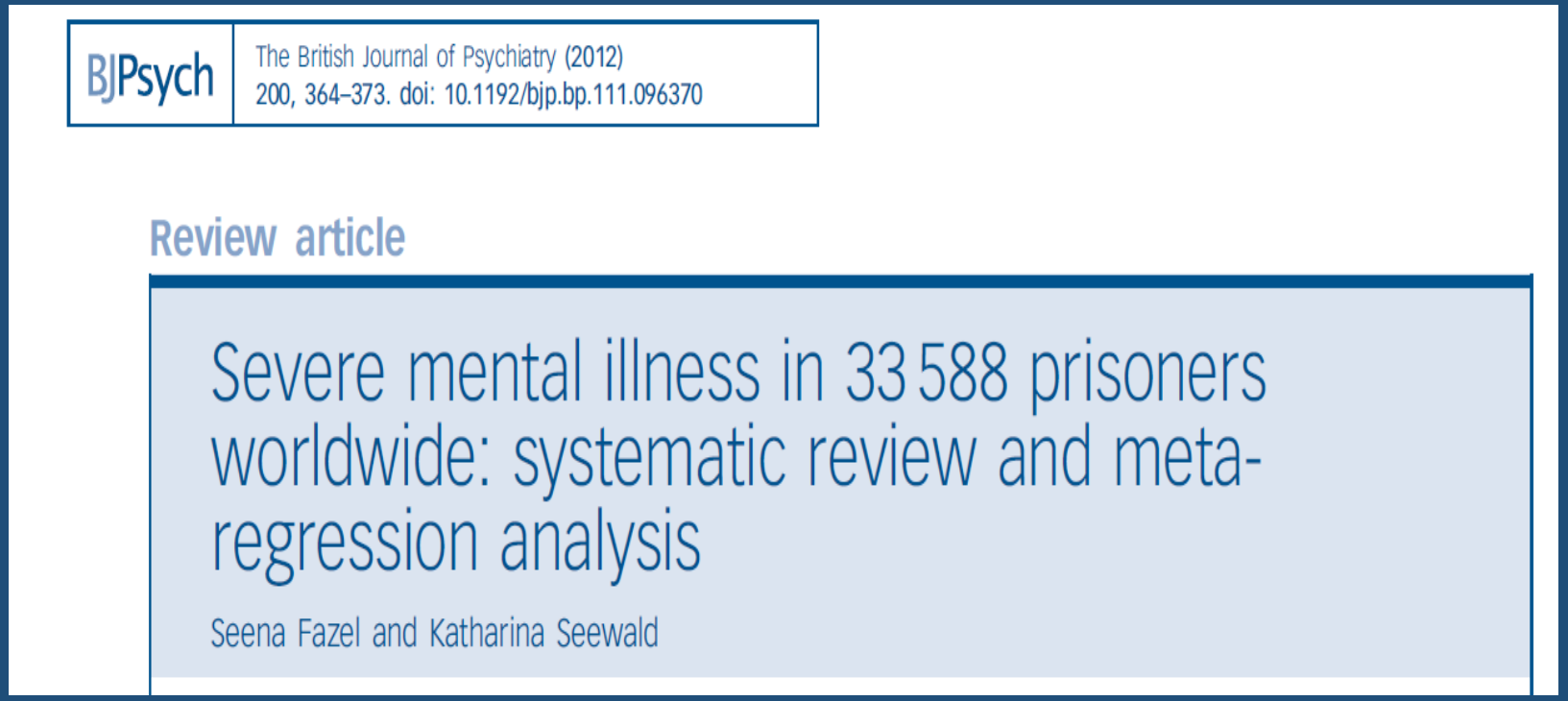
Mary Davoren
Ronan Mullaney
Zetti Azvee
Louise Brennan
Bronagh Gallagher
Mark Joynt
Claire Kehoe
Kate Maddock
Ben O'Keeffe
Diane Mullins
Liz Owens
Sean Quigley

Republic of Ireland: 4.7 million people

- 2791 inpatient beds (2016 IMHS Report)
  - Hospitalisation rate 59/100,000
  - 1827 public beds (2014)
- 3958 prisoners (23.10.17)
  - Imprisonment rate 84/100,000
- 90 Forensic Beds
- Forensic bed rate 2/100,000
- Central Mental Hospital , Dundrum (1850)
- New hospital to open in 2019 (170 beds)

Prisoner Population: October 2017

Prisoner Population on Monday 23rd October 2017								
INSTITUTION	Number in Custody	No. On Temp Release*	No. On Trial/ Remand	Total Prisoners in System**	Bed Capacity	% of Bed Capacity	Bed Capacity per Inspector of Prisons***	% of Inspector of Prisoners Bed Capacity
MOUNTJOY CAMPUS								
Mountjoy (m)****	557	57	38	668	755	74%		
Mountjoy (f)	126	11	42	147	105	120%	105	120%
WEST DUBLIN CAMPUS								
Cloverhill****	381	6	275	393	431	88%	414	92%
Wheatfield****	423	18	3	447	550	77%	550	77%
17 Year Olds	0	1	0	1				
PORTLAOISE CAMPUS								
Midlands	824	7	69	837	870	95%	870	95%
Portlaoise	226	0	20	227	291	78%	291	78%
A Block	18	0	0	18	40			
C Block	166	0	0	167	181			
E Block	42	0	20	42	70			
Cork	263	29	74	303	296	89%		
Limerick (m)	209	25	78	239	210	100%	185	113%
Limerick (f)	25	4	4	30	28	89%	24	104%
Castlerea	262	13	48	282	340	77%	300	87%
Arbour Hill	136	0	1	144	142	96%	131	104%
Loughan House	106	2	0	124	140	76%	140	76%
Shelton Abbey	94	3	0	117	115	82%	115	82%
Totals	3,632	175	652	3,958	4,273	85%		



- 109 samples from 24 countries, 1966-2010
- Pooled prevalence psychosis
  - Sentenced 3.7% (95% CI 3.0-4.2%)
  - Remand 3.5% (95% CI 2.4-4.2%
- Stable across jurisdictions and over time
  - Therefore more SMI in prison if prison populations increasing

Downloaded from http://bmjopen.bmj.com/ on June 18, 2016 - Published by group.bmj.com

Open Access Research

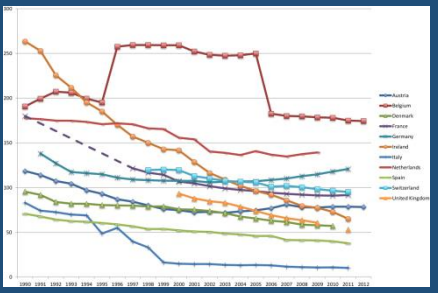
BMJ Open

How has the extent of institutional mental healthcare changed in Western Europe? Analysis of data since 1990

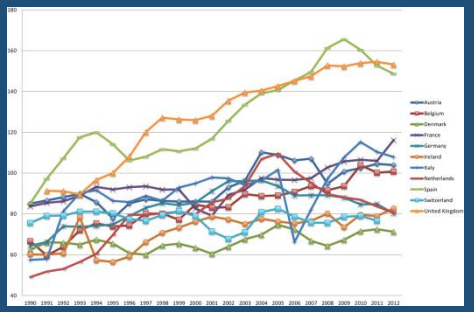
Winnie S Chow, Stefan Priebe

Per 100,000

General Beds

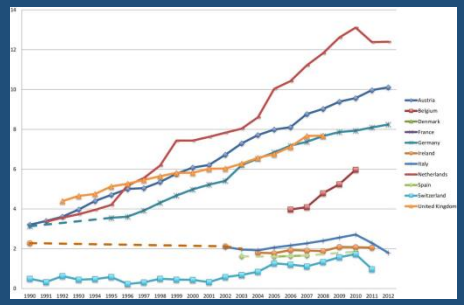


Prison Places



- 11 Western European Countries 1990-2012
- Negative association between bed reduction and prison increase

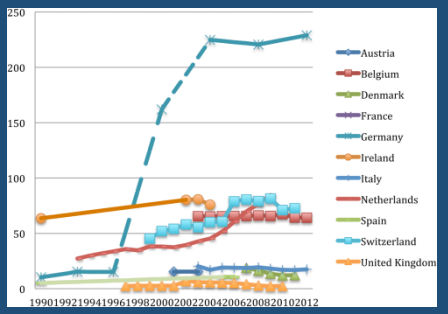
Forensic Beds



•General Beds reducing: Protective Housing, Forensic beds increasing

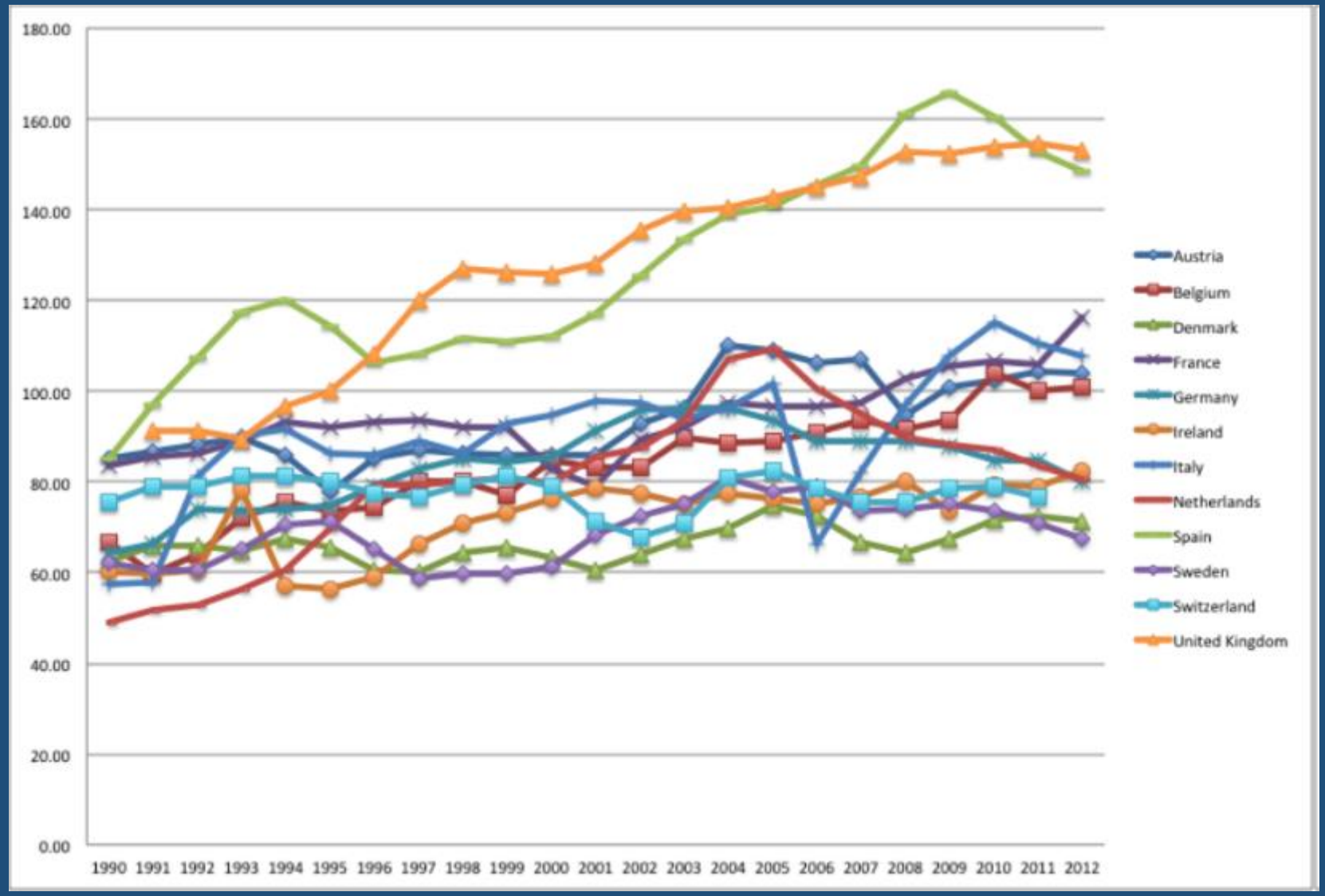
- Not Ireland!

Protecting Housing



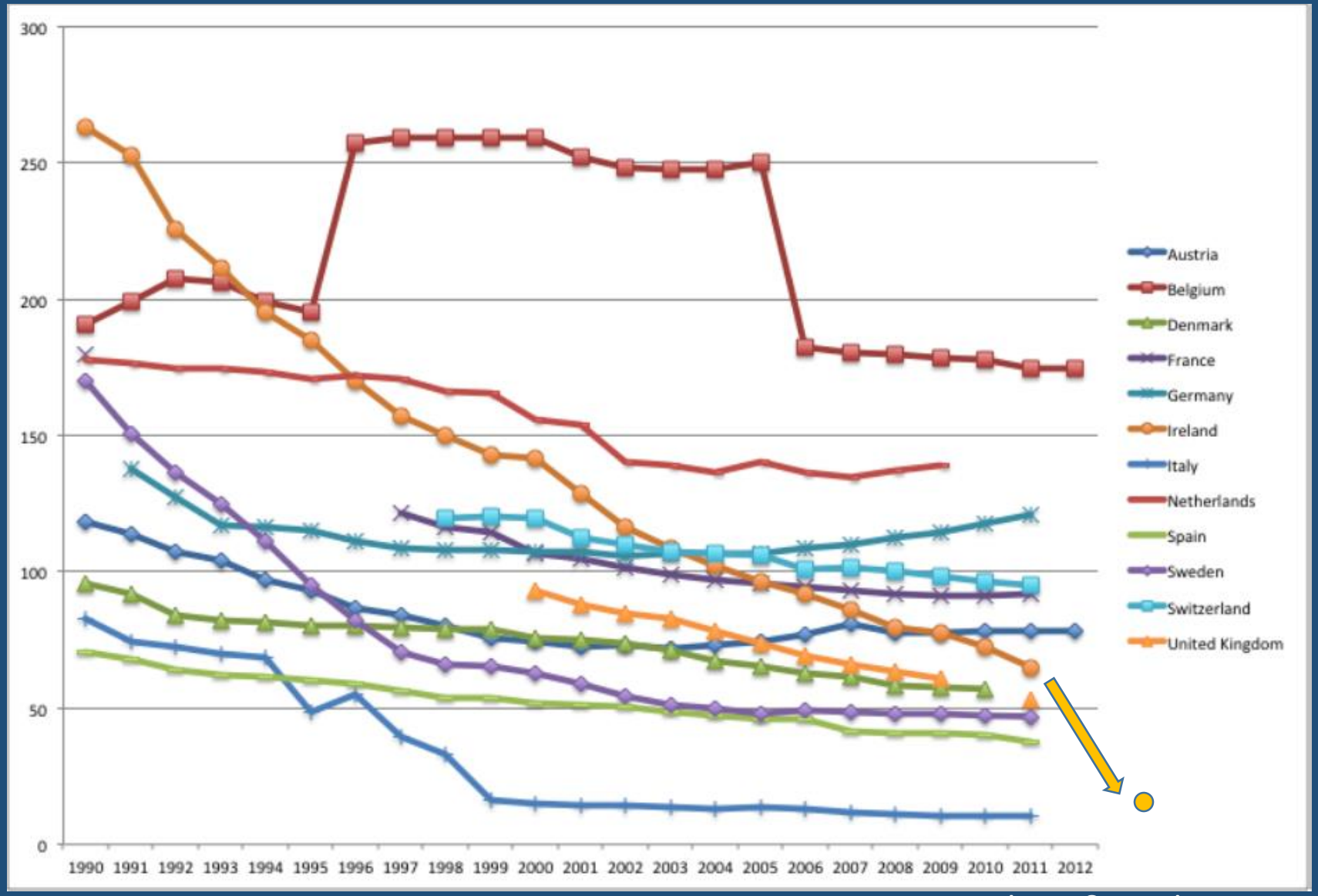
Chow WS, Priebe S.
BMJ Open 2016;6:e010188. doi:10.1136/

