





## Adult ADHD and Autism Pathways in Barnsley

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## Organisation of Mental Health



Neurodevelopmental Disorders

(ADHD, ASD)

(4+1=5%)





Mental Illness
(Schizophrenia,
Depression, Anxiety)
10%

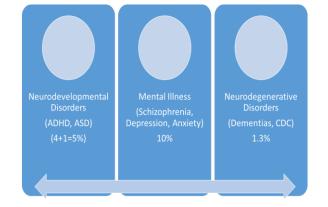


Neurodegenerative Disorders (Dementias, CDC)

1.3%

IQ

**AGE** 











#### Referral form

Service for adults with ADHD

Date of referral										
Referrer detail	s									
Name										
Address										
Telephone number										
Designation										
Details of pers	on ref	erre	rd							
NHS number										
RIO number										
Gender	Male				fe	male				
Date of birth										
Current address										
Telephone numbers	s Home					Mobil	le			
Has the person con- referral?	sented to	> thi	s	YES			NO			
Does the person ha information in a for					for re	quire	YES		NO	
If YES, what are the	person'	s ne	eds?							
Does the person wa (e.g. partner, paren							YES		NO	





#### Referral form

Service for adults with autism

Date of referral	
Referrer details	i
Name	
Address	
Telephone number	
Designation	
Details of person	on referred
Name	
NHS number	
RIO number	
Gender	
Date of birth	
Current address	
Home telephone	
Mobile telephone	
GP details	
Name	
Surgery address	
Telephone number	

## **ADHD REFERRALS**

- There is National Guidance for Service Capacity (NICE CG72)
- Standard benchmark rate for referral to a Service for the diagnosis and management of attention deficit hyperactivity disorder (ADHD) in adults is 25 per 100,000 population per year.
- For Barnsley (230,000) it will be in total 57 cases per year (including Transition from children services)

#### **ACTUAL REFERRALS NUMBERS FOR OOA, no Transition)**

March 2012-end March 2013	March 2013- end March 2014	April 2014 - end March 2015
32	32	35

## **Autism REFERRALS**

 No national guidance for planned Service Capacity

#### **ACTUAL REFERRAL NUMBERS**

2013-2014	46
2014-2015	44
2014-2015	50

## Impact of Untreated and Undertreated ADHD

## Health Care System

50% ↑ in bike accidents¹
33% ↑ in ER visits²
2–4X more motor
vehicle crashes³-5

**Patient** 

## **Family**

3–5X ↑ Parental Divorce or Separation<sup>11,12</sup> 2–4X ↑ Sibling Fights<sup>13</sup>

#### **School & Occupation**

46% Expelled⁵ 35% Drop Out⁵ Lower Occupational Status<sup>7</sup> Society
Substance Use Disorders:

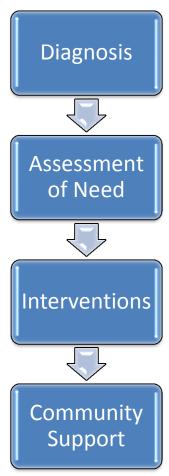
2X Risk<sup>8</sup>
Earlier Onset<sup>9</sup>
Less Likely to Quit
in Adulthood<sup>10</sup>

### **Employer**

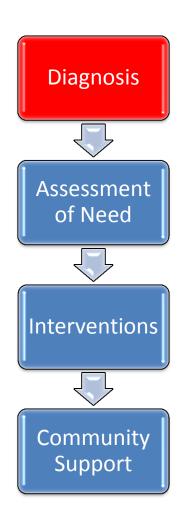
↑ Parental ↑Absenteeism¹⁴ and ↓ Productivity¹⁴

- 1. DiScala et al. 1998
- 2. Liebson et al. 2001
- NHTSA, 1997.
- 4-5. Barkley et al. 1993; 1996.
- 6. Barkley, et al. 1990.
- 7. Manuzza et al. 1997.
- Biederman et al. 1997.
- 9. Pomerleau et al. 1995
- Wilens et al. 1995.
- 11. Barkley et al. 1991.
- 12. Brown & Pacini, 1989.
- Mash & Johnston, 1983.
- 14. Noe et al, 1999

