

# THRIVE & PbR: Emerging thinking on a new organisational and payment system for CAMHS

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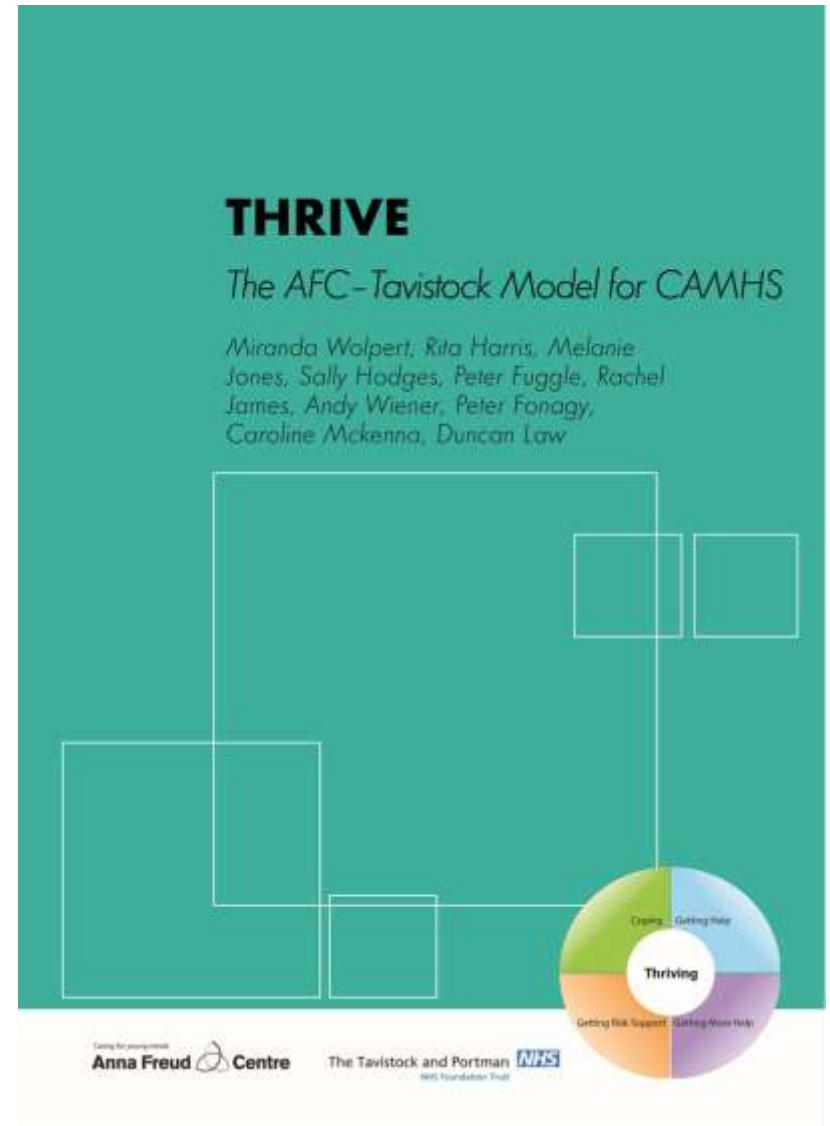


[http://www.annafreud.org/data/files/CAMHS\\_EBPU/Publications\\_and\\_Resources/Thrive031214.pdf](http://www.annafreud.org/data/files/CAMHS_EBPU/Publications_and_Resources/Thrive031214.pdf)

# The THRIVE Model

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# Payment Systems <http://pbrcamhs.org/>

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# Plan for talk

- Intro to CAMHS generally and key issues and the THRIVE model
- Update on Payment systems for CAMHS: suggested clusters and how we got to them
- Quality Improvement cycles

## **Guiding Principles**

- Evidence Informed Practice
- Outcomes orientated Practice
- Shared decision Making



# History: The origins of CAMHS

## The child guidance movement

- From the 1920s
- Support child wellbeing
- Deal with problems before that become significant

Educational lexicon

## Psychiatry

- Focused on mental illness and severe mental health problems

Health lexicon

## Management of risk

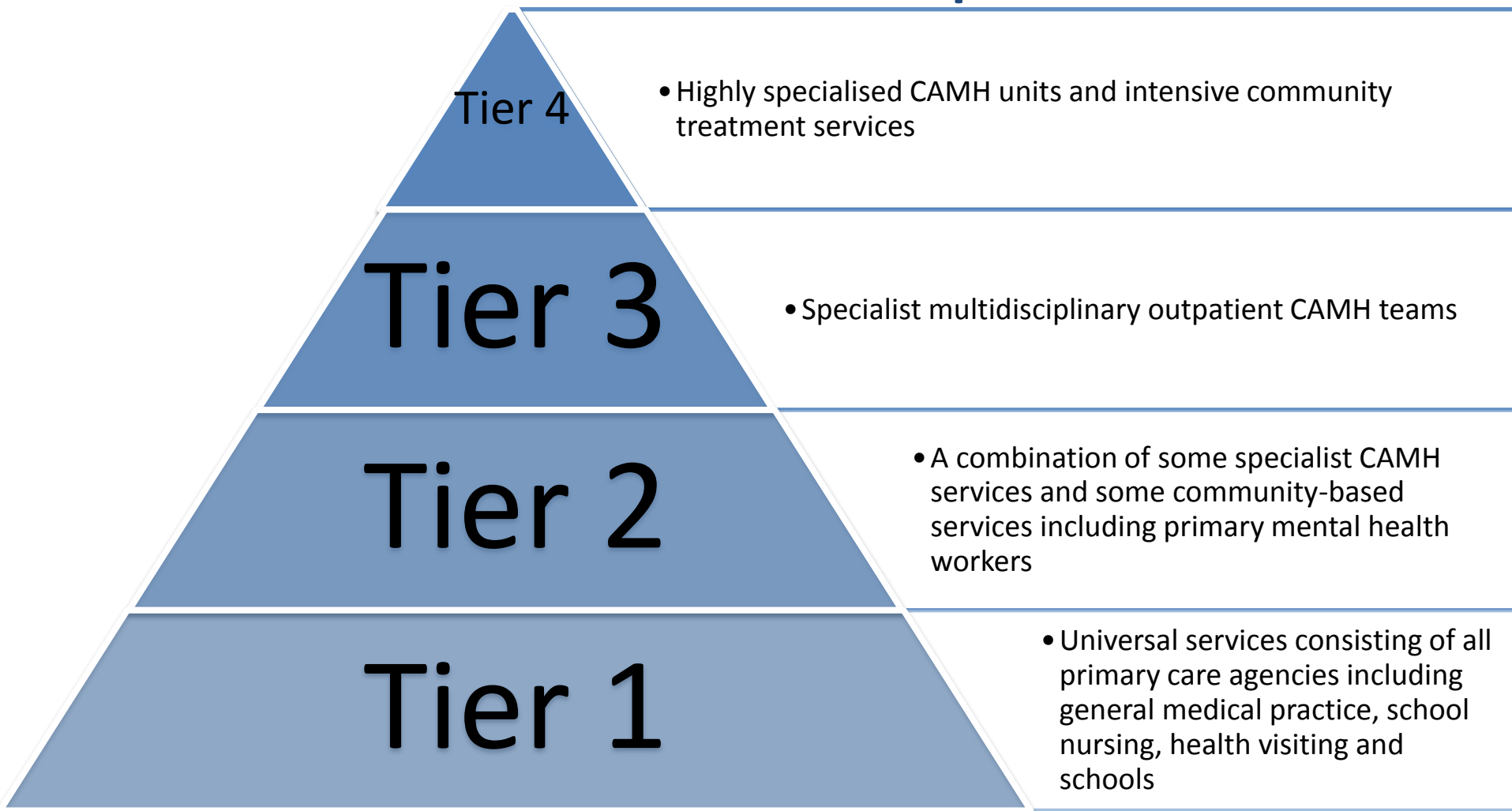
- More a recent perspective
- Focus on most troubling young people
- Risk to themselves or others

Social care lexicon

- Different languages: difficult cross-agency work
- Historically underfunded
  - Current austerity context resulted in cuts up to 25%
- The last UK epidemiological study (10 years ago) shows
  - Less than 25% of those deemed in need accessed support



# Current model of provision



Criticised, even by its same developers for leading to a reification of service divisions



# The THRIVE Model

Attempts at drawing a clearer distinction than before between:

- **treatment and support**
- **self-management and intervention**

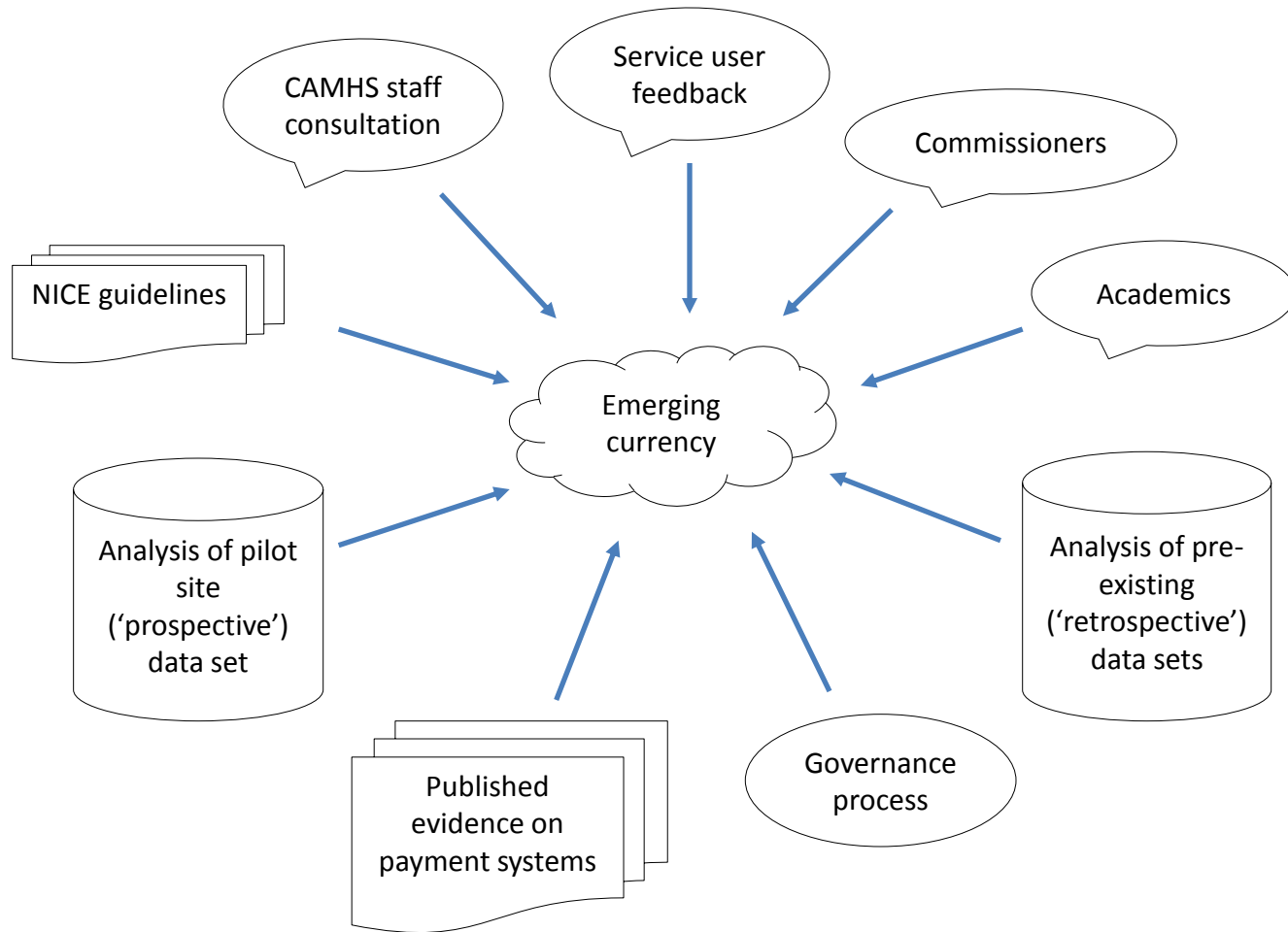


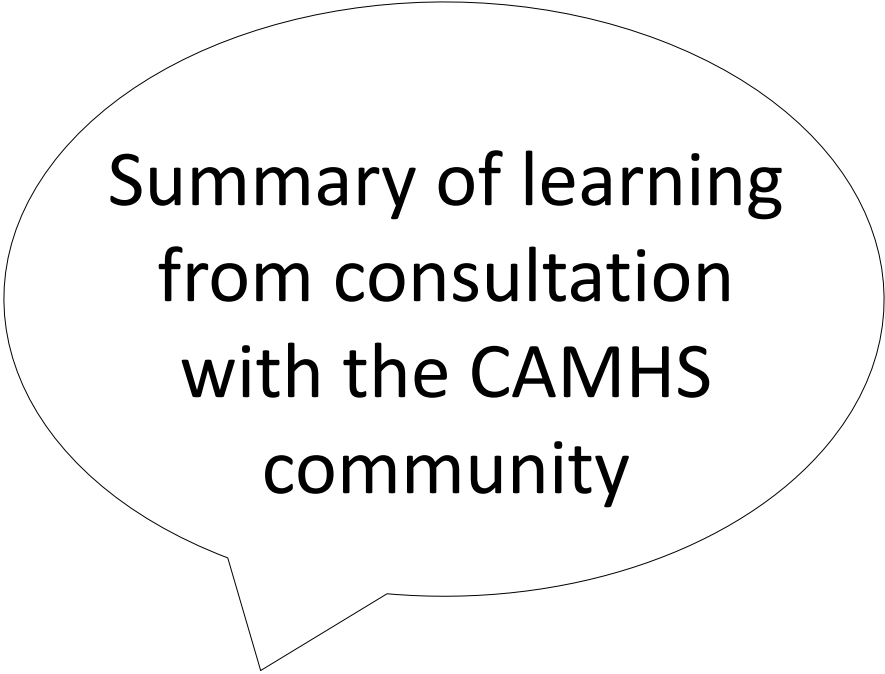
We are aware there are a number of initiatives across the country who use “Thrive” in their title. We use the term to reflect our core commitment to young people “thriving” and to represent our commitment to provision that is Timely, Helpful, Respectful, Innovative, Values-based and Efficient.

**How did we get to the draft  
currencies?**



# Who have we asked and what have we looked at?





**Summary of learning  
from consultation  
with the CAMHS  
community**

- Needs- rather than diagnostic-led
  - Should not drive clinical decisions
  - Consider complexity
  - Measure indirect activities
  - Link with outcomes and resource use
- 
- Source: Questionnaire survey (n=180) and participatory workshops (n=91) in 2012

# What have we learned from reviewing National Institute for Health & Care Excellence (NICE) guidelines?

- Evidence complemented by expert consensus
- Include majority of child mental health problems
- Currently largely based on diagnostic categories
- Currently focus on direct activity

## Commissioning perspective – summary of themes

- The payment system should include reward for outcomes, and not just be payment by activity
- Challenge of how CAMHS currencies would fit with multi agency nature of support for children
- Very complex case such as LAC/CP/LD all have multi agency input and so challenge about measuring CAMHS impact
- Move towards earliest possible interventions leads to model of outreach, advice, consultation, training, for CAMHS. This is harder to identify/measure CAMHS input and by implication harder to allocate to currencies
- How to avoid gaming – providers deliberately put children in higher currency grouping to optimise their income
- Need to engage with CCG/GPs to ensure understanding and buy-in to CAMHS payment system

# What feedback did we receive from service users?

- Overarching message: Language used in policy and programmes becomes part of the language of clinicians and services
- Young people expressed strongly a need to avoid using language that links currencies to severity

*“If you weren’t put in the severe group, but you were feeling really bad it would make you feel worthless, inferior. It would make you think what do you need to do to get that help?”*

*“You could just say the support they need? So, rather than saying you’re more severe so you need more support [...] You just say it’s about levels of support rather than levels of severity.”*

- Source: Consultation with young people in Leeds in April 2013

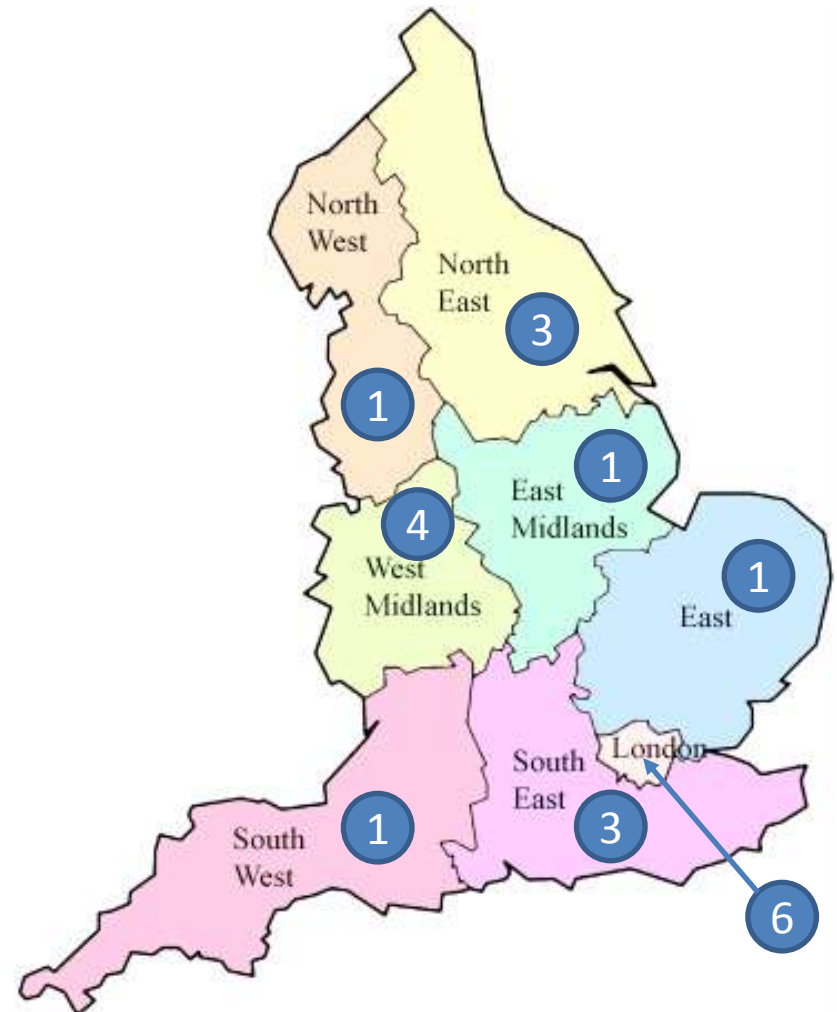
# Summary of learning from reviewing the international literature