Figure 2. Prison Population per 100,000 inhabitants from 1990-2012



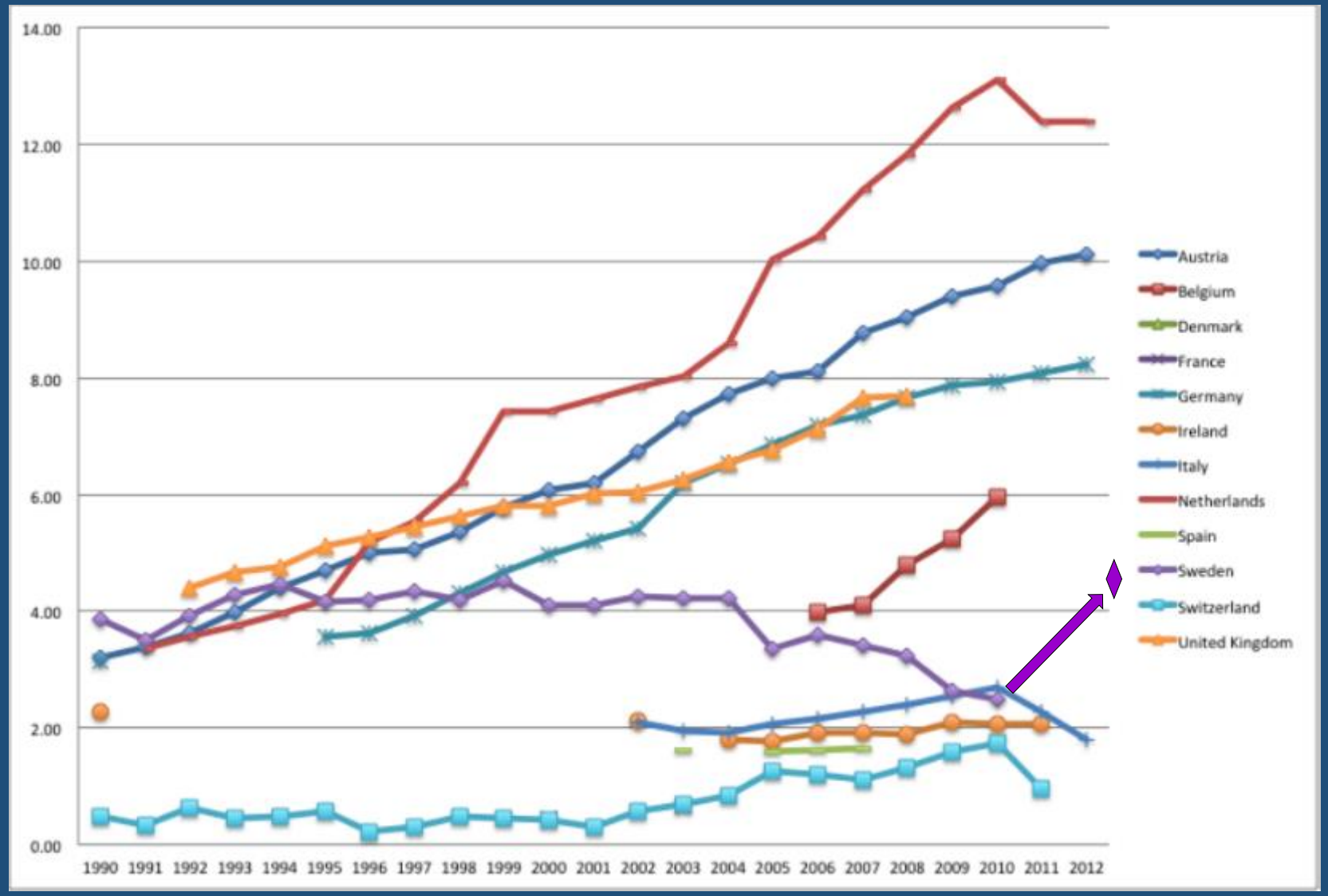
From Chow & Priebe 2016

Fig. 1: Psychiatric hospital beds per 100,000 inhabitants from 1990-2012



From Chow & Priebe 2016

Figure 3. Forensic beds per 100, 000 inhabitants from 1990-2012



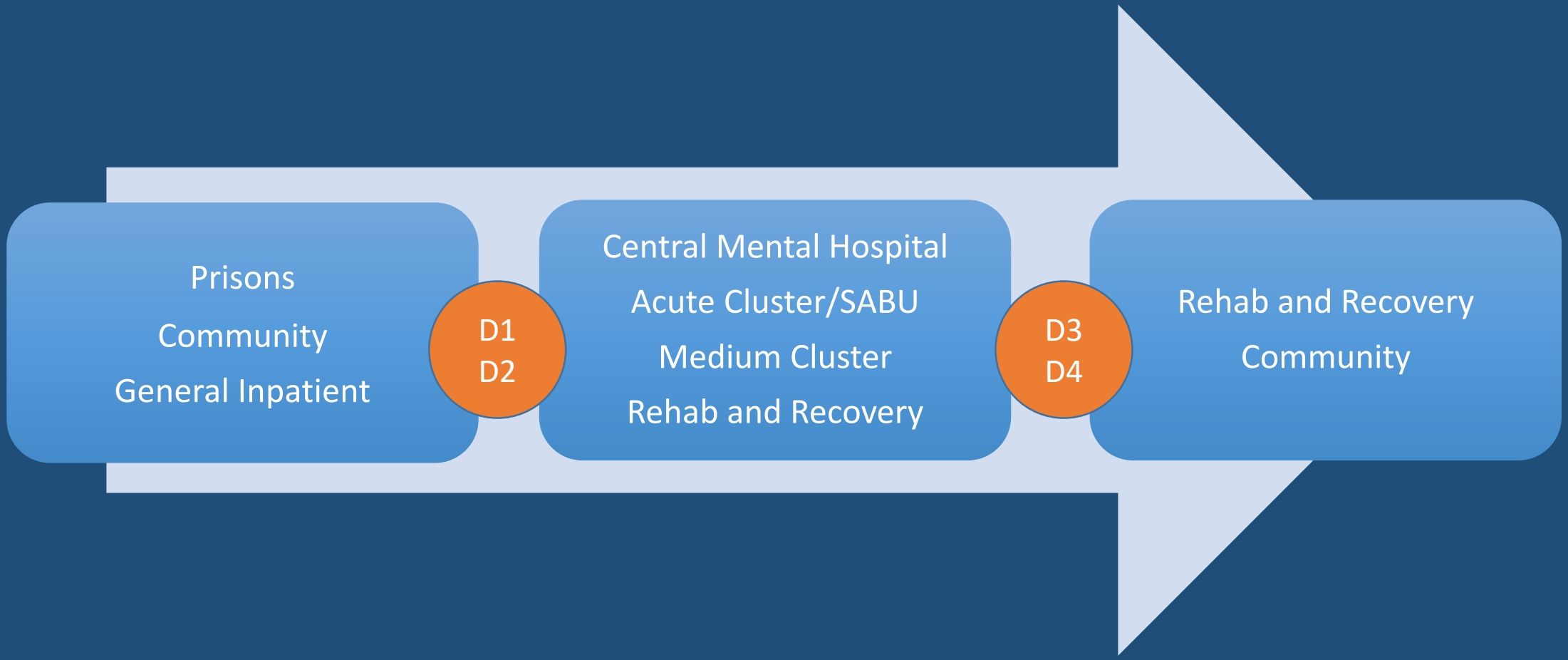
From Chow & Priebe 2016

	High Secure	Medium Secure	Long Term Low Secure	All secure
Netherlands		10.0		**>10.0**
Germany				**10.0**
Scotland (5.2m)	2.77	2.88	3.85	**9.49**
England & Wales	0.8	3.6	3.2	**7.6**
Canada				**6.1**
N. Ireland (1,.8m)	?	1.93	3.58	**5.51**
Australia				**3.8**
Ireland CMH (4.4m)	0.64	0.73	0.79	**2.17**

CENTRAL MENTAL HOSPITAL

Medium secure, low secure rehabilitation and open forensic rehabilitation beds all on the same site.

Intake and progress through care guided by the DUNDRUM Toolkit (Kennedy et al)



The DUNDRUM Toolkit (Kennedy et al)

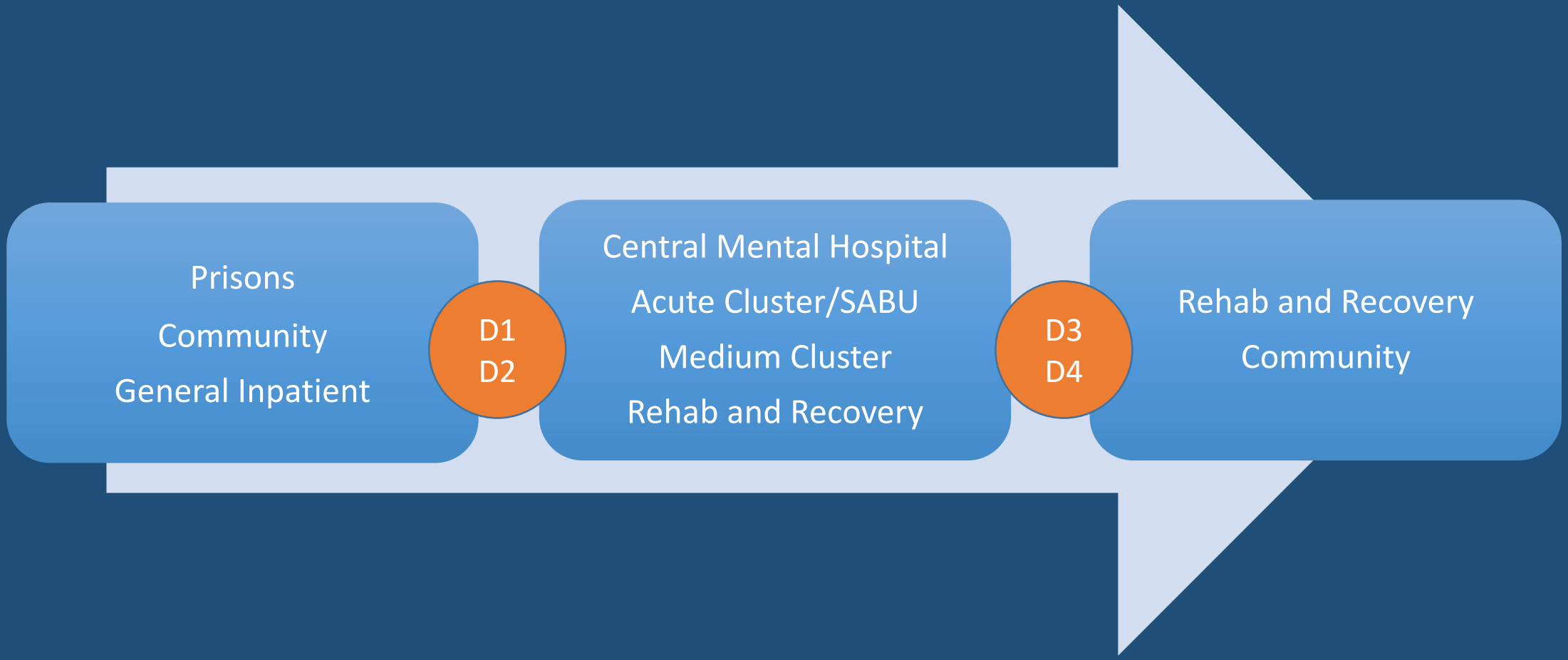
www.tara.tcd.ie/handle/2262/39131

- Suite of 4 SPJ instruments: Open access
  - D1- Triage Security
  - D2- Triage Urgency
  - D3- Programme completion
  - D4 -Forensic recovery

- D1 and D2 used to triage and prioritise persons on waiting lists for admission to forensic services (eg in prisons)

- D3 and D4 used to assess progress through and readiness to progress from forensic services

Intake and progress through care guided by the DUNDRUM Toolkit (Kennedy et al)



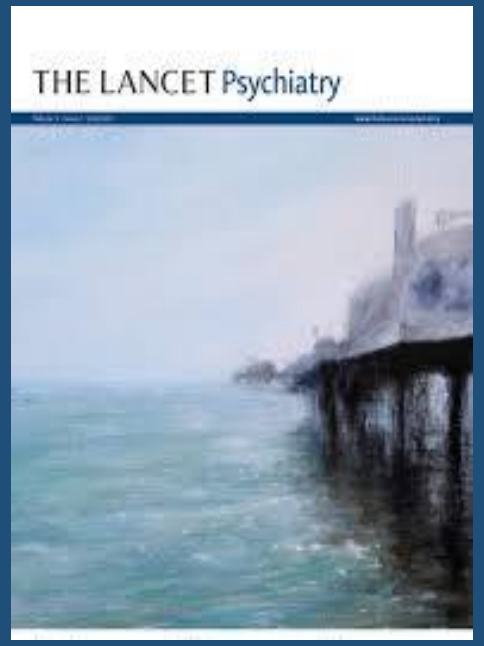
BJPsych The British Journal of Psychiatry (2012)
200, 364–373. doi: 10.1192/bjp.bp.111.096370

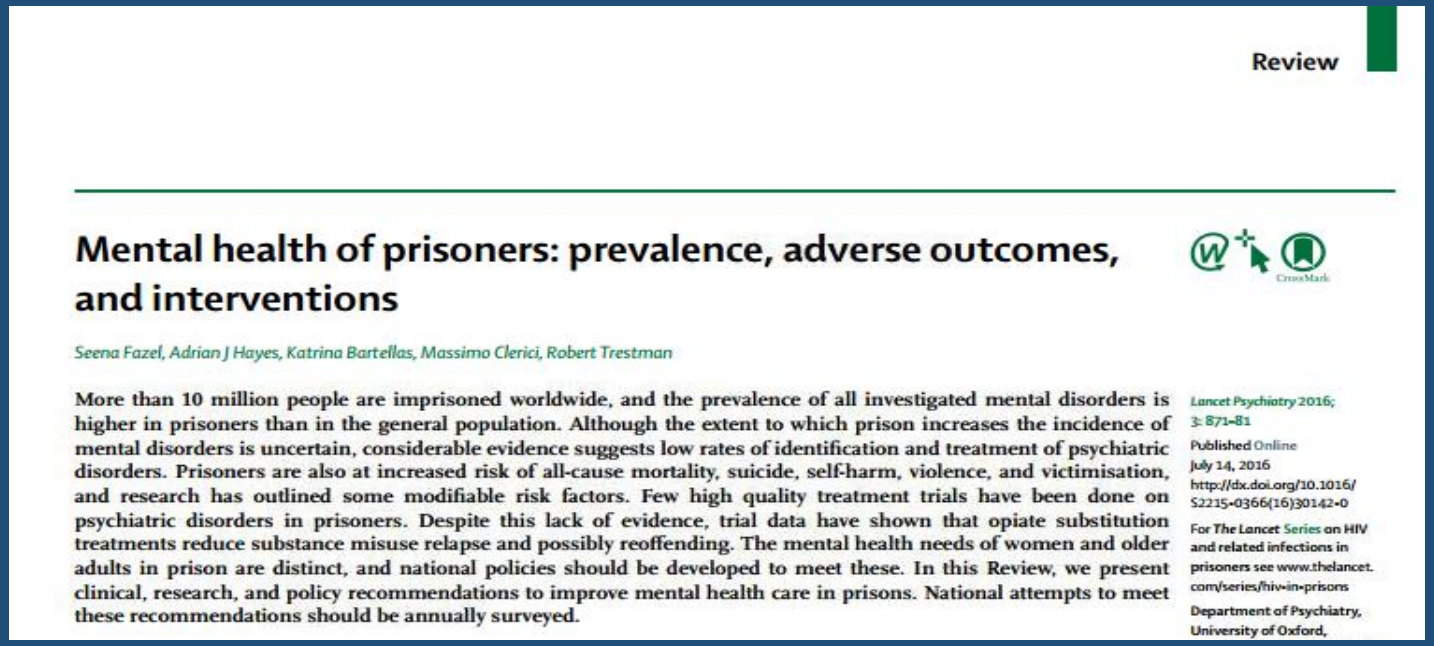
Review article

Severe mental illness in 33 588 prisoners worldwide: systematic review and meta-regression analysis

Seena Fazel and Katharina Seewald

- 109 samples from 24 countries, 1966-2010
- Pooled prevalence psychosis
  - Sentenced -95% CI 3.0-4.2%
  - Remand -95% CI 4.2-6.8%
- Stable across jurisdictions and over time





Review

Mental health of prisoners: prevalence, adverse outcomes, and interventions

Seena Fazel, Adrian J Hayes, Katrina Bartellas, Massimo Clerici, Robert Trestman

More than 10 million people are imprisoned worldwide, and the prevalence of all investigated mental disorders is higher in prisoners than in the general population. Although the extent to which prison increases the incidence of mental disorders is uncertain, considerable evidence suggests low rates of identification and treatment of psychiatric disorders. Prisoners are also at increased risk of all-cause mortality, suicide, self-harm, violence, and victimisation, and research has outlined some modifiable risk factors. Few high quality treatment trials have been done on psychiatric disorders in prisoners. Despite this lack of evidence, trial data have shown that opiate substitution treatments reduce substance misuse relapse and possibly reoffending. The mental health needs of women and older adults in prison are distinct, and national policies should be developed to meet these. In this Review, we present clinical, research, and policy recommendations to improve mental health care in prisons. National attempts to meet these recommendations should be annually surveyed.