# Pathway Structure for any Healthcare condition (mental health context)

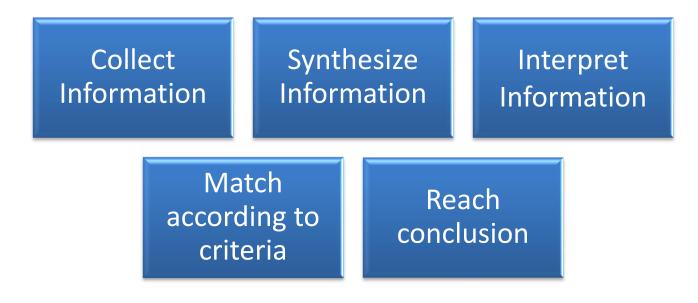


# Pathway Structure for any Healthcare condition



## **Diagnosis**

It is a **process** i.e. a series of actions or steps taken in order to achieve a particular end.



# Pathway Structure for any Healthcare condition



## Recovery Stars- focus on Recovery

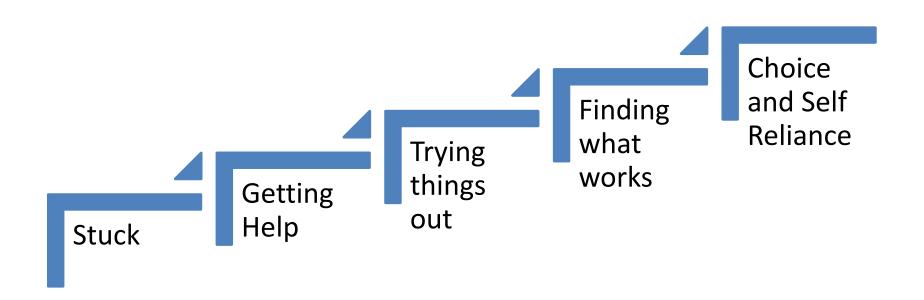
#### **SPECTRUM STAR- AUTISM**

- Physical health
- Living skills & self care
- Well-being & self-esteem
- Sensory differences
- Communication
- Social skills
- Relationships
- Socially responsible behaviour
- Time and activities

#### **ADHD STAR- ADHD**

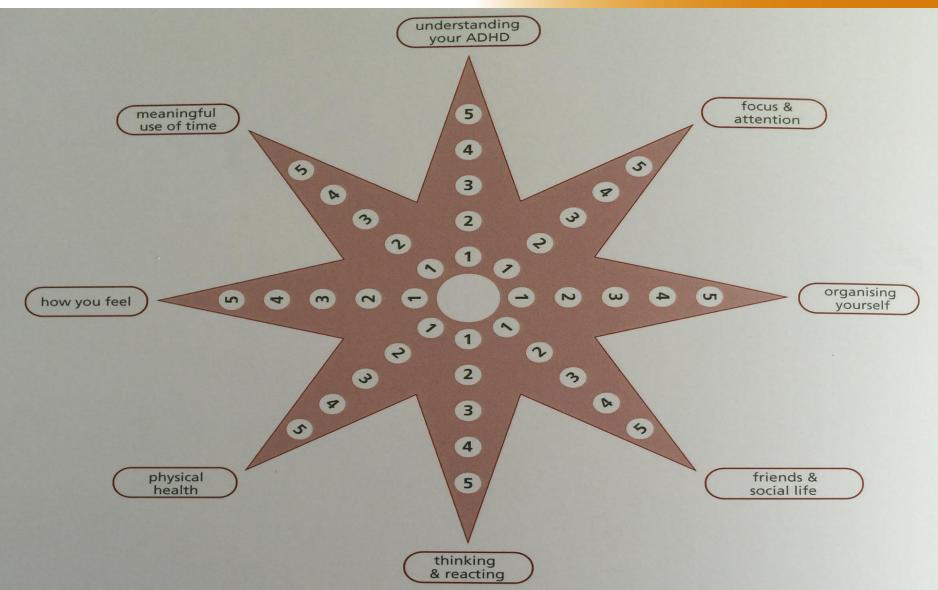
- Understanding your ADHD
- 2. Physical Health
- 3. Focus and attention
- 4. Organising yourself
- 5. Friend and Social life
- 6. Thinking and Reacting
- 7. How you Feel
- 8. Meaningful use of time