- Moving from a payment system based on block contracts or individual appointments to one based on periods of care provides different incentives, including the ability to focus on delivering outcomes
- Needs-based payment systems for periods of mental health care (that include all settings) are in development or are being rolled out (e.g. for working age adults and older people's mental health services in England), and there are no full evaluations yet
  - Recurring constraint: How little the information collected on service user characteristics at the start of a period of care can predict resource use
- Empirical studies aimed at examining the effect of period of care-based payment have concentrated on the acute hospital sector
  - Impact is hard to isolate from other policies and trends, and is dependent on context (e.g. prior funding arrangements)

# The prospective data collection pilot – 20 services participated

- Training late 2012 – early 2013
- Data collection until mid 2014 with focussed work on data quality
- Examples of services provided:
  - Outreach & intensive community treatment
  - Looked after children
  - Neurodevelopmental disorders
  - Learning disability
  - Paediatric liaison
  - Forensic
  - Tier 2
  - Tier 3
  - Eating disorders
  - Inpatient

- No. of sites in each region:



# Current View form – provisional problem descriptions

Provisional Problem Description		None	Mild	Moderate	Severe	Not known
Rating need not imply a diagnosis						
1	Anxious away from caregivers (Separation anxiety)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Anxious in social situations (Social anxiety/phobia)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Anxious generally (Generalized anxiety)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Compelled to do or think things (OCD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Panics (Panic disorder)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Avoids going out (Agoraphobia)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Avoids specific things (Specific phobia)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Repetitive problematic behaviours (Habit problems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Depression/low mood (Depression)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Self-Harm (Self injury or self-harm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Extremes of mood (Bipolar disorder)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Delusional beliefs and hallucinations (Psychosis)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Drug and alcohol difficulties (Substance abuse)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Difficulties sitting still or concentrating (ADHD/Hyperactivity)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Behavioural difficulties (CD or ODD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16	Poses risk to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Carer management of CYP behaviour (e.g., management of child)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Doesn't get to toilet in time (Elimination problems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Disturbed by traumatic event (PTSD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Eating issues (Anorexia/Bulimia)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	Family relationship difficulties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Problems in attachment to parent/carers (Attachment problems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	Peer relationship difficulties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	Persistent difficulties managing relationships with others (includes emerging personality disorder)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	Does not speak (Selective mutism)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	Gender discomfort issues (Gender identity disorder)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	Unexplained physical symptoms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	Unexplained developmental difficulties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	Self-care Issues (includes medical care management, obesity)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	Adjustment to health issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N.B. not a diagnostic tool; does not replace a risk assessment



# Current View form – complexity factors

SELECTED COMPLEXITY FACTORS		Yes	No	Not known
1	Looked after child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Young carer status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Learning disability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Serious physical health issues (including chronic fatigue)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Pervasive Developmental Disorders (Autism/Asperger's)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Neurological issues (e.g. Tics or Tourette's)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Current protection plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Deemed "child in need" of social service input	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Refugee or asylum seeker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Experience of war, torture or trafficking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Experience of abuse or neglect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Parental health issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Contact with Youth Justice System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Living in financial difficulty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Current View form – contextual problems

CONTEXTUAL PROBLEMS					
	None	Mild	Moderate	Severe	Not known
HOME	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SCHOOL, WORK or TRAINING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMUNITY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SERVICE ENGAGEMENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EDUCATION/EMPLOYMENT/TRAINING					
ATTENDANCE DIFFICULTIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ATTAINMENT DIFFICULTIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Payment Systems Cluster Development: Data Analysis

## **Data Analysis – Aims**

- To investigate the relationship between presenting information and resource use in CAMHS, in order to develop currencies for CAMHS.
- To develop an algorithm using assessment information to suggest appropriate currency assignment. Clinicians will always be able to overrule the algorithm according to clinical judgement.

## **Notes of Caution**

- Resource use in CAMHS is not the same as total resource use (which may include other agencies)
- Current resource use (either in CAMHS or in total) may or may not be meeting the needs of the child, young person, or family
- So current resource use in CAMHS may not reflect need for resources

Data on resource use are imperfect and do not capture all activity in CAMHS

## Payment Systems Pilot Project: Data and Limitations

- 4573 periods of contact from 11 CAMH services
- Study Period for Payment Systems Project: Sep 2012 – June 2014 (22 months)
- Since only closed cases were considered, long Periods of Contact (POCs) had a smaller chance to be in the sample than shorter POCs
- So the Payment Systems Pilot sample is biased towards shorter POCs

### From other data (CORC), we estimate that:

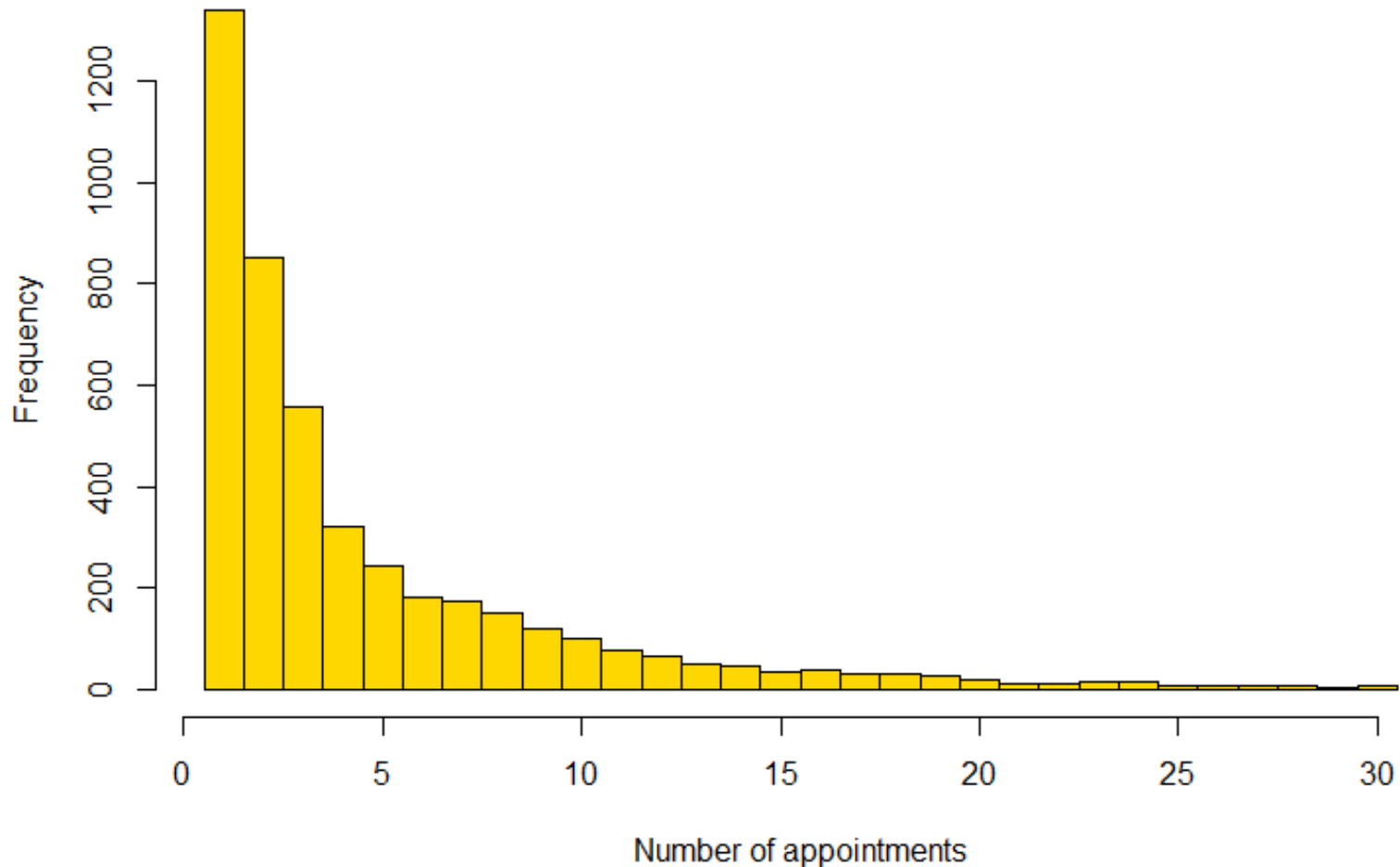
- Around a quarter of POCs end after a single session
- More than a third of overall direct appointments are taken by the 5 % of periods of contact with the highest number of appointments (who attended over 30 appointments each)
  - This result does not account for repeated POCs by the same child (not identifiable in CORC)
- So a relatively small proportion of children is likely to take up a significant proportion of resources

## Payment Systems Pilot Sample: Age and Gender

Age Group	Boys	Girls	Total
0-4	64 %	36 %	135
5-9	66 %	34 %	910
10-14	48 %	52 %	1752
15-19	33 %	67 %	1672