Lancet Psychiatry 2016; 3: 871–81

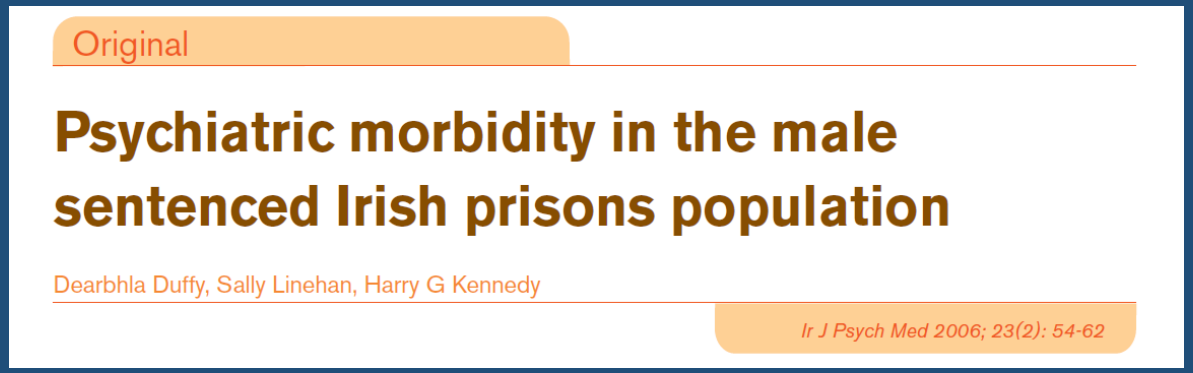
Published Online July 14, 2016 http://dx.doi.org/10.1016/S2215-0366(16)30142-0

For *The Lancet* Series on HIV and related infections in prisoners see www.thelancet.com/series/hiv-in-prisons

Department of Psychiatry, University of Oxford,

- Enough cross-sectional prevalence studies
- Need longitudinal data

Fazel S, Hayes AJ, Clerici M, Trestman R. Mental health of prisoners: prevalence, adverse outcomes, and interventions. Lancet Psychiatry Online. 2016;9:871–81.

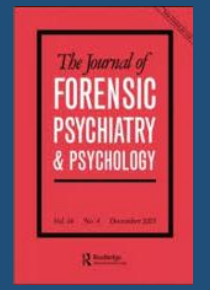


Psychosis (Cross-sectional)
0.8% active
2.7% six-month
3.8% lifetime

Psychosis (Cross-sectional)
4.5% active
7.6% six-month
12.4% lifetime

Psychosis (Longitudinal remands)
3.8% active (95% CI 2.2-6.6%)
5.1% six-month
9.3% lifetime

Pakes and Winstone (2010)



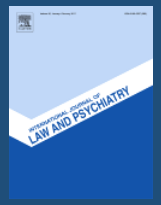
- Audited 101 prison mental health services across England
- Schemes do mental health assessments well but…..
  - lack of coherence in data collection
  - Sporadic proactive screening
  - Questionable sustainability

Pakes F, Winstone J. A site visit survey of 101 mental health liaison and diversion schemes in England.

J Forensic Psychiatry Psychol. 2010;21:873–86.

Coid and Ullrich (2011)

- Psychiatric services “fail to identify psychotic prisoners and provide after care”.
- Need for the public to be reassured that diversion is risk-appropriate



Coid J, Ullrich S. Prisoners with psychosis in England and Wales: diversion to psychiatric inpatient services? Int J Law Psychiatry. 2011;34:99–108.

RCPsych- 2015

UK Royal College of Psychiatrists (H.Stone, S. Davies)

Quality Network for Prison Mental Health Services

Standards developed to support, improve and standardise prison mental health services.

Collaborative: and supportive

Site visits by teams from 37 member prisons

Georgiou M, Souza R, Holder S, Stone H, Davies S. Standards for Prison Mental Health Services, quality network for Prison Mental Health Services [Internet]. London: 2015. Royal College Psychiatrists publication number CCQI202.

RCPsych Prison Quality Network Standards

- Domains
  - Admission & Assessment
  - Case management & Treatment
  - Referral, Discharge and Transfer
  - Patient Experience
  - Patient Safety
  - Environment
  - Workforce capacity & capability
  - Workforce training, CPD & support
  - Governance

McKenna et al, 2014

- A prison mental health in-reach model informed by assertive community treatment principles: evaluation of its impact on planning during the pre-release period, community mental health service engagement and re-offending. (CBMH, 2014)

Pillai et al, 2016

From positive screen to engagement in treatment: A preliminary study of the impact of a new model of care for prisoners with serious mental illness. BMC Psychiatry (2016) 16:9

- Described the implementation of a Prison Model of Care in 4 New Zealand prisons and benefits accruing.
- Increased referrals and triage assesssments
- Increased numbers taken onto caseloads
- Increased numbers with SMI taken onto caseloads

Mc Kenna B, Skipworth J, Pillay K 2017

Mental Health care and treatment in prisons: A new paradigm to support best Practice

World Psychiatry, 2017: 10.1002/wps.20395

- Screening/Case finding/Triage
- Hospital Transfer/Mental Health in-reach teams
- Systematic processes for sustained clinical involvement in prison and on release
- Need for interagency collaboration
- Person-centered, rather than needs of the institution
- Court-based solutions
- Transform toxic penal environments: Integration of therapy and custody

Standard Model of care in prisons served by NFMHS

Local (Prison setting)

- Multidisciplinary Teams
- Screening, Assessment, Follow-up care
- Detailed letter to local services
  - Committal/discharge/release/Prison transfer
- Weekly Multiagency meetings in each prison:
    - High-Support Units
    - Pre-release plannnig

Central (CMH)

- Weekly multidisciplinary meeting at CMH of hospital and prison teams
  - Prison and hospital staff
  - Prioritise waiting lists based on DUNDRUM Toolkit
- Monthly Prison Continuity & Aftercare meetings
  - Prison inreach teams
  - Aggregated activity and aftercare arrangements

Priorities in remand settings may differ

- Presentations complicated by recent substance misuse
- Shorter timeframes
- Concentrate on most severe mental illness
- Early Diversion
- Early comprehensive work-up prior to
  - Diversion
  - Transfer to sentenced prisons

Pierzchniak P, Purchase N, Kennedy H.
Liaison between prison, court and psychiatric services.
Health Trends. 1997;29:26–9.

- Front-load remand services to achieve these aims

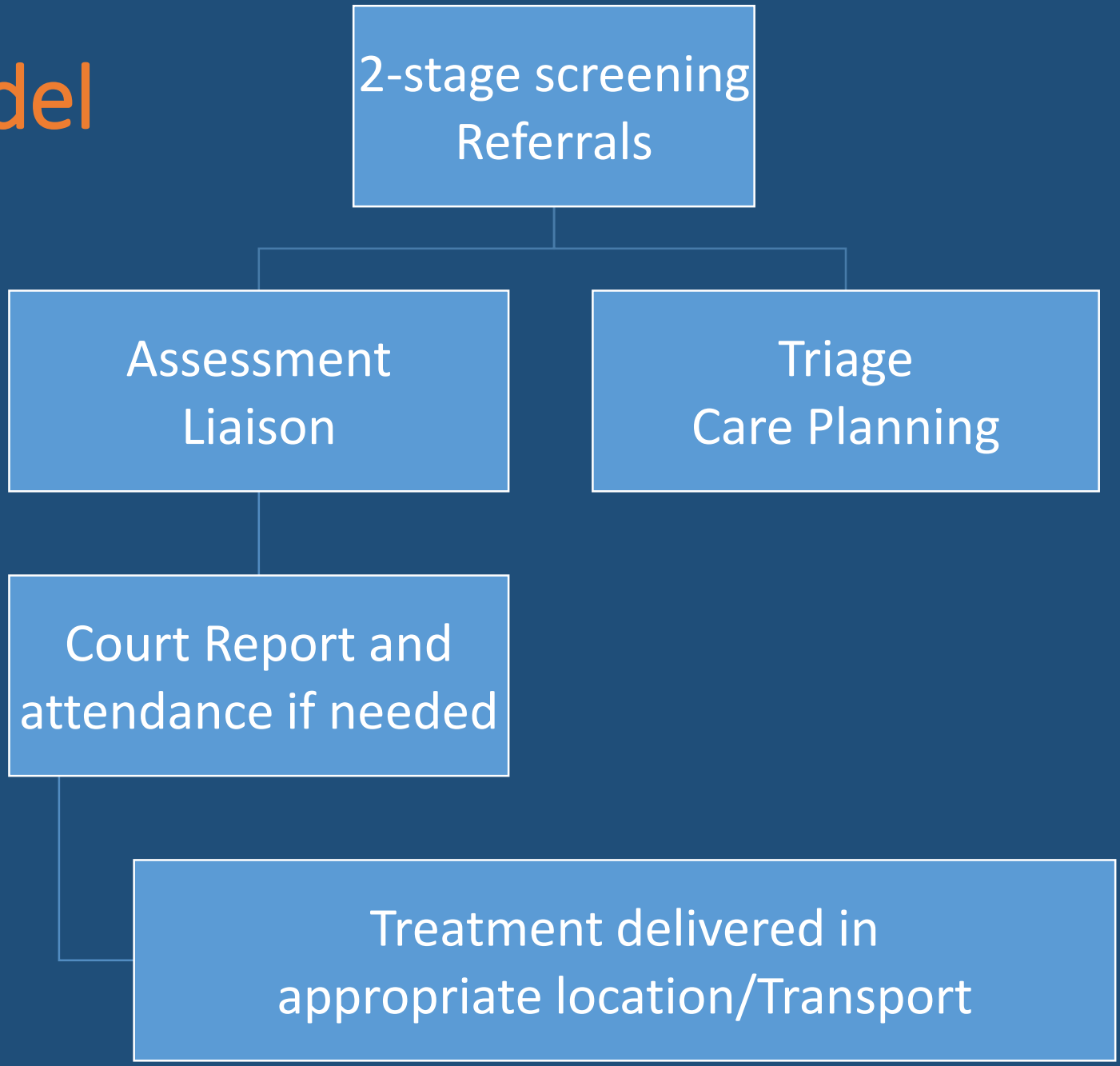
Prison Inreach & Court Liaison Service (PICLS)

- Cloverhill Remand Prison
  - 60% remands nationally
  - Focus of delivery of identification/diversion

- Multidisciplinary Team (2006)
  - Attends 5 days weekly
  - 1 Consultant Psychiatrist (now 1.5)
  - 3 Forensic Mental Health Nurses
  - 2-3 Trainee Psychiatrists
  - Housing Support Worker since 2014

PICLS

PICLS Model


2-stage screening
Referrals
Assessment
Liaison
Triage
Care Planning
Court Report and
attendance if needed
Treatment delivered in
appropriate location/Transport

2-stage Screening (Daily)

Stage 1: (Modified version Grubin Screen-7 items)

1. Previous MHS contact (outside prison)
2. Previous antipsychotic/antidepressant medication.
3. Homicide charge
4. History of deliberate self harm
5. Current thoughts DSH
6. Physical Exam
7. Observed unusual behaviour/Placement requirements

Stage 2: (MDT: Next working day)

- Review of previous prison medical records
- Referrals
- Prioritise assessments

D2 Vulnerable Wing

-Assessment
-Liaison

Triage	
CMH Admission	Major Illness/Major offence or High Risk
Community Diversion	Major Illness/Minor Offence
Prison Management	Minor or no illness

Multigency Meetings: Weekly

Attended by

- PICLS MDT
- Psychology
- Prison Nursing staff
- Prison Governor and D2 staff
- Addiction Counsellor
- Chaplain
- Others as required

•Agenda

- Patients on D2 vulnerable wing: Risks, Care Plans
- Self-harm episodes in past week
- Waiting lists

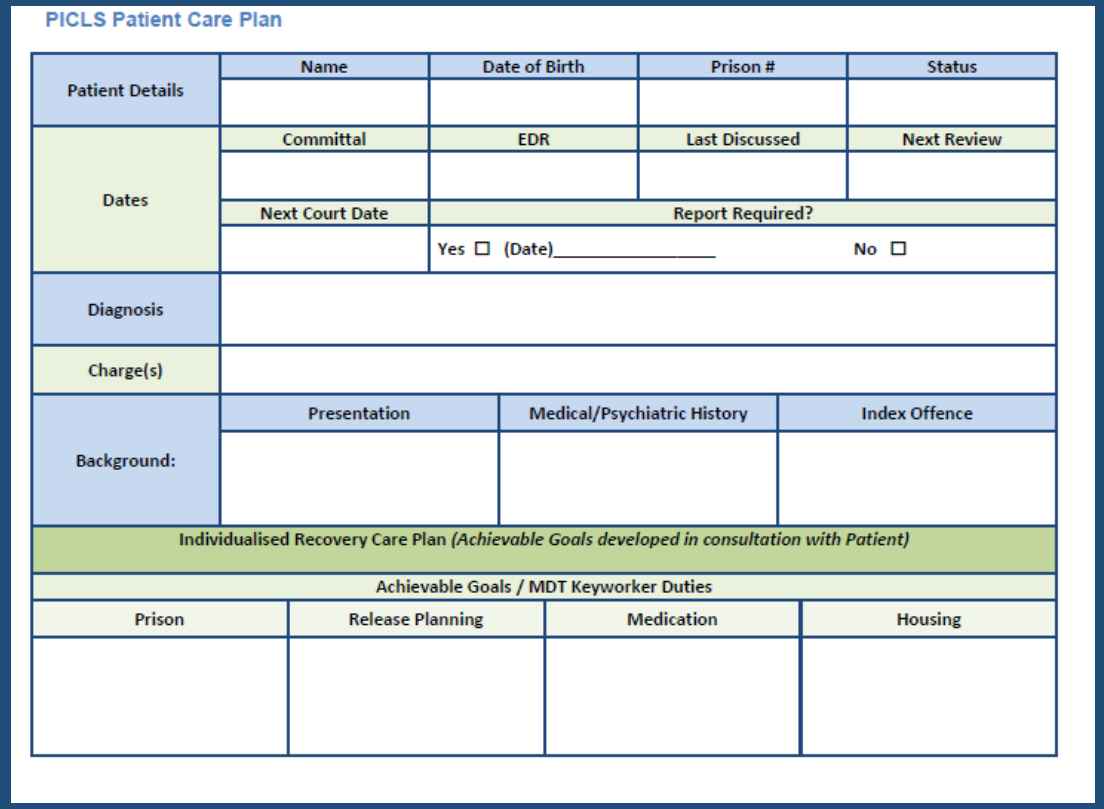
Care Planning

Fortnightly PICLS MDT meetings

Agenda

- Discuss all patients on caseload
  - Care planning
  - Contingency planning
  - Triage: Waiting list