## Ladder of Change in Adult ADHD

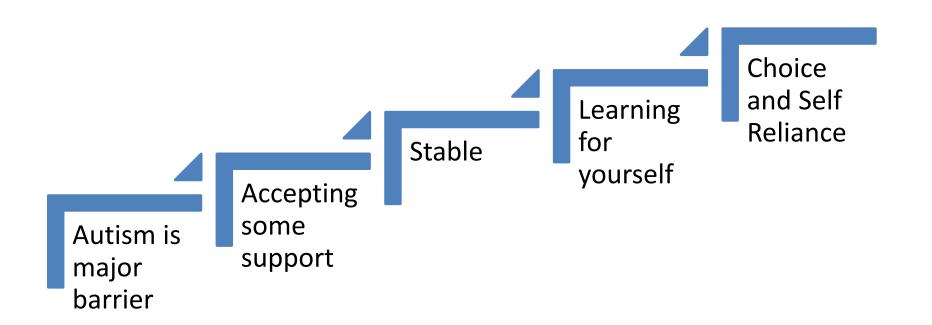


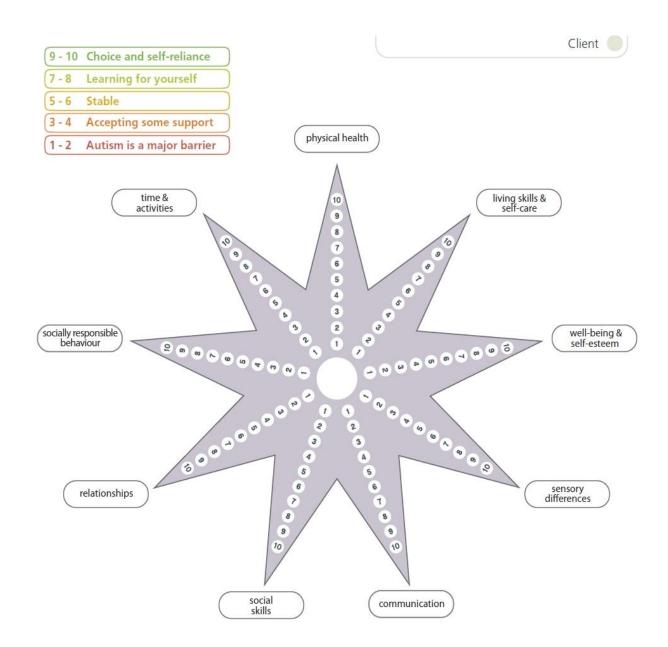


## A tried and tested tool for supporting and measuring change



## Ladder of Change in Autism





# Pathway Structure for any Healthcare condition



## ADHD and Comorbidity Lead to Adult Functional Impairments

#### Symptom Domains

- Hyperactivity
- Inattention
- Impulsivity



Lead to

#### Psychiatric Comorbidities

- Anxiety and mood disorders
- Disruptive behavior disorders (conduct disorder and oppositional defiant disorder)

#### Adult Functional Impairments

#### Self

- Low self-esteem
- Accidents and injuries
- Smoking
- Substance abuse

#### School / Work

- Academic difficulties, underachievement.
- Employment difficulties

#### Home

- Family stress
- Parenting difficulties

#### Social

- Poor peer relationships
- Socialization deficit
- Relationship difficulties
- Legal troubles

## **Health Interventions**

Relate to Disorder (ADHD or Autism)