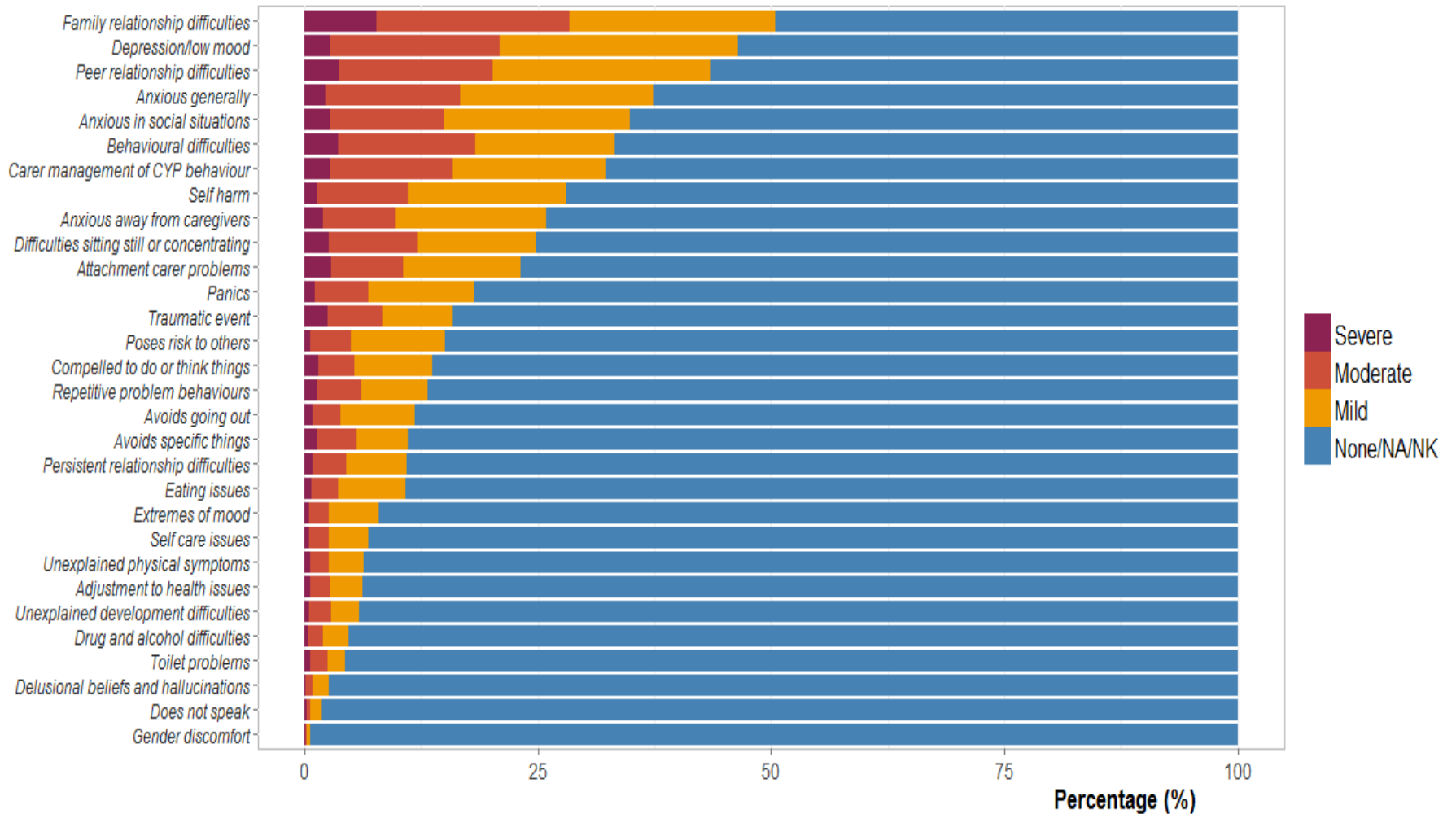
Note: 21 POCs had no gender of child recorded; these are excluded from this table. Overall N = 4573.

## Number of appointments (Payment Systems Data)



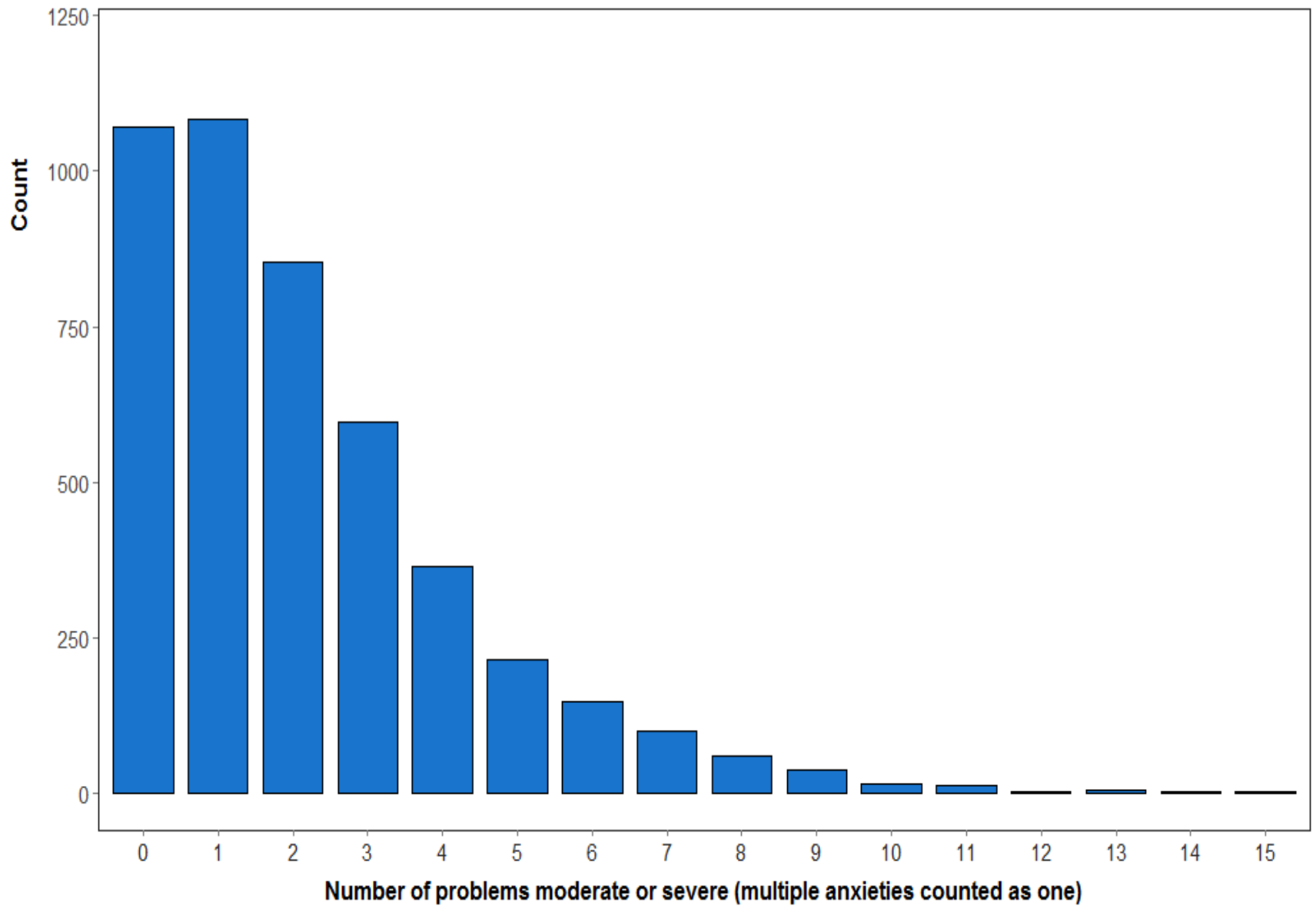
Note: 40 periods of contact were recorded to have attended more than 30 appointments. These are not shown in this graph, but are included in the analysis.