Update “Rolling record” of discharges



PICLS Patient Care Plan

Patient Details	Name	Date of Birth	Prison #	Status
Dates	Committal	EDR	Last Discussed	Next Review
	Next Court Date	Report Required?		
		Yes ☐ (Date)_____		No ☐
Diagnosis				
Charge(s)				
Background:	Presentation	Medical/Psychiatric History	Index Offence	

Individualised Recovery Care Plan *(Achievable Goals developed in consultation with Patient)*			
Achievable Goals / MDT Keyworker Duties			
Prison	Release Planning	Medication	Housing

Diversion

- Court reports (Voluntary and on request)
- Court appearance
- Assistance in transfer to hospital for community
- Diversion:
  - Bail Acts
  - S 12 Civil Mental Act (MHA 2001)

Continued care model – practice and cross-sectional data collection

Census Date	Prison Pop	PICLS Caseload	
	Number	N	% prison population
2008	452	23	5.1%
2011	418	23	5.5%
2014	413	28	6.8%
2015	370	30	8.1%
2016	391	32	8.2%
2017	384	33	8.6%

Census Date	Prison Pop	PICLS Caseload		Current Psychotic Diagnosis	
	Number	N	% prison population	N (% of caseload)	% prison population
2008	452	23	5.1%	15 (65%)	3.3% (2.0-4.4)
2011	418	23	5.5%	12 (52%)	2.9% (1.7-5.4)
2014	413	28	6.8%	15 (54%)	3.6 (2.2-5.9)
2015	370	30	8.1%	18 (60%)	4.9 (3.1-7.6)
2016	391	32	8.2%	24 (75%)	6.1 (4.2-9.0)
2017	384	33	8.6%	24 (73%)	6.3 (4.2-9.1)

Census Date	Prison Pop	PICLS Caseload		Current Psychotic Diagnosis		Dependency Needs	
	Number	N	% prison population	N (% of caseload)	% prison population	High support wing	On waiting list
2008	452	23	5.1%	15 (65%)	3.3% (2.0-4.4)	10 (43%)	6 (26%)
2011	418	23	5.5%	12 (52%)	2.9% (1.7-5.4)	16 (70%)	3 (13%)
2014	413	28	6.8%	15 (54%)	3.6 (2.2-5.9)	18 (64%)	6 (21%)
2015	370	30	8.1%	18 (60%)	4.9 (3.1-7.6)	19 (63%)	3 (10%)
2016	391	32	8.2%	24 (75%)	6.1 (4.2-9.0)	24 (75%)	6 (19%)
2017	384	33	8.6%	24 (73%)	6.3 (4.2-9.1)	23 (70%)	9 (27%)

- Expected prevalence Ireland (Linehan et al 2005)
  - Prevalence = 4.5 % (95% CI 3.0-6.5%)

- Expected prevalence international (Fazel& Seewald 2012*)
  - Prevalence = 3.5 % (95% CI 2.8-4.2%)

Census Date	Prison Pop	PICLS Caseload		Active Psychotic Symptoms		Diversion issues	
	Number	N	% prison population	N (%Caseload)	% prison population	Homeless	Violent offence
2008	452	23	5.1%	7 (30%)	0.6% (0.8-3.2%)	7 (30%)	9 (39%)
2011	418	23	5.5%	6 (26%)	1.4 (0.7-3.1)	9 (39%)	7 (30%)
2014	413	28	6.8%	5 (18%)	1.2 (0.5-2.8)	10 (36%)	3 (11%)
2015	370	30	8.1%	9 (30%)	2.4 (1.3-4.6)	13 (43%)	12 (40%)
2016	391	32	8.2%	7 (22%)	1.8 (0.9-3.7)	17 (53%)	16 (50%)
2017	384	33	8.6%	12 (31%)	3.1 (1.8-5.4)	22 (67%)	12 (36%)

General psychiatric beds versus prison places Ireland 1963-2002(B. Kelly, 2003).

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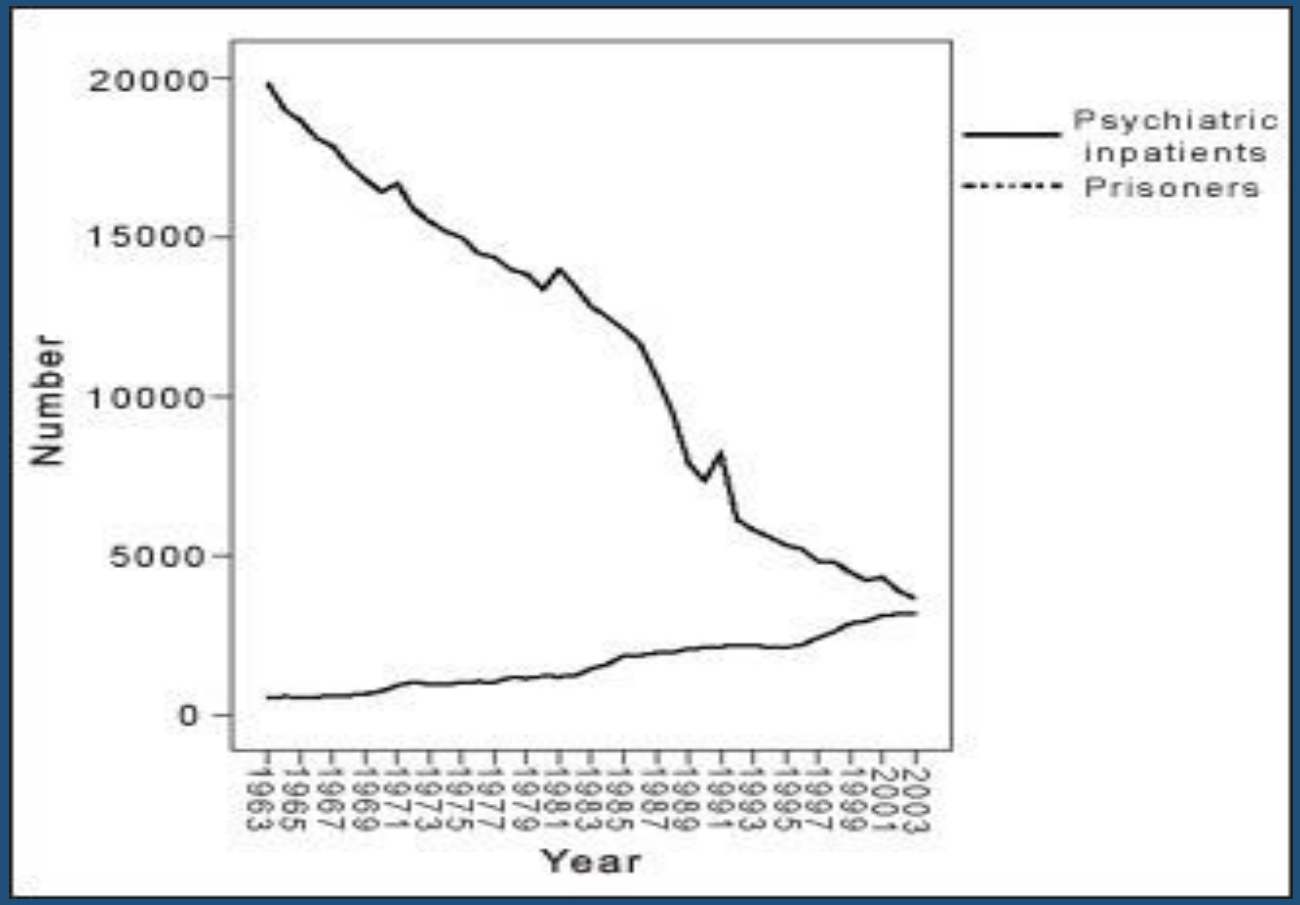

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2016	391	32	8.2%	24 (75%)	6.1 (4.2-9.0)	24 (75%)	6 (19%)
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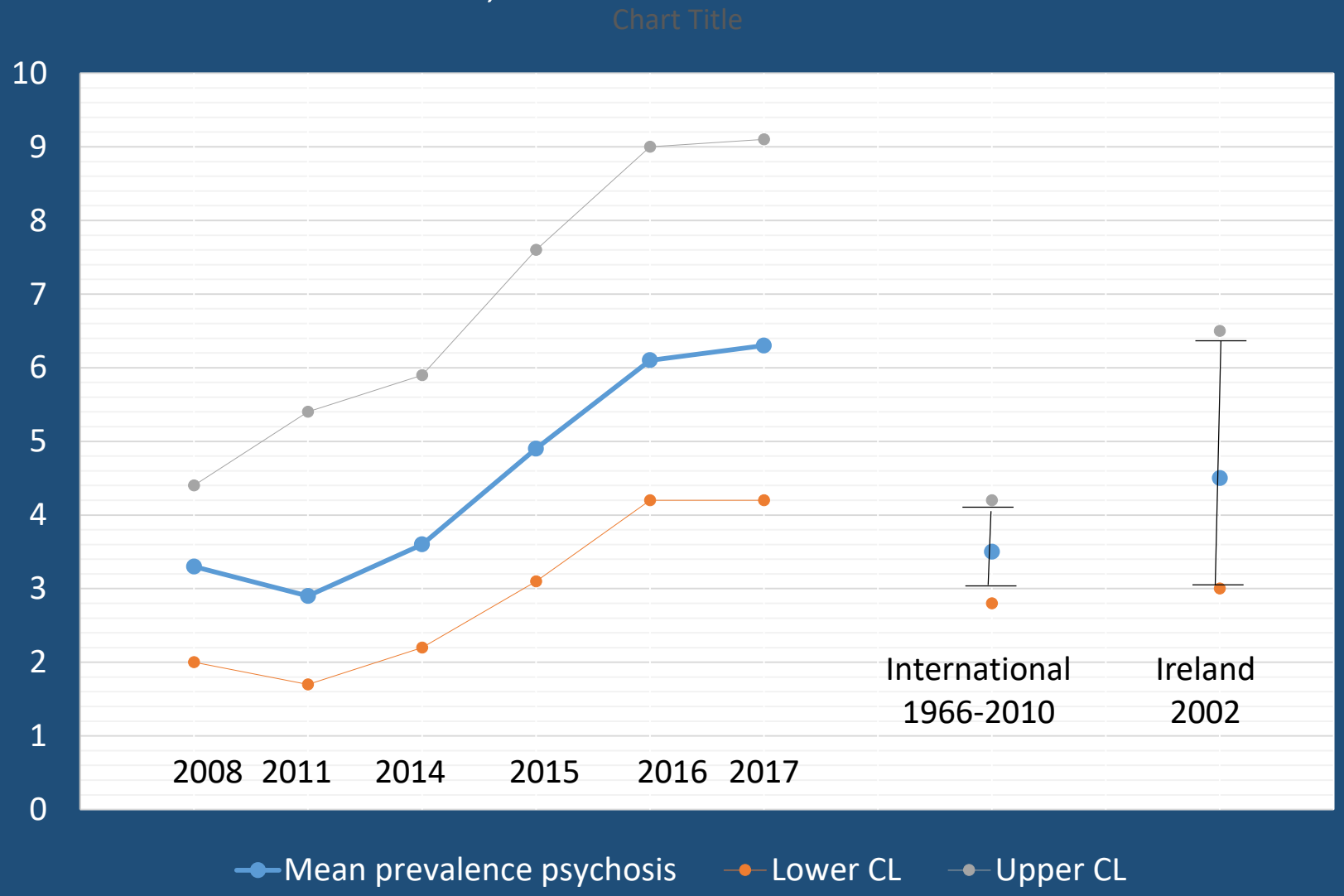
Mean prevalence psychosis: Remands

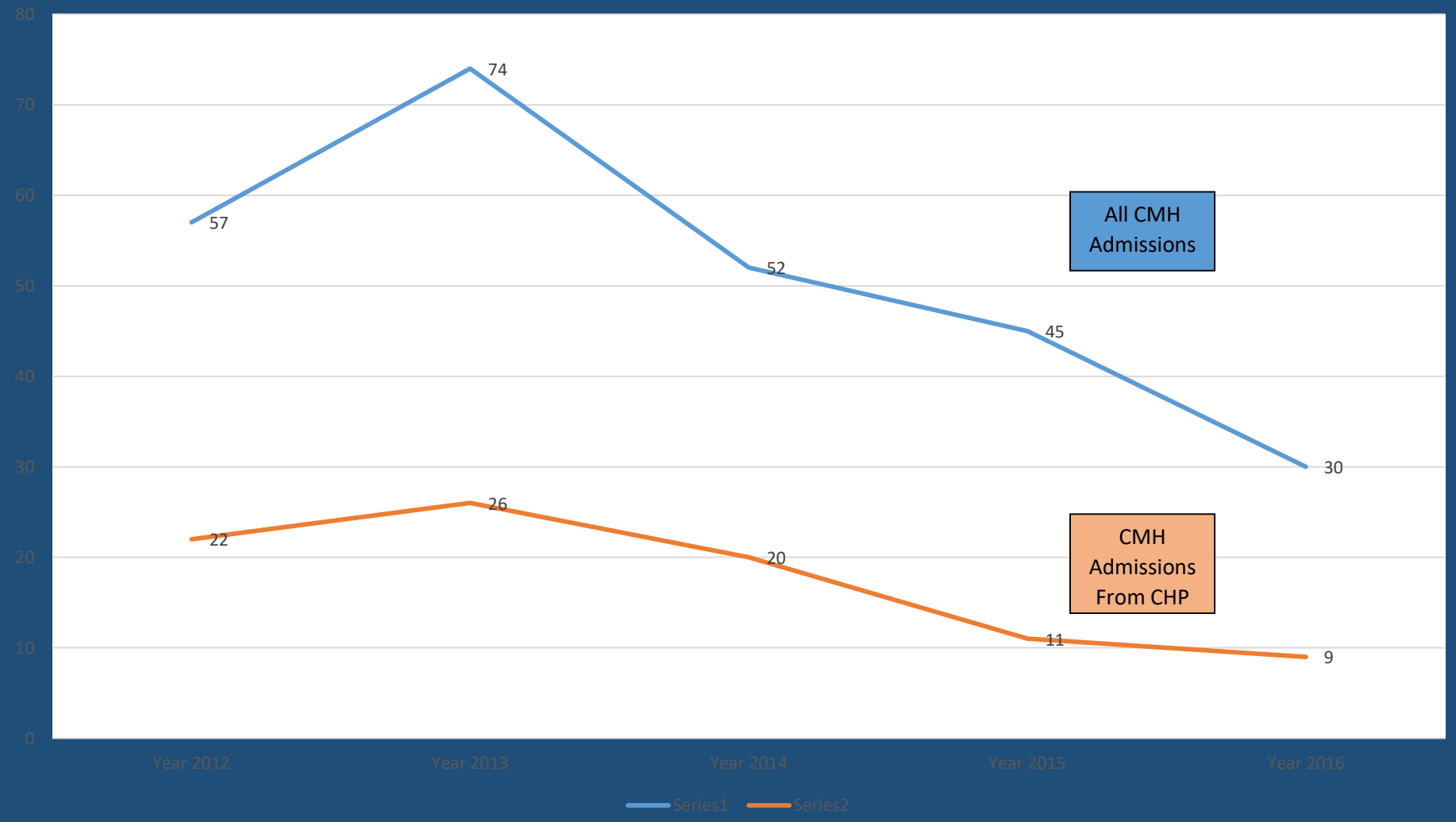
Cloverhill 2008-2017, International 1966-2010 and Ireland 2002 (with 95% CI)