Relate to Comorbidity

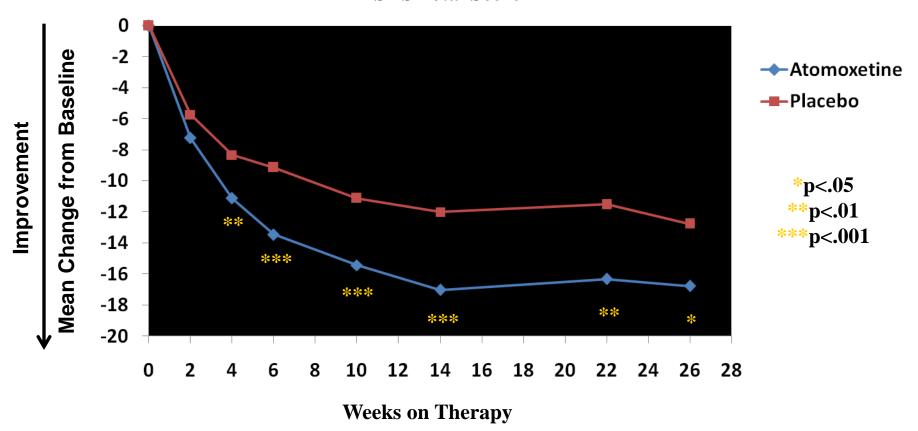
## Health Interventions

# Relate to Disorder (ADHD or Autism)

Relate to Comorbidity

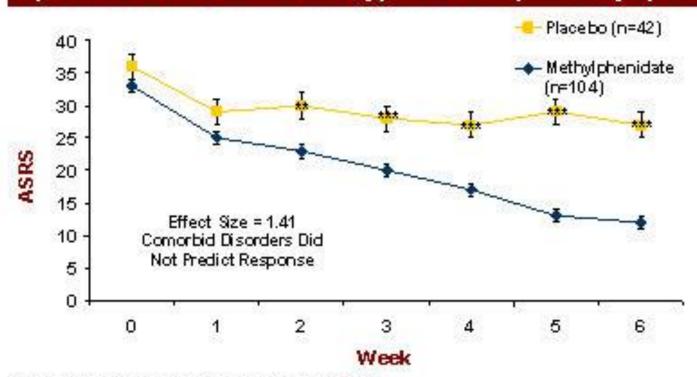
# Atomoxetine Efficacy in Adult ADHD: LYCU Study



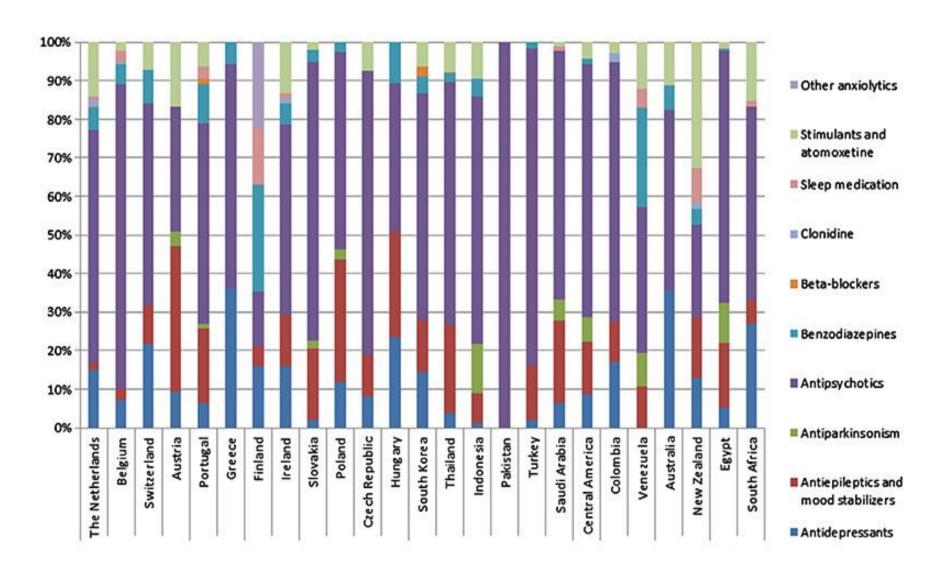


## Methylphenidate for Adult ADHD

#### Improvement in Inattention and Hyperactive-Impulsive Symptoms



Spencer T, et al. Biol Psychiatry. 2005;57:456-463.