## Current View Problem Descriptors

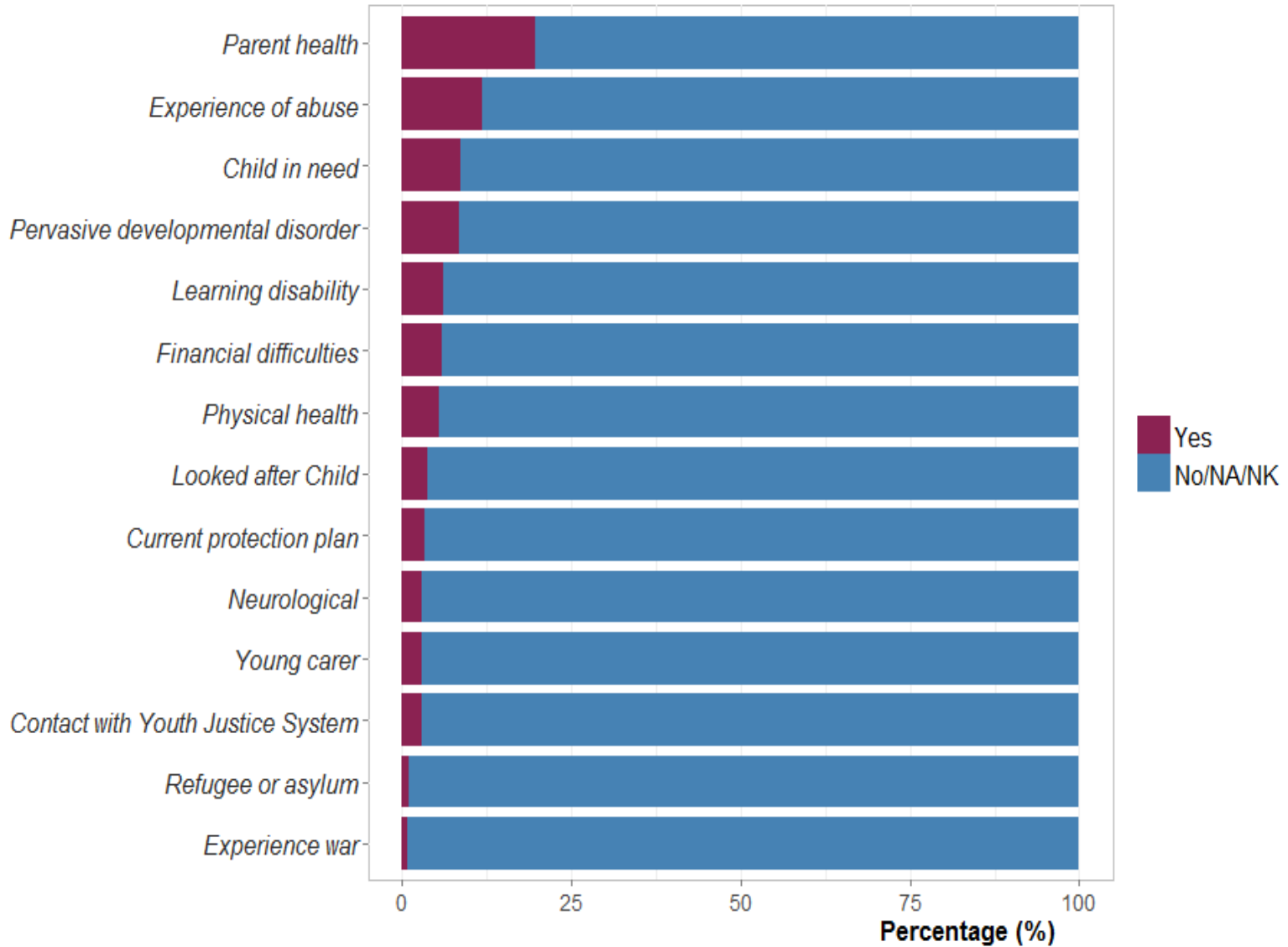




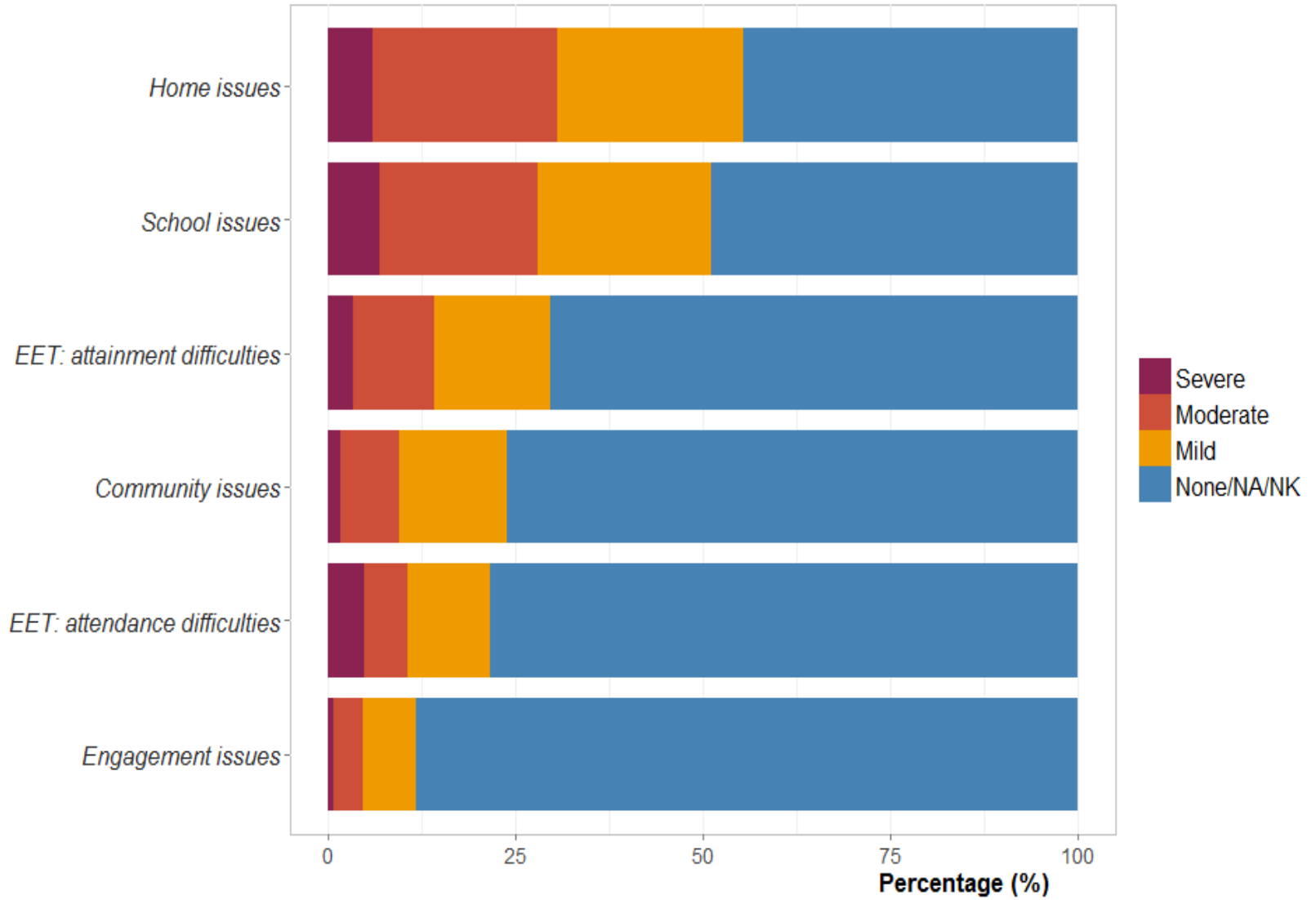
## Number of Problems Rated Moderate or Severe



## Current View Complexity Factors



## Current View Contextual Problems



# Cluster Analysis and Cluster Development

We compared three methods of classification:

**A: Cluster Analysis** (k-mediod cluster analysis, “unsupervised cluster analysis”)

**B: Regression Trees** (“supervised cluster analysis”)

**C: Theory-driven classification** based on NICE guidance

The **theory-driven classification** provided the best prediction of “number of appointments attended”.

# Theory-driven Classification

We identified 15 categories of presenting problems for which NICE guidance was available:

- ADHD
- Autism Assessment
- Autism Management
- Bipolar Disorder
- Conduct Disorder
- Depression
- Eating Disorder
- Emerging Borderline Personality Disorder
- Generalized Anxiety Disorder
- Obsessive-Compulsive Disorder
- Panic Disorder
- Psychosis
- PTSD
- Self Harm
- Social Anxiety

# Theory-Driven Classification

Cluster	Current View Indicators
<b>1: Coping</b>	<ul style="list-style-type: none"> <li>Has mild problems only</li> </ul>
<b>2: ADHD</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for ADHD</li> </ul>
<b>2: Autism</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Autism Management</li> </ul>
<b>2: Bipolar</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Bipolar (moderate severity)</li> </ul>
<b>2: Conduct</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Conduct Disorder</li> </ul>
<b>2: Depression</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Depression</li> </ul>
<b>2: General. Anxiety</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Generalised Anxiety Disorder</li> </ul>
<b>2: OCD</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for OCD</li> </ul>
<b>2: Panics</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Panics</li> </ul>
<b>2: PTSD</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for PTSD</li> </ul>
<b>2: Social Anxiety</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Social Anxiety</li> </ul>
<b>2: Multiple Moderate Problems</b>	<ul style="list-style-type: none"> <li>Has multiple moderate problems, and/or one severe problem, but doesn't fit any NICE guidance (or has significant comorbidity)</li> </ul>
<b>3: Psychosis</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Psychosis</li> </ul>
<b>3: Eating Disorder</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Eating Disorder</li> </ul>
<b>3: Self Harm</b>	<ul style="list-style-type: none"> <li>Fits NICE guidance for Self Harm (may be combined with Depression or Anxiety)</li> </ul>
<b>3: Multiple Severe Problems</b>	<ul style="list-style-type: none"> <li>Emerging BPD, or</li> <li>Does not fit any NICE category but has multiple problems rated as severe</li> </ul>

# Classification of POCs into NICE Guidance Categories

Information from Current View Forms filled in at assessment was used to check, for each case, whether presenting problems appeared to 'fit' a NICE guidance. To 'fit' a NICE guidance, a POC had to fulfil the following criteria:

- Have the “signature problem” defined by the NICE guidance, rated ‘moderate’ or ‘severe’
- Not have a significant “comorbidity” that would mean that NICE guidance may not be applicable in a straightforward way

Example:

- To be classified into the NICE category “OCD”, a POC had to:
  - Have “Compelled to do or think things” rated moderate or severe (this is the “signature problem”)
  - Not have any of 23 specific other problems (e.g “Low Mood”, “Delusional Beliefs or Hallucinations”, etc.) rated at equal or higher severity compared to the signature problem

# Percentages of periods of contact in each cluster

Cluster	Percentage of POC
<b>1: Coping</b>	32 %
<b>2: ADHD</b>	6 %
<b>2: Autism</b>	1 %
<b>2: Bipolar</b>	1 %
<b>2: Conduct</b>	5 %
<b>2: Depression</b>	6 %
<b>2: Generalised Anxiety</b>	4 %
<b>2: OCD</b>	1 %
<b>2: Panics</b>	0.3 %
<b>2: PTSD</b>	2 %
<b>2: Social Anxiety</b>	2 %
<b>2: Multiple Moderate Problems</b>	24 %
<b>3: Psychosis</b>	1 %
<b>3: Eating Disorder</b>	1 %
<b>3: Self Harm</b>	6 %
<b>3: Multiple Severe Problems</b>	8 %