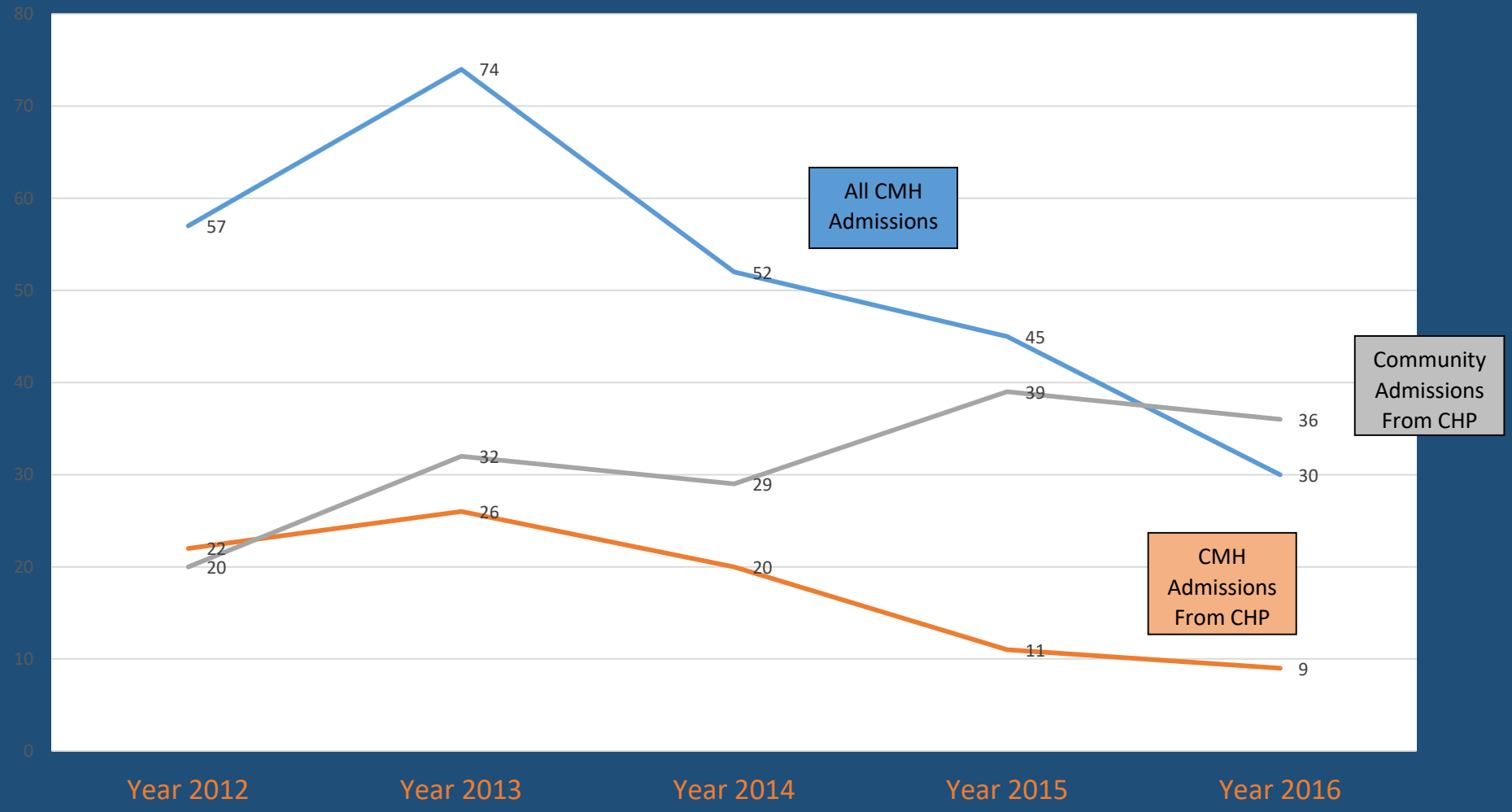
General psychiatric admissions vs prison committals: Ireland 1983-2013.

(Spearman rho 0.82 (p = 0.001)

CMH Admissions 2012-2016



Admissions to Central Mental Hospital and Community Admissions from Cloverhill 2012-2016



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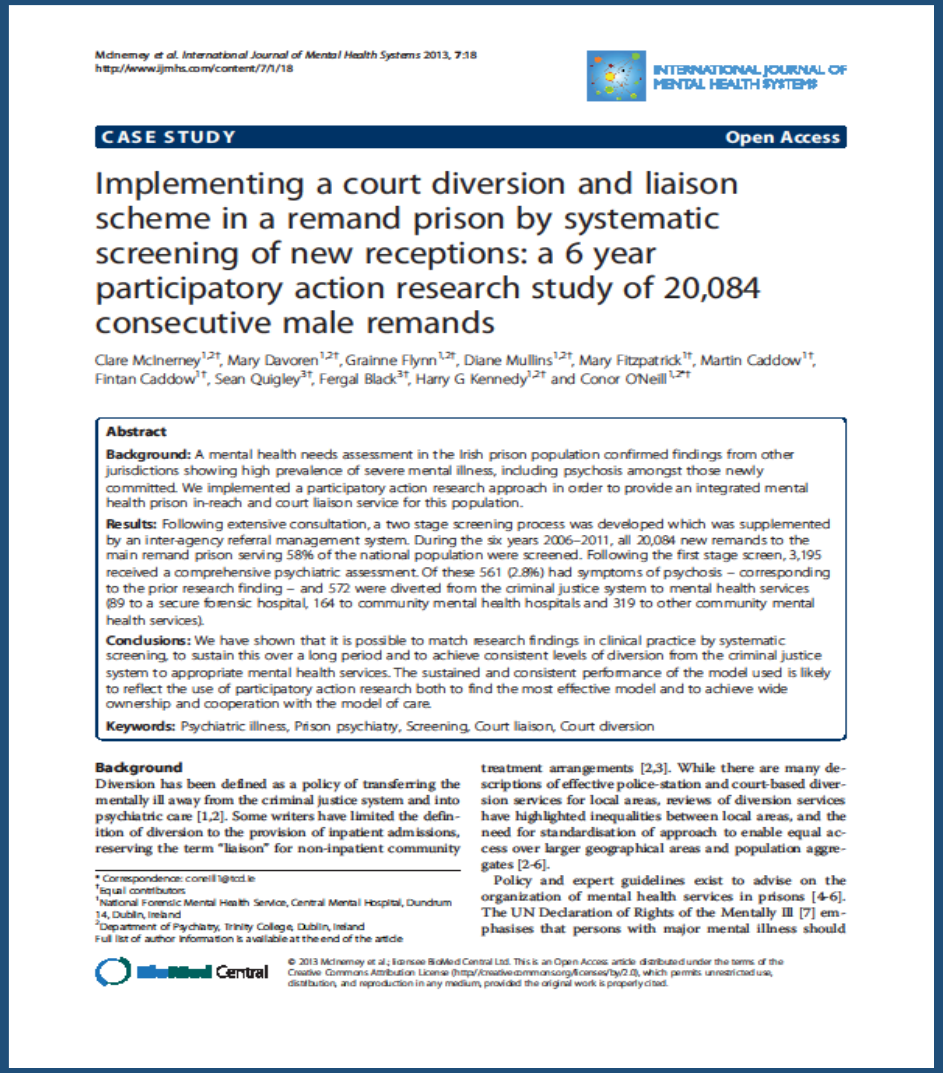
Continued care model – practice and longitudinal data collection



McInerney et al. International Journal of Mental Health Systems 2013, 7:18
http://www.ijmhs.com/content/7/1/18

INTERNATIONAL JOURNAL OF MENTAL HEALTH SYSTEMS

CASE STUDY Open Access

Implementing a court diversion and liaison scheme in a remand prison by systematic screening of new receptions: a 6 year participatory action research study of 20,084 consecutive male remands

Clare McInerney[1,2†], Mary Davoren[1,2†], Grainne Flynn[1,2†], Diane Mullins[1,2†], Mary Fitzpatrick[1†], Martin Caddow[1†], Fintan Caddow[1†], Sean Quigley[3†], Fergal Black[3†], Harry G Kennedy[1,2†] and Conor O'Neill[1,2*†]

Abstract

Background: A mental health needs assessment in the Irish prison population confirmed findings from other jurisdictions showing high prevalence of severe mental illness, including psychosis amongst those newly committed. We implemented a participatory action research approach in order to provide an integrated mental health prison in-reach and court liaison service for this population.

Results: Following extensive consultation, a two stage screening process was developed which was supplemented by an inter-agency referral management system. During the six years 2006–2011, all 20,084 new remands to the main remand prison serving 58% of the national population were screened. Following the first stage screen, 3,195 received a comprehensive psychiatric assessment. Of these 561 (2.8%) had symptoms of psychosis – corresponding to the prior research finding – and 572 were diverted from the criminal justice system to mental health services (89 to a secure forensic hospital, 164 to community mental health hospitals and 319 to other community mental health services).

Conclusions: We have shown that it is possible to match research findings in clinical practice by systematic screening, to sustain this over a long period and to achieve consistent levels of diversion from the criminal justice system to appropriate mental health services. The sustained and consistent performance of the model used is likely to reflect the use of participatory action research both to find the most effective model and to achieve wide ownership and cooperation with the model of care.

Keywords: Psychiatric illness, Prison psychiatry, Screening, Court liaison, Court diversion

Background

Diversion has been defined as a policy of transferring the mentally ill away from the criminal justice system and into psychiatric care [1,2]. Some writers have limited the definition of diversion to the provision of inpatient admissions, reserving the term "liaison" for non-inpatient community treatment arrangements [2,3]. While there are many descriptions of effective police-station and court-based diversion services for local areas, reviews of diversion services have highlighted inequalities between local areas, and the need for standardisation of approach to enable equal access over larger geographical areas and population aggregates [2-6].

Policy and expert guidelines exist to advise on the organization of mental health services in prisons [4-6]. The UN Declaration of Rights of the Mentally Ill [7] emphasises that persons with major mental illness should

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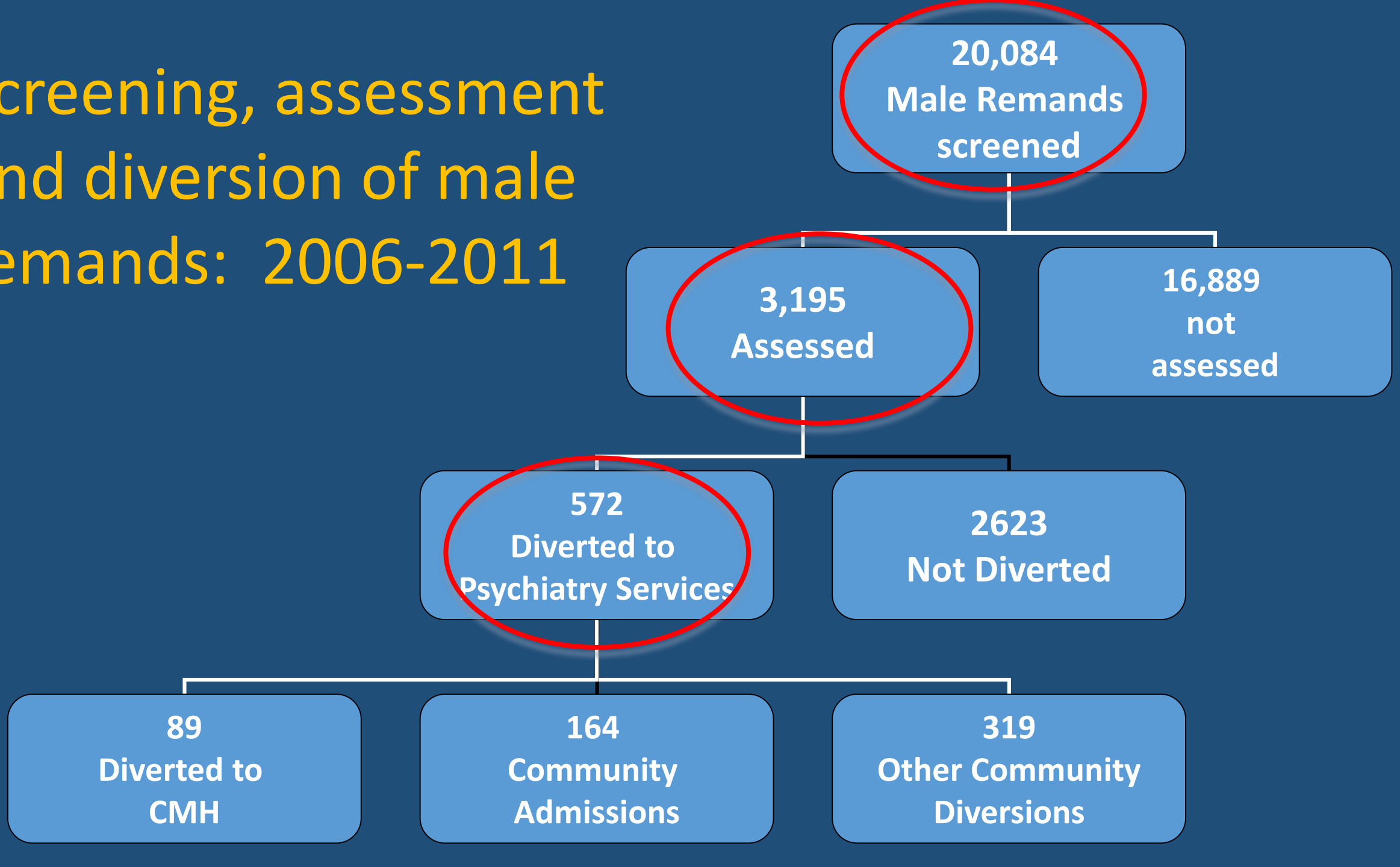
McInerney C, Davoren M, Flynn G, Mullins D, Fitzpatrick M, Caddow M, Caddow F, Quigley S, Black F, Kennedy HG, O'Neill C. Implementing a court diversion and liaison scheme in a remand prison by systematic screening of new receptions: a 6 year participatory action research study of 20,084 consecutive male remands. Int J Mental Health Syst. 2013;7:18

Screening, assessment and diversion of male remands: 2006-2011



Identification of acute psychotic symptoms in male remands 2006-2011 (expected range 2.2-6.6%)

2.3% in 2006

3.2% 2011

Absolute numbers stayed relatively constant

Year	Screened	Assessed	Psychosis (N)	Psychosis (%)	95% CI
2006	4107	306	95	(2.3%)	1.9-2.8
2007	3562	371	102	(2.9 %)	2.4-3.5
2008	3635	680	112	(3.1 %)	2.6-3.7
2009	2919	755	70	(2.4 %)	1.9-3.0
2010	3121	576	91	(2.9 %)	2.4-3.6
2011	2740	507	91	(3.2 %)	2.6-3.9
Total	**20,084**	**3,195**	**561**	**(2.8 %)**	**2.6-3.0**

PICLS 2006-2011 study:

Quality of service sustained over time

- Limitations
  - Timeframes for assessment and diversion
  - Risk-appropriateness of diversions
  - Need SPJ approach to triage
- Outcome measures refined for 2012-14:
- Is the service operating effectively?

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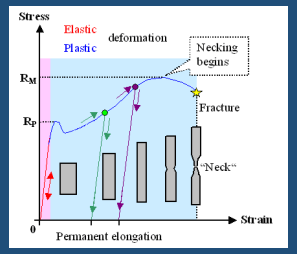
Stress testing

"Deliberately thorough testing used to determine the stability of a system to confirm intended specifications are being met and help determine modes of failure".