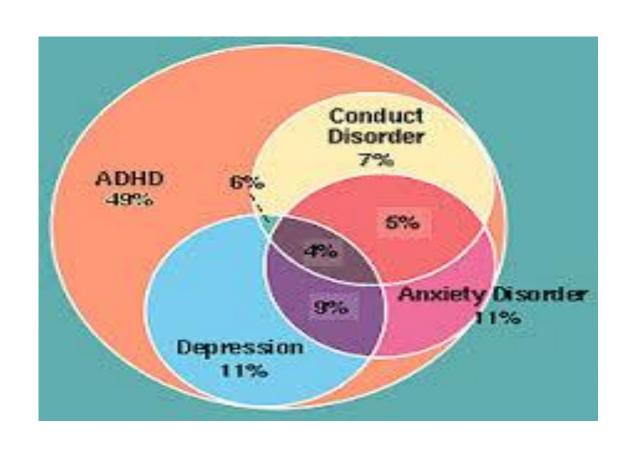


Wong, A. Y., Y. Hsia, et al. (2014). "The variation of psychopharmacological prescription rates for people with autism spectrum disorder (ASD) in 30 countries." <u>Autism Res **7(5)**: **543-554**.</u>

## Health Interventions

Relate to Disorder (ADHD or Autism)

Relate to Comorbidity



## Co-morbidity in ADI (CO) KELL (CO)

	Paediatrics n=429	CAMHS n=3,738	Adult mental health n=1,312	Total sample n=5,479		
F00-F09 - Organic mental disorder	<1%	<1%	<1%	<1%		
S06-S07 - Traumatic brain injury	<1%	<1%	<1%	<1%		
F10 - Mental and behavioural disorders due to use of alcohol		<1%	4%	1%		
F11 - Mental and behavioural disorders due to use of opioids			<1%	0%		
F12 - Mental and behavioural disorders due to use of cannabinoids	<1%	<1%	3%	1%		
F14 - Mental and behavioural disorders due to use of cocaine		<1%	<1%	<1%		
F19 - Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances		<1%	2%	<1%		
F20-F29 - Schizophrenia spectrum disorder		<1%	2%	<1%		
F31 - Bipolar affective disorder		<1%	2%	<1%		
F30-F39 - Other mood disorder	<1%	1%	13%	4%		
F40-F48 - Neurotic, stress related and somatoform disorders	<1%	3%	8%	4%		
F50 - Eating disorder		<1%	<1%	<1%		
F50-F59 - Other behavioural syndromes associated with physiological disturbances and physical factors	<1%	<1%	<1%	<1%		
F60.2 - Dissocial personality disorder		<1%	3%	<1%		
F60.3 - Borderline personality disorder		<1%	3%	1%		
F60-F69 - Disorders of adult personality and behaviour		<1%	6%	1%		
F70-79 - Mental retardation (includes learning disability)	10%	10%	14%	11%		
F84 - Pervasive developmental disorder (includes autism and Asperger's syndrome)	19%	21%	15%	20%		
F80-F89 - Other disorders of psychological development	2%	2%	1%	2%		
F91 - Conduct disorder	4%	5%	3%	4%		
F91.3 - Oppositional defiant disorder	5%	11%	2%	8%		
F93 -Emotional disorders with onset specific to childhood	3%	4%	1%	3%		
F95 - Tic disorders (including Tourette's)	2%	4%	2%	4%		
F94 -Disorders of social functioning with onset specific to childhood and adolescence	4%	2%	1%	2%		
F98 - Other behavioural and emotional disorders with onset usually occurring in childhood and adolescence	6%	3%	1%	3%		
G40 – Epilepsy	2%	1%	2%	2%		
G47 - Sleep disorders	24%	5%	2%	6%		
Other	11%	7%	4%	7%		
None of the above comorbid disorders	36%	44%	40%	42%		