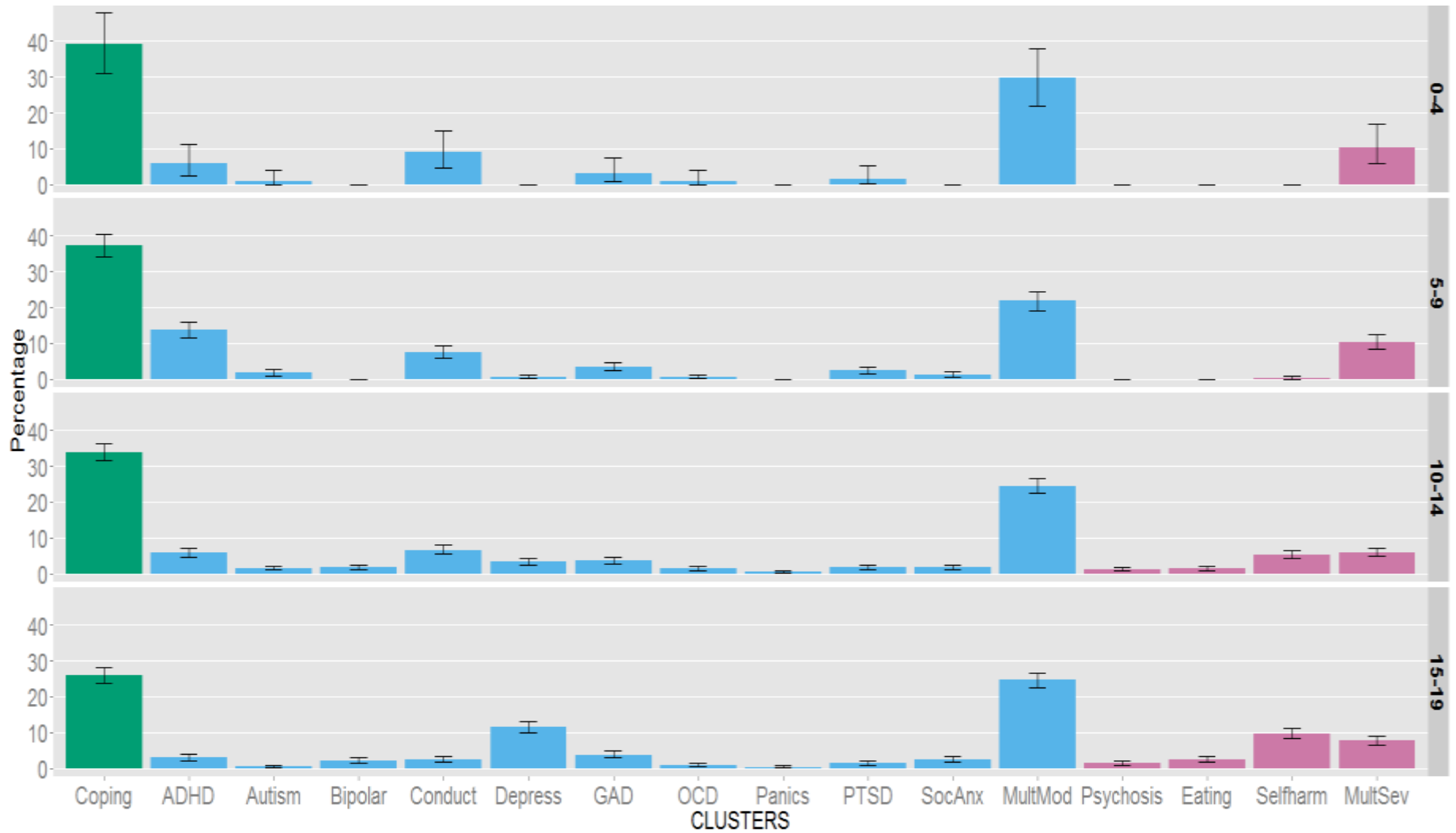


# Conceptual Structure

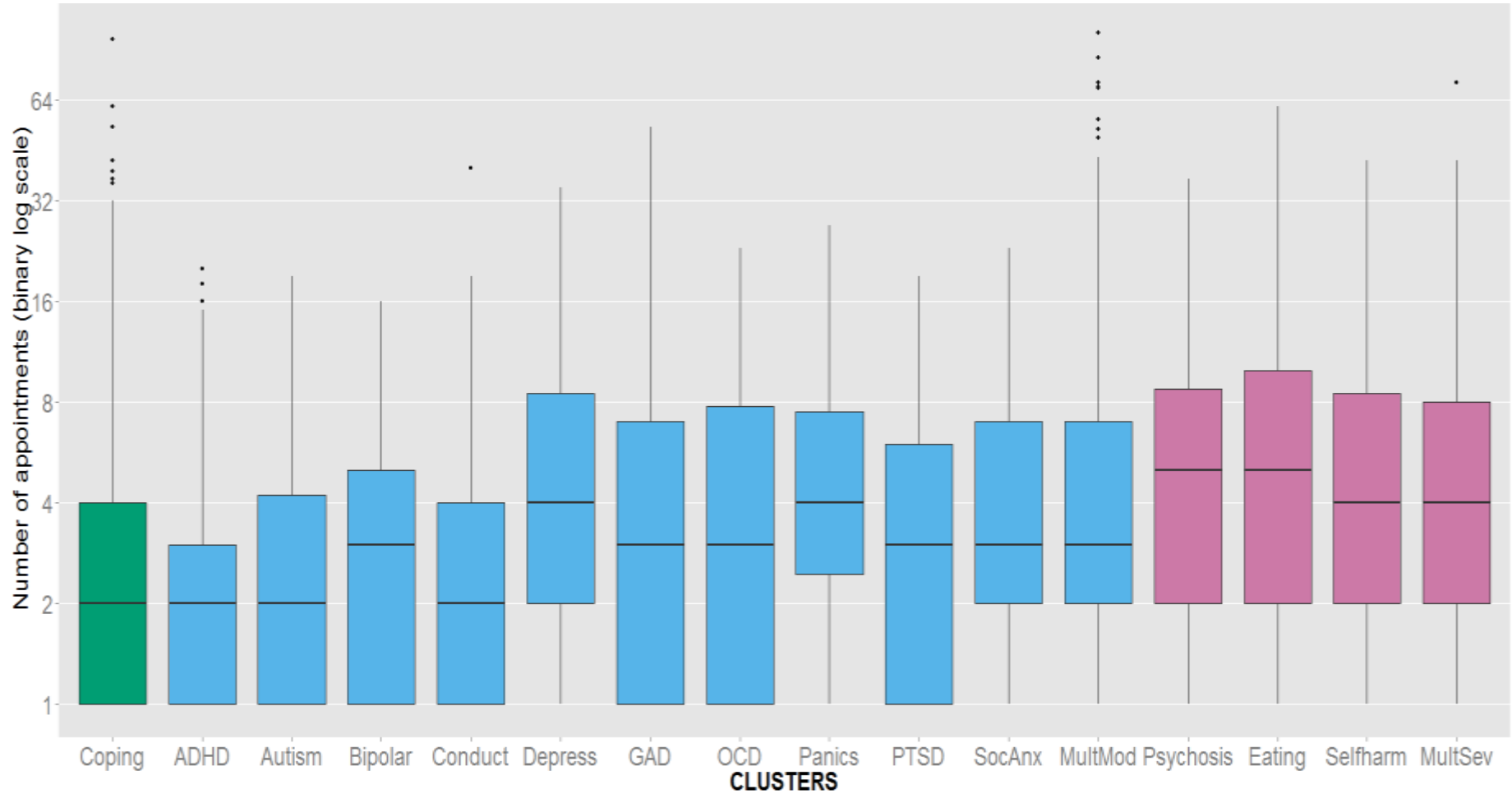
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<b>CLUSTER</b>	<b>Percentage of POC</b>
<b>1: Coping</b>	<b>32 %</b>
<b>2: Getting Help</b>	<b>53 %</b>
<b>3: Getting More Help</b>	<b>16 %</b>