- Used in

•Engineering
•Financial systems
•Information technology
•Healthcare



- In prison settings, the greatest turnover is in remand settings

“Rolling Record” of activities and outcomes 2012-2014

Descriptive Variable	Format
Date of Birth	Date
Date of Committal	Date
Lifetime history of psychosis	Yes/no
Lifetime history substance misuse	Yes/no
History deliberate self harm	Yes/no
Homeless	Yes/no
History of contact with psychiatric services outside prison	Yes/no
Nationality	Code
Most serious index offence	Code
Violent index offence	Yes/no

Process Variable	Format
Date first assessed	Date
Date of Discharge	Date
Number of assessments	Count
Discharge primary ICD-10 diagnosis	ICD-code
Discharge outcome	Code
Last Dundrum 1 score before outcome	Score
Last Dundrum 1 score before outcome	Score
Self harm episodes during committal	Details/Dates
Active psychotic symptoms following committal	Yes/no

STRESS-testing
Clinical activity and outcomes for a Remand Prison Inreach and Court Liaison Service:

A three-year observational study of

6177 consecutive male remands

The University of Dublin
Trinity College

Seirbhís Phríosúin na hÉireann
IRISH PRISON SERVICE

Aims: 3 years 2012-2014

- Quantitative measures of clinical efficiency and effectiveness of remand PICLS service over three years.
- Compare rates of identification of psychosis and diversion with the previous six years.
- Service Assessment Protocol divided into 6 domains of numerically quantifiable activity and outcomes:

Domain	Aim
Screening, Identification and caseload description	• How many remands were screened? • How many were assessed and taken onto the team caseload? • Is the caseload over time described in terms of diagnosis, co-morbid conditions and offence type? • Is the caseload described in terms of other factors including homelessness, whether or not known to have a past history of self harm and whether or not known to have previous contact with psychiatric services outside prison. • Is the service identifying persons with the most severe acute symptoms, such as active psychotic symptoms at rates in keeping with expected rates based on the existing epidemiological literature?
Transfer of Care	• How many were diverted from the criminal justice system to mental health treatment settings?
Risk-appropriateness of diversions	• Were diversions to forensic inpatient settings, to general psychiatric inpatient settings and to outpatient settings justifiable in terms of risk and clinical need?
Efficiency and Productivity	• What was the delay from committal screening to first comprehensive assessment? • Were persons identified as actively psychotic seen more rapidly than persons without acute psychotic symptoms? • What was the delay from committal and first assessment to diversion? • How many cases were managed and diversions achieved per whole time equivalent employed?
Self-harm	• How many persons deliberately harmed themselves in custody over the study period?
Service Mapping	• Can the service 'map' the flow of all patients through the system, with outcomes at the point of discharge and times to those outcomes? • Can the service map subsequent outcomes for persons admitted to the 'parent' forensic psychiatric unit ?
Testing	• How did the above activity and outcome data compare with previously published findings for the same service in the six years preceding this three-year study?

Screening, Identification, caseload description

Aims:

- Are all remands screened?
- Proportion fully assessed and taken onto caseload?
  - Is caseload over time described in terms of diagnosis, co-morbid conditions and offence type?
  - Is caseload described in terms of factors including homelessness, past history of self-harm and previous contact with psychiatric services outside prison.
- Is the service identifying persons with the most severe acute symptoms, eg active psychotic symptoms at rates in keeping with expected rates?

Screening, Identification and caseload description

Method:

- All new remand episodes to Cloverhill Prison from Jan 2012 to Dec 2014 screened.
- Sentenced episodes (unless also remanded) excluded
- ICD-10 diagnoses based on clinical assessment and collateral, updated at regular multi-disciplinary care planning meetings, based on serial assessments.
- Active psychotic symptoms following committal
- Demographic, clinical and offending data based on collateral.
- Data presented where possible in binary (yes/no) format

Definitions:

- Remand episode: Committals on remand, trial, deportation and extradition.
- Psychotic symptoms: Current hallucinations, delusions and/or thought disorder).
- Violent offence: An act of physical violence on a person and included homicide, assault, robbery, aggravated burglary, contact sexual offences, false imprisonment, driving offences involving injury to others and arson where there was a possibility of injury to others.
- Homelessness: Not having regular accommodation, rough sleeping or residence in homeless shelters at the time of or identified during committal.

Screening, Identification and caseload description
Results:

- 6177 consecutive remand committals screened
  - 60.9% of male remand episodes nationally (6177/10,148)

- 1109 first assessments of 917 individuals taken onto caseload
  - 2573 repeat “face to face” assessments
  - 10,504 case note entries

Screening, Identification and caseload description

Results:

- 1109 remand episodes
  - All Male
  - Mean Age 32.8
  - 86% Irish
  - 35% Homeless
  - 23% Active Psychosis
  - 86% Substance Misuse
  - 65% History DSH
  - 35% Violent Index Offence

Table: Demographic and clinical variables for individuals at first remand and all remand episodes for individuals identified through 2-stage screening and referrals to PICLS team 2012-2014.

	Individuals on first remand episode during 2012-14 (N=917)							All remand episodes during 2012-2014 (N=1109)						
Variable	Number Yes	%	95% CI	Number No	%	95% CI	Total (100%)	Number Yes	%	95% CI	Number No	%	95% CI	Total (100%)
Irish nationality	772	84.2%	81.7-86.5	145	15.8%	13.5-18.3	917	952	85.8%	83.7-87.8	157	14.2%	12.2-16.3	1109
Homeless	308	33.6%	30.5-36.7	609	66.4%	63.3-69.5	917	388	35.0%	32.2-37.9	721	65.0%	62.1-67.8	1109
Lifetime Psychosis	252	27.5%	24.6-30.5	665	72.5%	69.5-75.4	917	339	30.6%	27.9-33.4	770	69.4%	66.6-72.1	1109
Active psychosis	192	20.9%	18.3-23.7	725	79.1%	76.3-81.7	917	251	22.6%	20.2-25.2	858	77.4%	74.8-79.8	1109
History substance misuse	781	85.2%	82.7-87.4	136	14.8%	12.6-17.3	917	954	86.0%	83.8-88.0	155	14.0%	12.0-16.2	1109
History deliberate self-harm	571	62.3%	59.0-65.4	346	37.7%	34.6-41.0	917	715	64.5%	61.6-67.3	394	35.6%	32.7-38.4	1109
Violent index offence	329	35.9%	32.8-39.1	588	64.1%	60.9-67.2	917	384	34.6%	31.8-37.5	725	65.4%		1109

Screening, Identification and caseload description

Results: Most serious Index Offence

Primary index offence	Number	%
Homicide	82	7.4
Assault	128	11.5
Robbery/aggravated burglary	96	8.7
Sexual offences	57	5.1
Arson	12	1.1
False imprisonment	5	0.5
Harassment/stalking/threats	30	2.7
Possession of weapons	44	4.0
Burglary, theft, handle stolen property, tax and fraud offences	271	24.4
Breach of barring, protection or safety order	72	6.5
Public order offences, criminal damage, trespass	190	17.1
Driving offences	35	3.2
Drugs offences	45	4.1
Extradition requests/international arrest warrants	15	1.4
Immigration offences	18	1.6
Failure to appear/contempt of court/other non-violent offences	9	0.8
Total	**1109**	**100.0**

Screening, Identification and caseload description

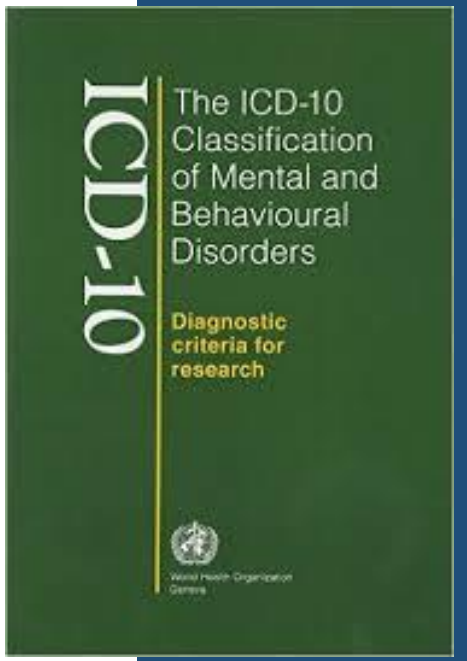
Results:

Primary ICD-10 Diagnosis

- 1109 remands
  - 23% Schizophreniform
  - 39% Substance misuse
  - 18% Personality Disorder
  - 14% other
  - 6% No illness

Table: Primary ICD-10 Diagnoses at discharge/transfer/diversion for new committals receiving psychiatric assessment following post-remand screening (All remand episodes, N=1109).

	Primary ICD-10 Diagnosis	Number	%
F00-09	Organic disorders	17	1.5%
F10-19	Substance Abuse Disorders	426	38.4%
F20-29	Schizophreniform Disorders	255	23.0%
F30-39	Mood Disorders	117	10.6%
F40-59	Neurotic Disorders	7	0.6%
F60-69	Personality disorders	200	18.0%
F70-79	Mental Retardation	14	1.3%
F80-98	Developmental/Childhood Disorders	9	0.8%
	No Mental Illness/Adjustment Reaction	64	5.8%
	Total	**1109**	**100.0**



Screening, Identification and caseload description
Results:

- 4.1% remand committal episodes actively psychotic
  - 251/6177 (95% C.I. 3.6-4.6)

Domain	Aim
Screening, Identification and caseload description	• How many remands were screened? • How many were assessed and taken onto the team caseload? • Is the caseload over time described in terms of diagnosis, co-morbid conditions and offence type? • Is the caseload described in terms of other factors including homelessness, whether or not known to have a past history of self harm and whether or not known to have previous contact with psychiatric services outside prison. • Is the service identifying persons with the most severe acute symptoms, such as active psychotic symptoms at rates in keeping with expected rates based on the existing epidemiological literature?
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Testing	• How did the above activity and outcome data compare with previously published findings for the same service in the six years preceding this three-year study?

Transfer of care:

Aims

- How many were diverted from the criminal justice system to mental health treatment settings?

Method

- Final disposal outcomes were recorded for all cases.
- Diversion defined as transfer from CJS to mental health care.

Transfer of care:

Results

Outcome	N	%
Did not require psychiatric assessment	5068	82.0%
Discharge to prison GP/Addiction services	546	8.8%
Transfer to in-reach psychiatry service in other Prison	202	3.3%
Community outpatient diversion	208	3.4%
General admission	81	1.3%
Forensic Admission	60	1.0%
Overseas prison transfer	6	0.1%
Remained on PICLS caseload as at 9th April 2015	6	0.1%
Total	6177	100%

Risk-appropriateness of diversions

Aims:

- Were diversions to forensic inpatient settings, to general psychiatric inpatient settings and to outpatient settings justifiable in terms of risk and clinical need?

Method

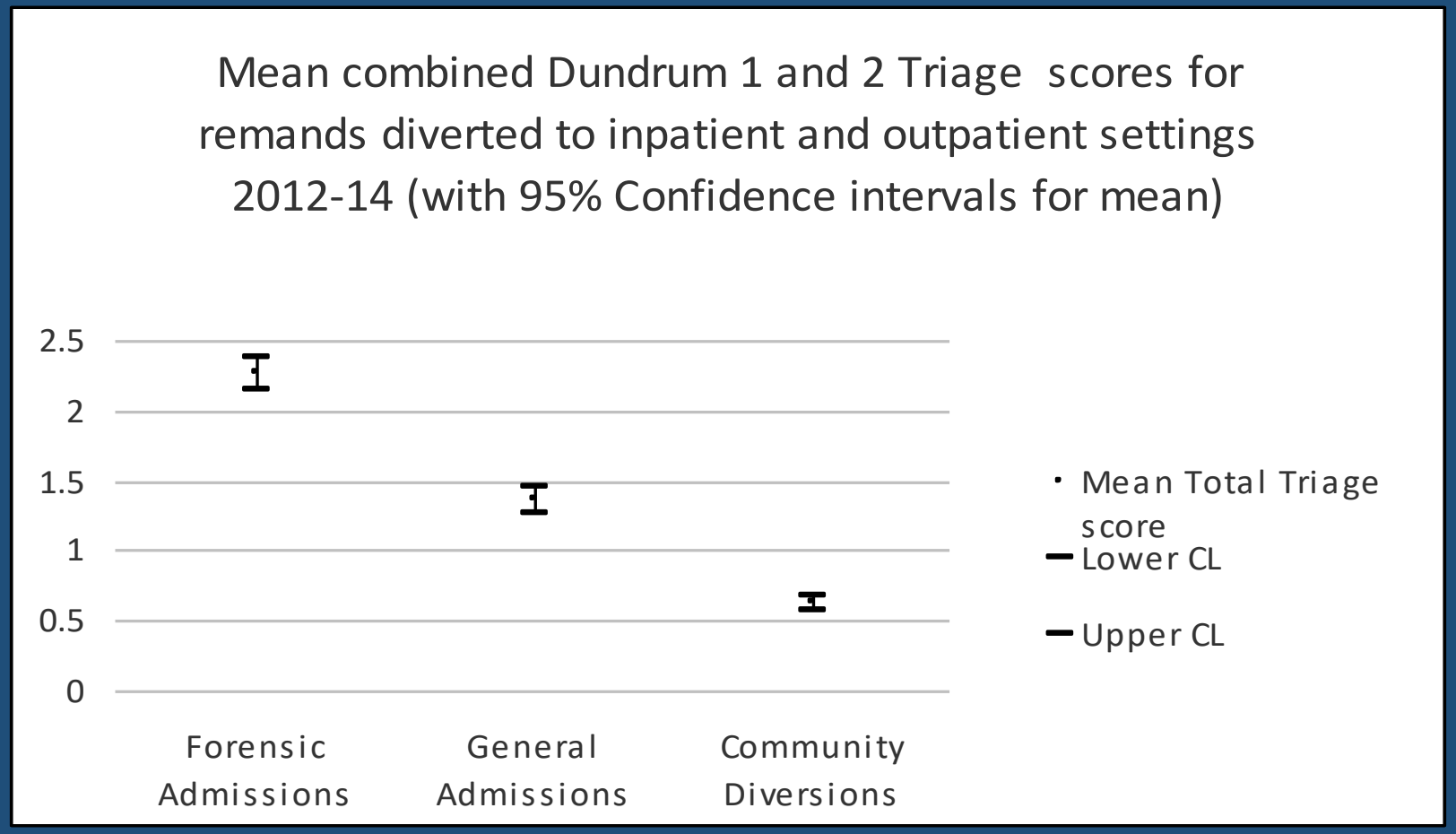
Risk-appropriateness of diversions

Method

- DUNDRUM Toolkit Mean scores calculated on a weekly basis for persons placed on waiting lists.
  - Score as measured in the week prior to the outcome for
  - DUNDRUM 1- Security Requirements
  - DUNDRUM 2- Urgency of treatment needs

Risk-appropriateness of diversions

Results:



Risk-appropriateness of diversions

Results:

		D-1 triage security score		D-2 triage urgency score		Total (D-1 + D-2) triage score	
	N	Mean (SD)	95 % CI	Mean (SD)	95 % CI	Mean (SD)	95 % (CI)
Forensic admission	60	2.39 (0.07)	2.25–2.53	2.01 (0.07)	1.89 –2.14	2.26 (0.06)	2.15–2.37
General admission	81	1.44 (0.05)	1.35–1.53	1.19 (0.06)	1.07–1.31	1.36 (0.05)	1.26–1.45
Outpatient diversions	208	0.77 (0.03)	0.71–0.82	0.26 (0.02)	0.23–0.30	0.59 (0.02)	0.55–0.63

Efficiency & Productivity

Aims:

- Delay in days from committal screening to assessment?
- Psychotic patients prioritised?
- Delay to healthcare diversion?

Method

- Medians were calculated to moderate the distorting effect of outliers, although means were also calculated.

Efficiency & Productivity

Results:

- Median delay from screening to assessment:
  - Psychotic patients: 2 days
  - Non-psychotic: 3 days

- Median delay to healthcare diversion
  - Forensic admission: Median 19.5 days from committal (17 from 1st assessment)
  - General Admission: 15 days (13)
  - OPD: 15.5 days (11)

- Cases and Diversions per WTE?

Self-Harm

Aims

- How many persons deliberately harmed themselves in custody over the study period?

Method:

- Episodes of self-harm recorded in the prison healthcare medical records system by prison staff.
- Cross-checked on a weekly basis at weekly interagency meeting, with bimonthly review at interagency suicide prevention meetings.