# Comorbidity in Autism (Schizophrenia). (Schizophrenia). (Depression, Anxiety) (Dementias, CDC) (Dementias, C

- 70% of participants had at least one comorbid disorder and 41% had two or more:
  - social anxiety disorder 29.2%
  - attention-deficit/hyperactivity disorder 28.2%
  - oppositional defiant disorder 28.1%
- Simonoff, E., A. Pickles, et al. (2008). "Psychiatric disorders in children with autism spectrum disorders: prevalence, comorbidity, and associated factors in a population-derived sample." J Am Acad Child Adolesc Psychiatry 47(8): 921-929.
- Vannucchi, G., G. Masi, et al. (2014). "Clinical features, developmental course, and psychiatric comorbidity of adult autism spectrum disorders." <u>CNS Spectr 19(2): 157-164.</u>

## **Social Care Interventions**

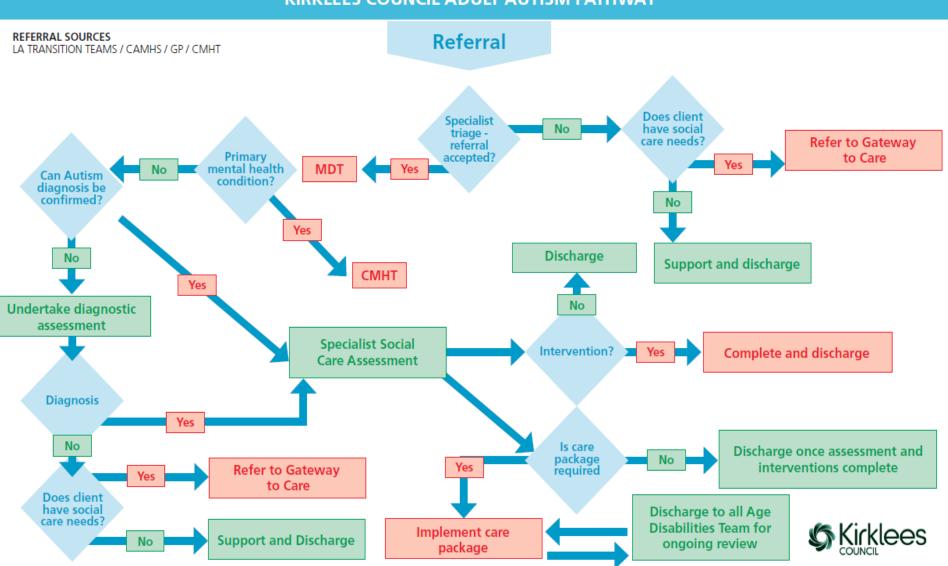
Relate to Disorder (ADHD or Autism)

Relate to Comorbidity

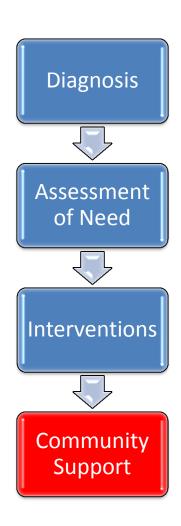




#### KIRKLEES COUNCIL ADULT AUTISM PATHWAY



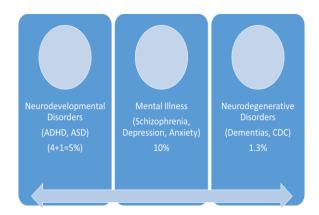
# Pathway Structure for any Healthcare condition











# Adult ADHD and Autism- take home points

- ADHD and Autism are different disorders- there is no overlap in phenomenology.
- Screening tools are **not** very good in discriminating either condition.
- Read your diagnostic criteria and don't be affected by 'awareness' campaigns.
- Use referral forms as a guide to you should I refer if I can only write one line?
- Demand is controlled by primary care- supply is controlled be CCG.
- Do we need some 'proper' training for these conditions?