# Percentage of periods of contact in each cluster, by age



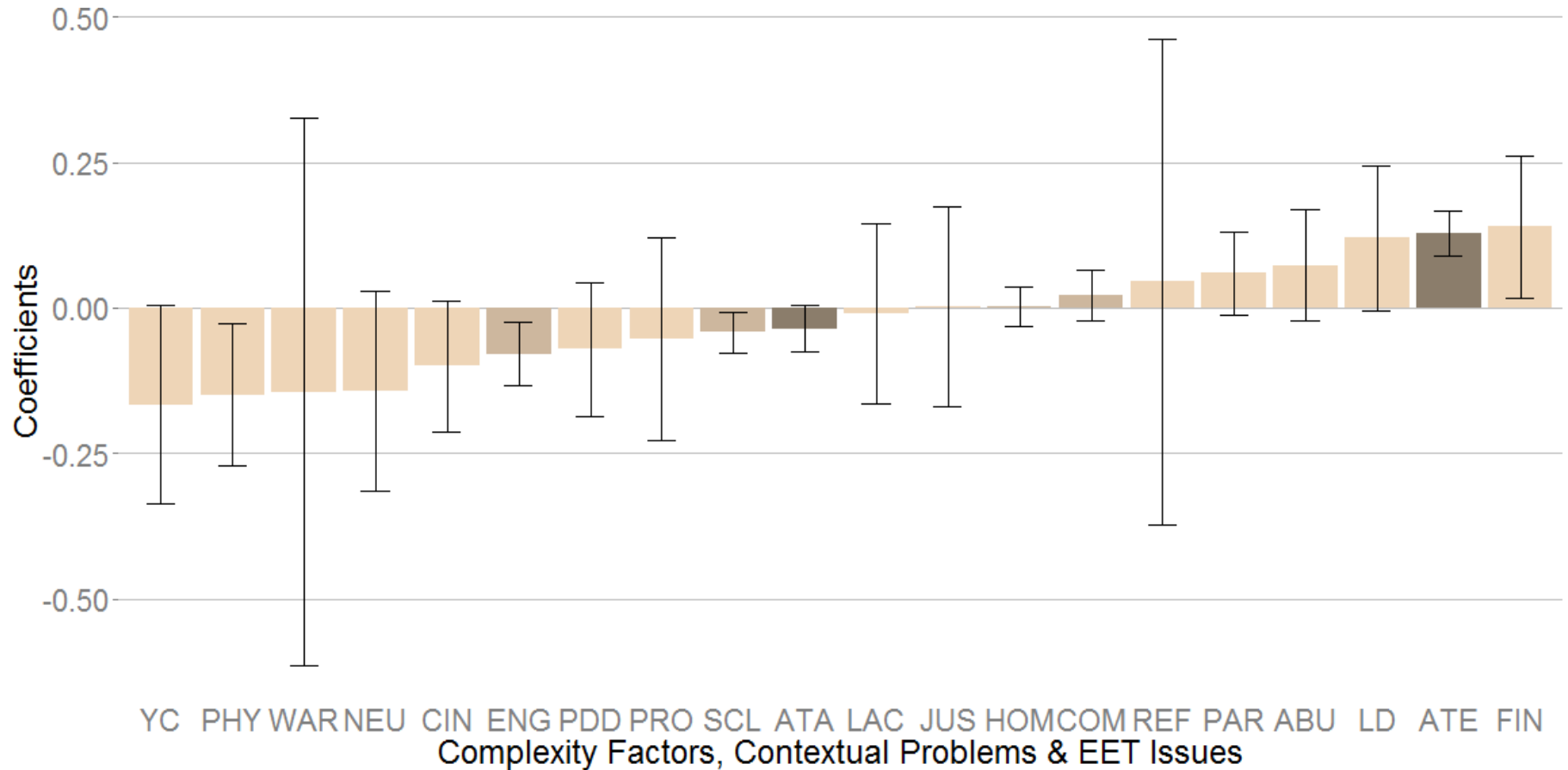
# Number of appointments by cluster



Note: Data are presented on a binary log scale to accommodate the wide range of appointments.

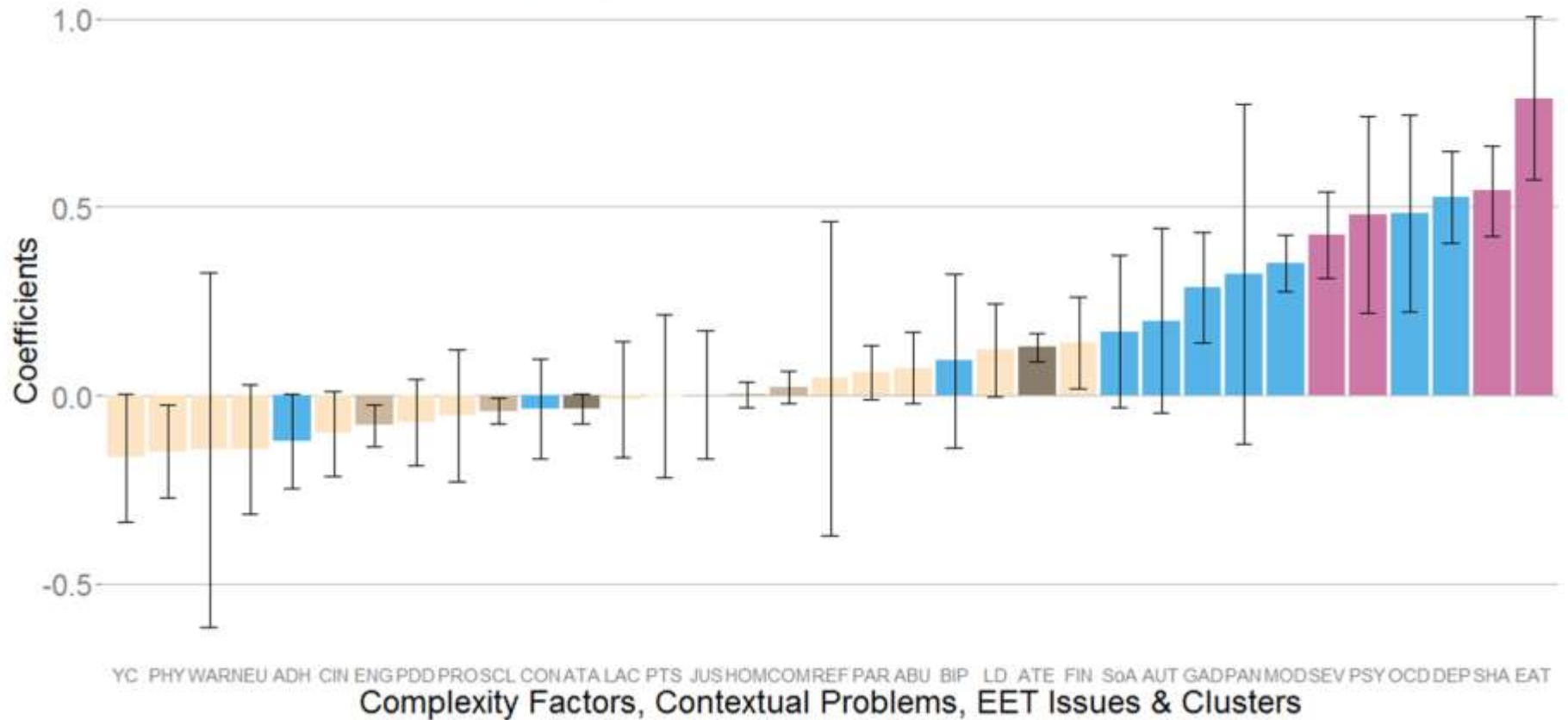
The height of the boxes represents the interquartile range, where the lower boundary of the box is the lower quartile, the line through the box is the median and the upper boundary of the box is the upper quartile.

# The influence of context, complexity and EET factors



Note: This plot is based on a model predicting the “number of appointments” using 16 clusters and 20 complexity, context and EET factors as predictors. Coloured bars show estimates the effect of having the associated risk factor, compared to the risk factor being absent. A bar reaching ‘up’ indicates that the associated risk factor is predicted to increase the number of appointments; a bar reaching down indicates that the associated risk factor is predicted to decrease the number of appointments. Error bars around the coloured bars show 95 % confidence intervals. If error bars span the value “0”, then there is no strong evidence for the influence of the associated risk factor.

# 16-cluster model: comparing clusters and other factors: influence on appointments



Note: This plot shows the same model as the previous plot, but this time the estimated effects of the 16 clusters are shown alongside the effects for complexity, context and EET factors. Clusters are identified by colour only: blue bars show clusters belonging to “Getting Help”, purple bars show clusters belonging to “Getting More Help”. The influence of each cluster or risk factor is shown compared to a POC in the “Coping” cluster without any risk factors. It can be seen that Cluster Membership is a more important predictor of “number of appointments” than any of the associated risk factors. See appendix for a legend to labels and for the model specification.

# Cluster Development: Conclusions

- CAMHS population and NICE guidance
  - classification suggests that current NICE guidance may apply to about half of the children in the “Getting Help” or “Getting More Help” group
  - The remaining half may either have significant problems for which no NICE guidance exists, or comorbid conditions that may mean assessment and/or treatment is particularly complex
  - These results are indicative only, as the algorithm that allocated children to clusters has not been validated
- Presenting information and resource use
  - Most of the variation in ‘number of appointments’ between children remains unexplained
  - No classification provides a good prediction of resource use, but theory-driven model outperforms statistically derived classifications
  - No strong evidence for an influence of context problems or complexity factors, once clusters based on presenting problems were taken into account

# Cluster Development: refinement

Consultation with CAMHS clinicians, service managers, and commissioners suggested that the 16 clusters were meaningful clinically and provided a plausible basis for classifications. However, feedback and further data exploration suggested the following refinements:

- Add three clusters:
  - Conduct Disorder comorbid with Emotional Problems (Depression or Anxiety)
  - Multiple Emotional Problems
  - Neurodevelopmental Assessment
- Combine the clusters GAD and Panic Disorder into one
- Classify Self Harm as “Getting Help” (from purple to blue)
- Rethink the language (cluster labels)
  - E.g rename “Coping” → “Getting Advice”

# Cluster Development: further work

- Validation of Clusters
- Validation of Algorithm for Cluster Allocation
- Reliability and Validity of the Current View Tool



## Appendix: Legend to abbreviations used in slides

### Complexity Factors

ABU: Experience of Abuse or Neglect  
CIN: Child in Need  
FIN: Living in financial difficulty  
JUS: Contact with Youth Justice System  
LAC: Looked after Child  
LD: Learning Disability  
NEU: Neurological Issues  
PAR: Parental Health Issues  
PDD: Pervasive Developmental Disorders  
PHY: Physical Health Problems  
PRO: Current Protection Plan  
REF: Refugee or asylum seeker  
WAR: Experience of War, Torture or Trafficking  
YC: Young Carer

### Contextual Problems

ENG: Service Engagement  
COM: Community Issues  
HOM: Home  
SCL: School, Work or Training

### Education/Employment/Training

ATA: Attainment Difficulties  
ATE: Attendance Difficulties

### Clusters: Getting Help

ADH: ADHD  
AUT: Autism  
BIP: Bipolar Disorder (moderate)  
CON: Conduct Problems  
DEP: Depression  
GAD: Generalized Anxiety Disorder  
MOD: Multiple Moderate Problems  
OCD: Obsessive Compulsive Disorder  
PAN: Panics  
PTS: PTSD  
SoA: Social Anxiety

### Clusters: Getting More Help

EAT: Eating Disorder  
PSY: Psychosis  
SHA: Self Harm  
SEV: Multiple Severe Problems

## Appendix: Statistical Model

A mixed-effects zero-truncated negative binomial regression approach was used to compare the three classifications with respect to how well they predict the number of appointments, and to explore the effect of contextual problems and complexity factors. The model includes a random effect for “CAMH service” in order to take into account the nested data structure.

$$\log(\mu_{ij}) = \beta_0 + \sum_{k=1}^p \beta_k x_{ijk} + u_i ,$$

where:

- $Y_{ij} \sim \text{ZTNB}(\mu_{ij}, \alpha)$  is the number of appointments for the  $j^{\text{th}}$  child treated by the  $i^{\text{th}}$  service, with mean  $\mu_{ij}$  and dispersion parameter  $\alpha$ ;
- $\beta_0$  is an intercept term;
- $\beta_k, k = 1, \dots, p$ , is a vector of slope coefficients corresponding to the  $p$  predictor variables  $x_1, \dots, x_p$ ;
- $u_i \sim N(0, \sigma_u^2)$  is the random intercept term for the  $i^{\text{th}}$  service,  $i = 1, \dots, 11$ ;
- The variance function is defined as:  $V(\alpha) = \mu + \alpha\mu^2$ . (This is called the “NB2 parameterization”.)