Self-Harm

Results:

- 70 incidents by 48 individuals (range 1-5 episodes)
- 0.8% remand episodes followed by one or more episode DSH
- 0.9% of individuals harmed themselves on one or more occasions

Service Mapping

Aims:

- Can the service 'map' the flow of all patients through the system, with discharge outcomes and times to those outcomes?
- Can the service map subsequent outcomes for persons admitted to the 'parent' forensic psychiatric unit ?

Method:

- All remands were mapped to show final transfer of care arrangements and the time to assessment and diversion.
- We also recorded subsequent placement arrangements for persons admitted to the Central Mental Hospital to 9th April 2015.

Mapping: Counting in, counting out

Surgical Safety Checklist

World Health Organization | Patient Safety

Before induction of anaesthesia
(with at least nurse and anaesthetist)

Has the patient confirmed his/her identity, site, procedure, and consent?
- ☐ Yes

Is the site marked?
- ☐ Yes
- ☐ Not applicable

Is the anaesthesia machine and medication check complete?
- ☐ Yes

Is the pulse oximeter on the patient and functioning?
- ☐ Yes

Does the patient have a:

Known allergy?
- ☐ No
- ☐ Yes

Difficult airway or aspiration risk?
- ☐ No
- ☐ Yes, and equipment/assistance available

Risk of >500ml blood loss (7ml/kg in children)?
- ☐ No
- ☐ Yes, and two IVs/central access and fluids planned

Before skin incision
(with nurse, anaesthetist and surgeon)

- ☐ **Confirm all team members have introduced themselves by name and role.**
- ☐ **Confirm the patient's name, procedure, and where the incision will be made.**

Has antibiotic prophylaxis been given within the last 60 minutes?
- ☐ Yes
- ☐ Not applicable

Anticipated Critical Events

To Surgeon:
- ☐ What are the critical or non-routine steps?
- ☐ How long will the case take?
- ☐ What is the anticipated blood loss?

To Anaesthetist:
- ☐ Are there any patient-specific concerns?

To Nursing Team:
- ☐ Has sterility (including indicator results) been confirmed?
- ☐ Are there equipment issues or any concerns?

Is essential imaging displayed?
- ☐ Yes
- ☐ Not applicable

Before patient leaves operating room
(with nurse, anaesthetist and surgeon)

Nurse Verbally Confirms:
- ☐ The name of the procedure
- ☐ Completion of instrument, sponge and needle counts
- ☐ Specimen labelling (read specimen labels aloud, including patient name)
- ☐ Whether there are any equipment problems to be addressed

To Surgeon, Anaesthetist and Nurse:
- ☐ What are the key concerns for recovery and management of this patient?

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Revised 1 / 2009

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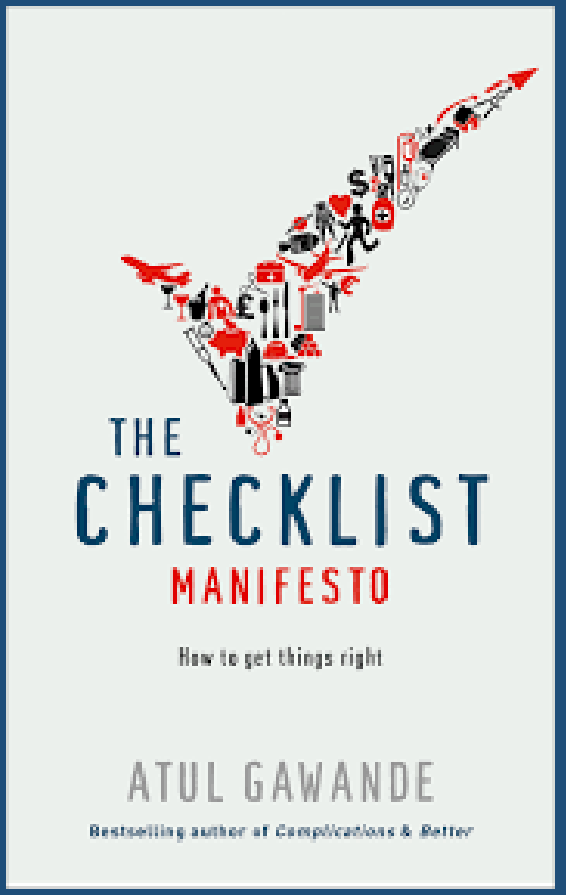
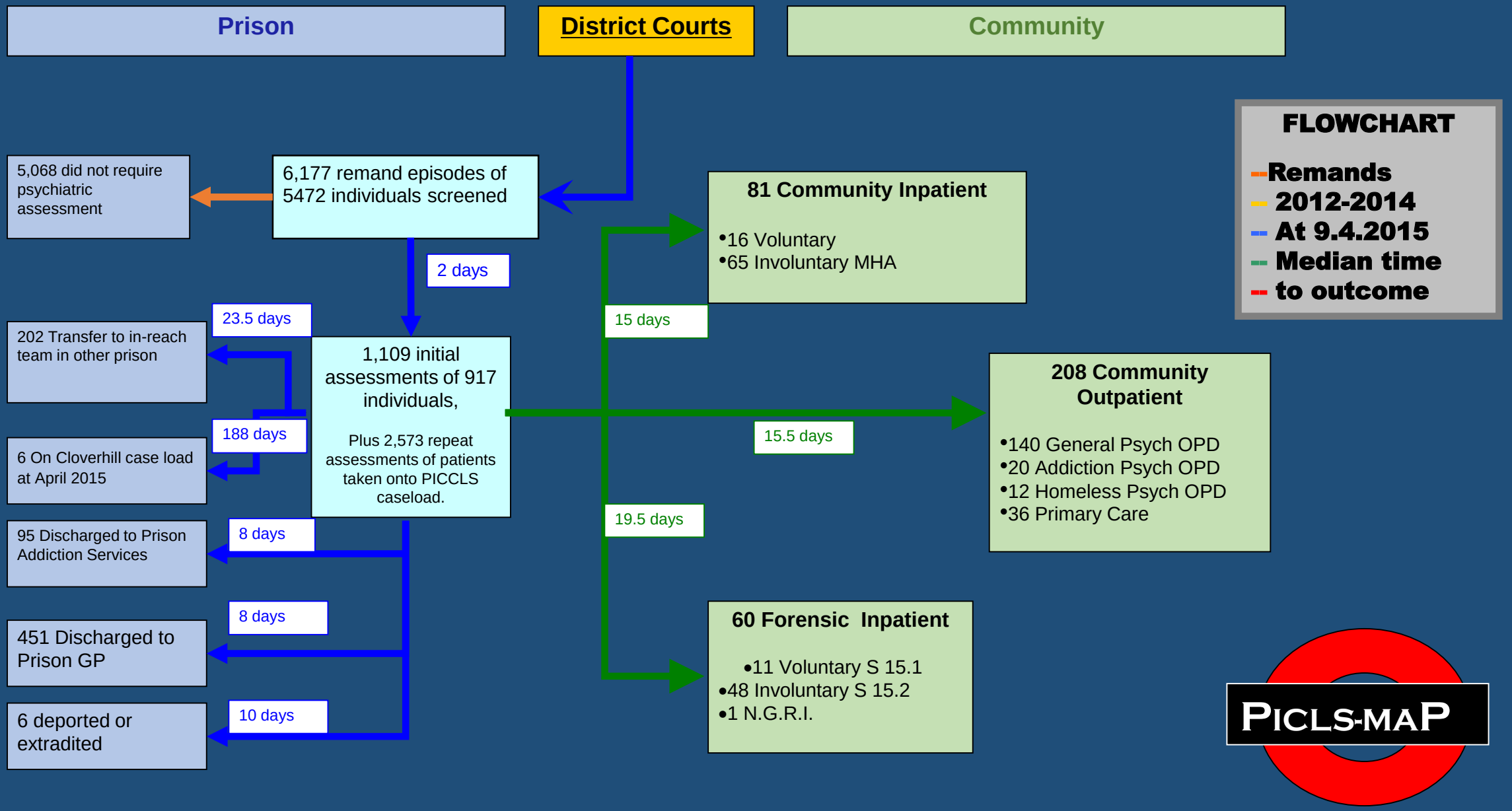
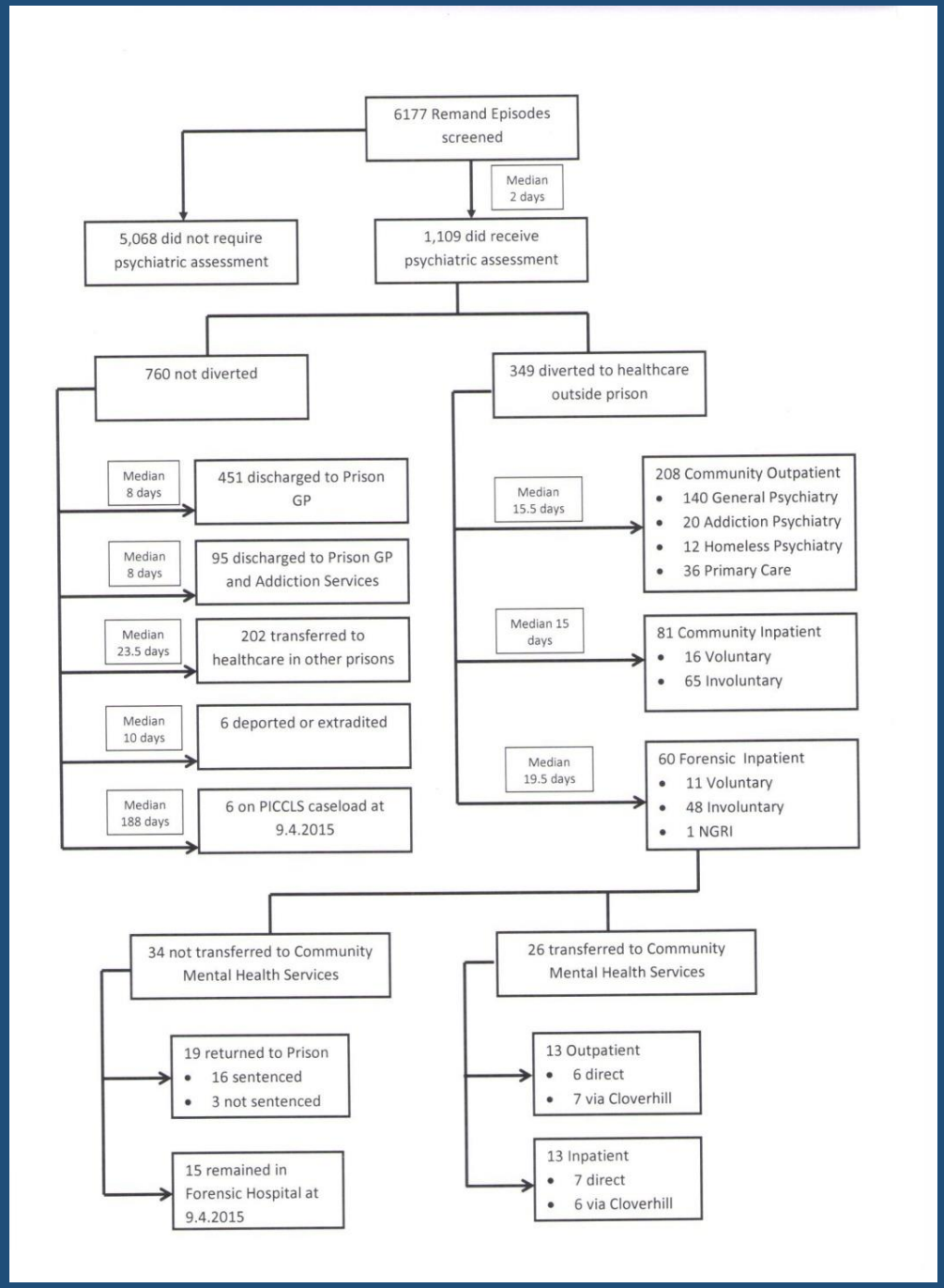



Prison
District Courts
Community
FLOWCHART
Remands
2012-2014
At 9.4.2015
Median time
to outcome
5,068 did not require psychiatric assessment
6,177 remand episodes of 5472 individuals screened
2 days
81 Community Inpatient
•16 Voluntary
•65 Involuntary MHA
15 days
23.5 days
202 Transfer to in-reach team in other prison
1,109 initial assessments of 917 individuals,
Plus 2,573 repeat assessments of patients taken onto PICCLS caseload.
188 days
6 On Cloverhill case load at April 2015
15.5 days
208 Community Outpatient
•140 General Psych OPD
•20 Addiction Psych OPD
•12 Homeless Psych OPD
•36 Primary Care
19.5 days
8 days
95 Discharged to Prison Addiction Services
8 days
451 Discharged to Prison GP
10 days
6 deported or extradited
60 Forensic Inpatient
•11 Voluntary S 15.1
•48 Involuntary S 15.2
•1 N.G.R.I.
PICLS-MAP


6177 Remand Episodes screened
Median 2 days
5,068 did not require psychiatric assessment
1,109 did receive psychiatric assessment
760 not diverted
349 diverted to healthcare outside prison
Median 8 days
451 discharged to Prison GP
Median 8 days
95 discharged to Prison GP and Addiction Services
Median 23.5 days
202 transferred to healthcare in other prisons
Median 10 days
6 deported or extradited
Median 188 days
6 on PICCLS caseload at 9.4.2015
Median 15.5 days
208 Community Outpatient
140 General Psychiatry
20 Addiction Psychiatry
12 Homeless Psychiatry
36 Primary Care
Median 15 days
81 Community Inpatient
16 Voluntary
65 Involuntary
Median 19.5 days
60 Forensic Inpatient
11 Voluntary
48 Involuntary
1 NGRI
34 not transferred to Community Mental Health Services
26 transferred to Community Mental Health Services
19 returned to Prison
16 sentenced
3 not sentenced
15 remained in Forensic Hospital at 9.4.2015
13 Outpatient
6 direct
7 via Cloverhill
13 Inpatient
7 direct
6 via Cloverhill

Testing:

Aims:

- How did the above activity and outcome data compare with previously published findings for the same service in the six years preceding this three-year study?

•Method:

- Compare with findings from 2006-2011 study
- Identification of Psychosis and diversion
- NB Case-mix similar other than increased homelessness

McInerney et al. International Journal of Mental Health Systems 2013, 7:18
http://www.ijmhs.com/content/7/1/18

INTERNATIONAL JOURNAL OF MENTAL HEALTH SYSTEMS

CASE STUDY Open Access

Implementing a court diversion and liaison scheme in a remand prison by systematic screening of new receptions: a 6 year participatory action research study of 20,084 consecutive male remands

Clare McInerney[1,2*], Mary Davoren[1,3†], Grainne Flynn[1,3†], Diane Mullins[1,2†], Mary Fitzpatrick[3†], Martin Caddow[1†], Fintan Caddow[1†], Sean Quigley[4†], Fergal Black[4†], Harry G Kennedy[2,3†] and Conor O'Neill[1,2†]

Abstract

Background: A mental health needs assessment in the Irish prison population confirmed findings from other jurisdictions showing high prevalence of severe mental illness, including psychosis amongst those newly committed. We implemented a participatory action research approach in order to provide an integrated mental health prison in-reach and court liaison service for this population.

Results: Following extensive consultation, a two stage screening process was developed which was supplemented by an inter-agency referral management system. During the six years 2006–2011, all 20,084 new remands to the main remand prison serving 58% of the national population were screened. Following the first stage screen, 3,195 received a comprehensive psychiatric assessment. Of these 561 (2.8%) had symptoms of psychosis – corresponding to the prior research finding – and 572 were diverted from the criminal justice system to mental health services (89 to a secure forensic hospital, 104 to community mental health hospitals and 313 to other community mental health services).

Conclusions: We have shown that it is possible to match research findings in clinical practice by systematic screening, to sustain this over a long period and to achieve consistent levels of diversion from the criminal justice system to appropriate mental health services.The sustained and consistent performance of the model used is likely to reflect the use of participatory action research both to find the most effective model and to achieve wide ownership and cooperation with the model of care.

Keywords: Psychiatric illness, Prison psychiatry, Screening, Court liaison, Court diversion

Background

Diversion has been defined as a policy of transferring the mentally ill away from the criminal justice system and into psychiatric care [1,2]. Some writers have limited the definition of diversion to the provision of inpatient admissions, reserving the term "liaison" for non-inpatient community treatment arrangements [2,3]. While there are many descriptions of effective police-station and court-based diversion services for local areas, reviews of diversion services have highlighted inequalities between local areas, and the need for standardisation of approach to enable equal access over larger geographical areas and population aggregates [2-6].

Policy and expert guidelines exist to advise on the organization of mental health services in prisons [4-6]. The UN Declaration of Rights of the Mentally Ill [7] emphasises that persons with major mental illness should

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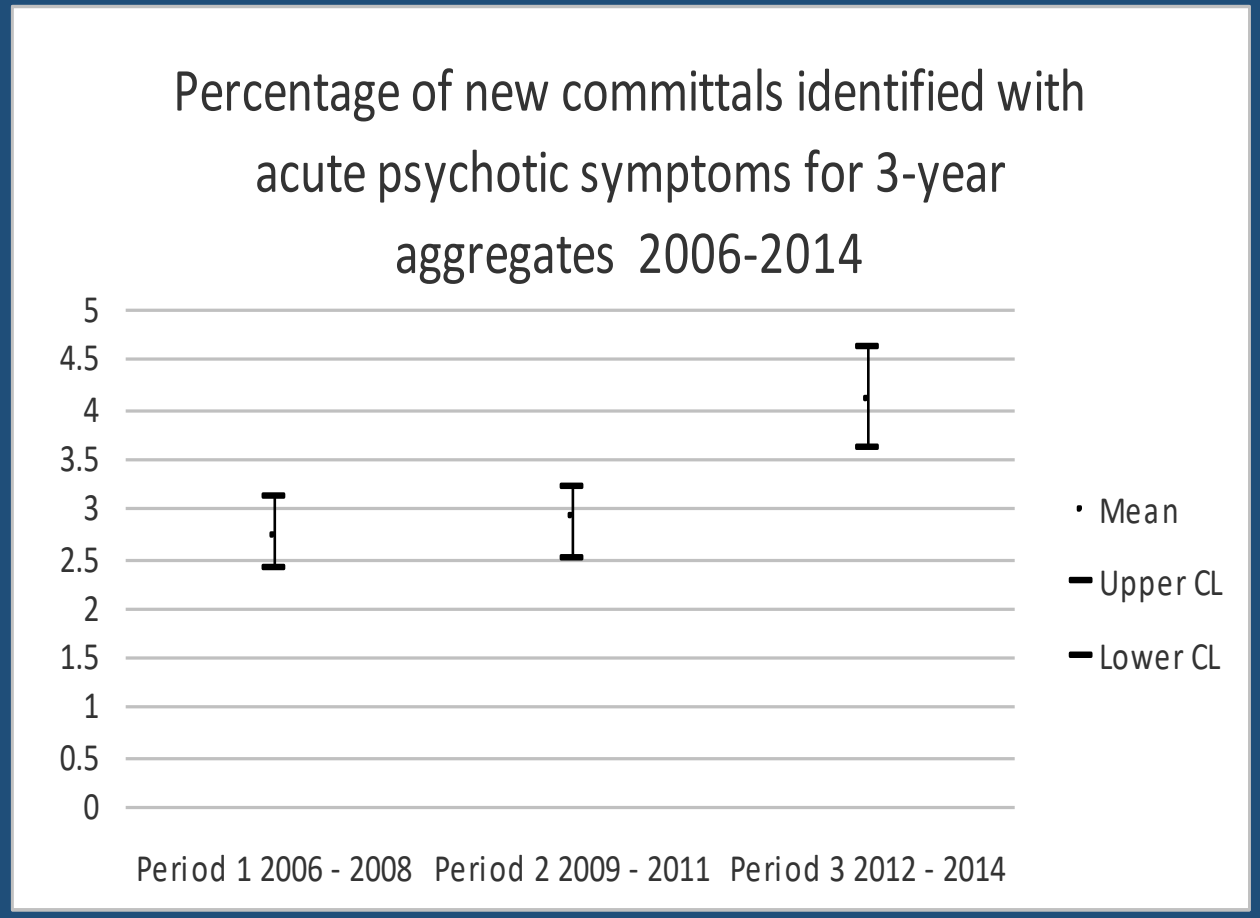
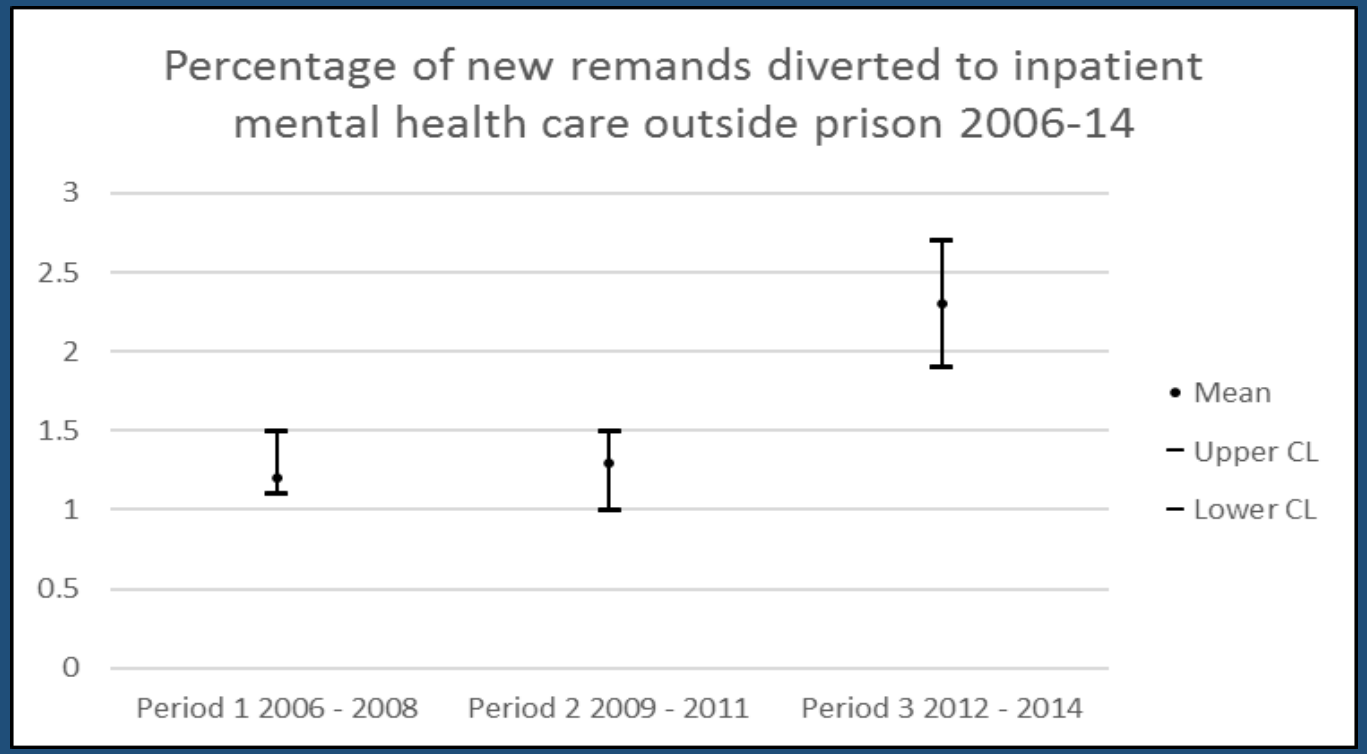
Testing: Identification of Psychosis: 3-year aggregates 2006-2014



Testing:

Inpatient diversions: 3-year aggregates 2006-2014



Domain	Aim
Screening, Identification and caseload description	• How many remands were screened? • How many were assessed and taken onto the team caseload? • Is the caseload over time described in terms of diagnosis, co-morbid conditions and offence type? • Is the caseload described in terms of other factors including homelessness, whether or not known to have a past history of self harm and whether or not known to have previous contact with psychiatric services outside prison. • Is the service identifying persons with the most severe acute symptoms, such as active psychotic symptoms at rates in keeping with expected rates based on the existing epidemiological literature?
Transfer of Care	• How many were diverted from the criminal justice system to mental health treatment settings?
Risk-appropriateness of diversions	• Were diversions to forensic inpatient settings, to general psychiatric inpatient settings and to outpatient settings justifiable in terms of risk and clinical need?
Efficiency and Productivity	• What was the delay from committal screening to first comprehensive assessment? • Were persons identified as actively psychotic seen more rapidly than persons without acute psychotic symptoms? • What was the delay from committal and first assessment to diversion? • How many cases were managed and diversions achieved per whole time equivalent employed?
Self-harm	• How many persons deliberately harmed themselves in custody over the study period?
Service Mapping	• Can the service 'map' the flow of all patients through the system, with outcomes at the point of discharge and times to those outcomes? • Can the service map subsequent outcomes for persons admitted to the 'parent' forensic psychiatric unit ?
Testing	• How did the above activity and outcome data compare with previously published findings for the same service in the six years preceding this three-year study?

Discussion

Simple longitudinal data collected as part of normal governance can assist service evaluation.

DUNDRUM Toolkit can help in making informed and defensible decisions.

Stress on a service may be indicated by evidence of:

- Missing cases
- Delayed assessment/diversion
- Increasing risk-inappropriate diversions based on DUNDRUM Toolkit scores.
- Inability to record /analyse activity data

Limitations

- Not full national sample
- Male sample only
- Remands only
- Ireland only
- Quantitative Outcomes, not Qualitative Standards

2016

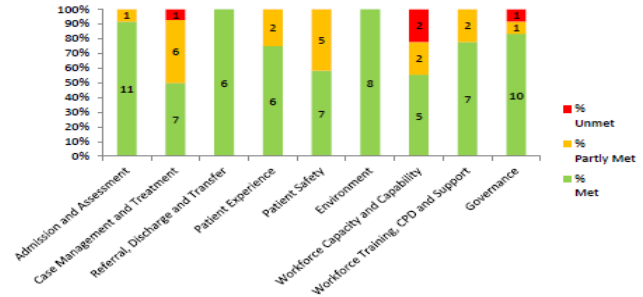
74%

Summary

Cloverhill Remand Prison fully met 74 per cent of standards for prison mental health services. The service excelled in such areas as Referral, Discharge and Transfer and Environment; however Workforce Capacity and Capability and Case Management and Treatment were recognised as in need for improvement over the coming year.

The following graph summarises the key findings from the review process.

Figure 1: Percentage and number of criteria met in each standard area



2017

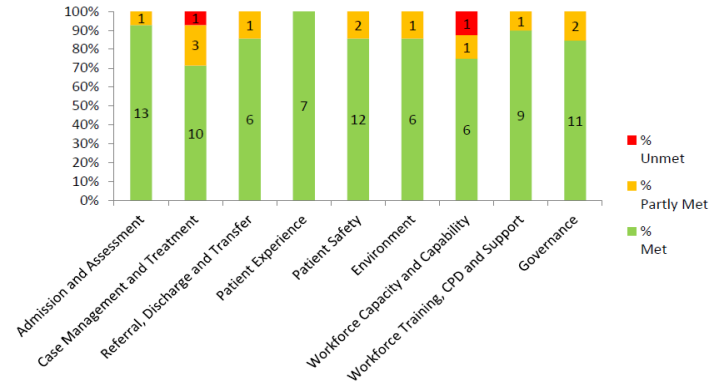
85%

Summary

Cloverhill Remand Prison fully met 85 per cent of standards for prison mental health services.

The following graph summarises the key findings from the review process.

Figure 1: Percentage and number of criteria met in each standard area



2016

Overview

On average, member services fully complied with 71% of standards.

Figure 1 offers a breakdown of how each member service performed in the pilot year, in order of strongest compliance. It illustrates the percentage of met, partly met and unmet criteria per service. The range of met criteria achieved spans from 59 per cent to 81 per cent. The final bar on the graph (TNS – total number of services) provides the average compliance across the 18 services.

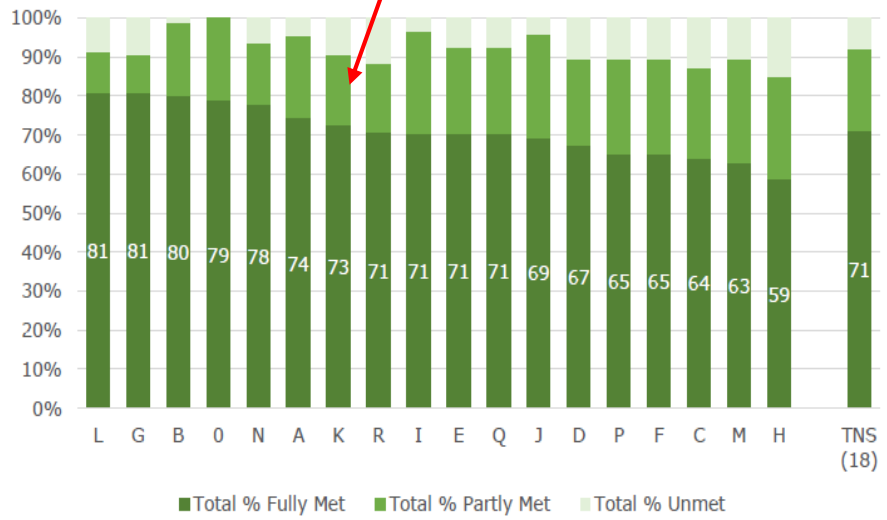


Figure 1: Percentage of Met Criteria by Service

2017

Overview

On average, member services fully complied with 70% of standards.

Figure 1 offers a breakdown of how each member service performed against the standards, in order of strongest compliance. It illustrates the percentage of met, partly met and not met criteria per service. The range of met criteria achieved spans from 90% to 39%. The average compliance across the 38 services is 70%, as indicated by the final bar marked 'TNS' (total number of services) on the graph.

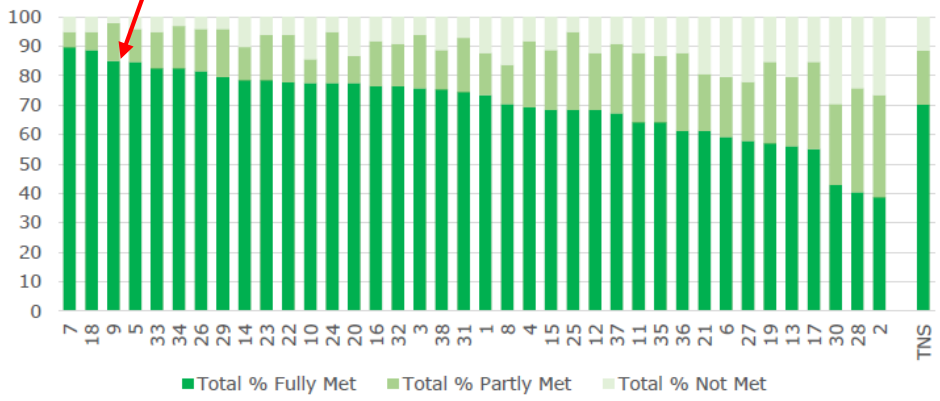


Figure 1: Percentage of Met Criteria by Service

Figure 2 displays the average percentage of met criteria per section. Member services scored most highly in the areas of Referral, Discharge and Transfer, Patient Experience and Patient Safety. The areas in most need of improvement are Case Management and Treatment and Environment.

Future

- International Collaborations
  - UK Royal College Quality Network for Prison Mental Health Services
  - I-CEISMIC (Simpson et al)
    - Standardised model of care
    - Standardised performance measurement
  - Remands: Longitudinal data, full-time staffing
  - Sentenced: Serial c/s data, maybe sessional staffing

Thank you!