# **Drawing together the information sources**

# Draft clusters for children, young people or families seeking support

Getting Advice

Getting Help

Getting More Help

# Hypothesis on the needs of service users

Children, young people and families who...

...are adjusting to life circumstances, with mild or temporary difficulties, where the best intervention is within the community with the possible addition of self-support

...would benefit from focused, evidence-based treatment, with clear aims, and criteria for assessing whether aims have been achieved

...would benefit from intensive (and potentially longer-term) treatment

# Broad description of care packages offered

Signposting and self-management support

Assessment and treatment involving goals focussed, evidence informed and outcomes focussed intervention, or extended assessment  
NICE guidance informed

Assessment and treatment for

- psychosis and/or severe bipolar disorder
  - eating disorders
- other problems and/or risk management

NICE guidance informed

# Cluster assignment is not automated

- Due to the complex nature of need, we envisage that choice of one of the needs-based clusters will necessitate a combination of information (e.g. from the Current View form), clinical judgement and shared decision making
- Example:

Algorithm suggests 'Getting Help' cluster on the basis of rating of 'compelled to do or think things' item as 'severe' on the Current View form but young person chooses to live with symptoms (e.g. excessive hand washing) and collaboratively agreed between clinician and young person that consider bibliotherapy with one off follow up, and so 'Getting Advice' cluster is chosen

# Incorporating monitoring of quality and outcomes

- The currency groupings may facilitate the identification of quality indicators with relevance to the needs of particular groups of children, young people and families
- Commissioners, providers and service user representatives could work together to identify and agree quality indicators for each of the currency groupings (illustrative examples on next slide)



# Illustrative examples of areas in which to identify and agree quality indicators

## Getting Advice

e.g. access to online support, levels of resilience

## Getting Help

e.g. access to National Institute for Health and Care Excellence (NICE) recommended interventions, levels of recovery or reliable change

## Getting More Help

e.g. length of stay (where care provided in inpatient setting), levels of functioning, management of crises

# Draft clusters and sub-clusters v2 – short descriptions (need not imply a diagnosis)

## Clusters

Getting Advice

Getting Help...

Getting More Help...

## Sub-clusters

...Guided by NICE Guideline 16 and/or Guideline 133 (Self-harm)

...Guided by NICE Guideline 26 (PTSD)

...Guided by NICE Guideline 28 (Depression)

...Guided by NICE Guideline 31 (OCD)

...Guided by NICE Guideline 38 (Bipolar Disorder)

...Guided by NICE Guideline 72 (ADHD)

...Guided by NICE Guideline 113 (GAD)

...Guided by NICE Guideline 113 (Panic Disorder)

...Guided by NICE Guideline 158 (Antisocial Behaviour & Conduct Disorders)

...Guided by NICE Guideline 159 (Social Anxiety Disorder)

...Guided by NICE Guideline 170 (Autism Spectrum)

...With Neurodevelopmental Assessment

...With Multiple Moderate Problems **N.B. exploring splitting this sub-cluster into more than one sub-cluster**

...Guided by NICE Guideline 9 (Eating Disorders)

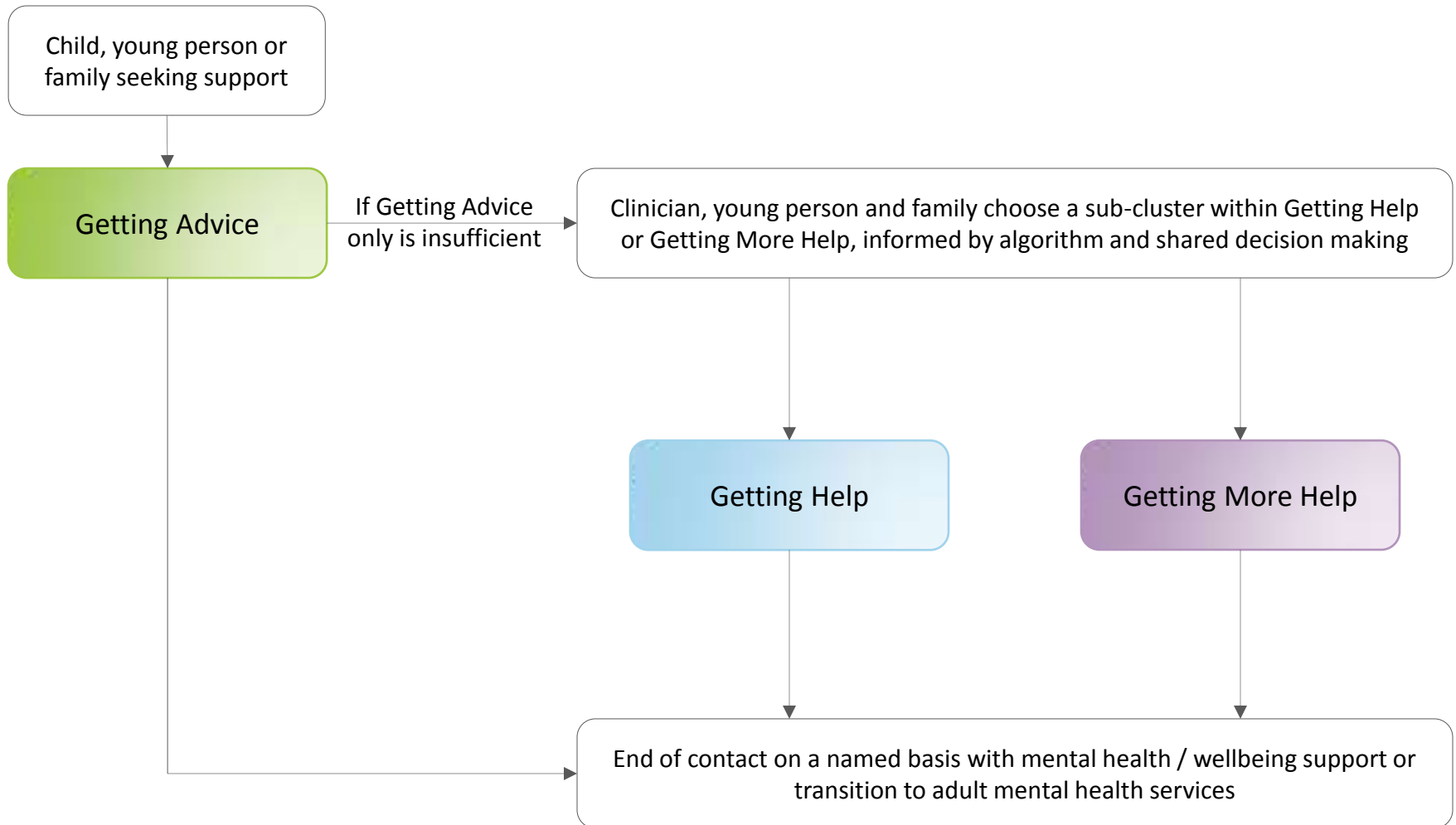
...Guided by NICE Guideline 155 (Psychosis) and/or Guideline 38 (Bipolar Disorder)

...With Multiple Severe Problems **N.B. exploring splitting this sub-cluster into more than one sub-cluster**

# Example of assigning to cluster: Getting advice

Hypothesised Need	Care package elements	Possible algorithm (based on “current view” tool)	Example of shared decision potentially overriding algorithm
Adjusting to life circumstances	Signposting	No problem rated more than mild	Severe difficulties but choose self management
Temporary or mild difficulties	Self-management support	A single problem on CV form rated moderate that does not fit any NICE guidance	Concern about depression agree to wait
Managing chronic difficulties	Choice appointment		

# Flow chart of assignment



# Choosing: Getting Advice vs Getting Help

	Getting help from a mental health specialist	Coping without help from a mental health specialist
Will it help?	Studies have found that seeing someone with specialist training using a NICE recommended approach at 1 year follow up % of people are no longer depressed, x% get more depressed and x% stay the same.	Activities such as exercise, talking friends and family and ensuring good sleeping and eating patterns can all help lift mood. Without treatment studies have found % of people are no longer depressed, x% get more depressed and x% stay the same.
How long will it take to get better	Generally recommendation is around x meetings but this varies for individuals	x% get better within x months
Will I get worse again ?	Around x % get depressed again within 1 year	Around x % get depressed again within 1 year
What are the risks	<p>If you choose medication as part of your care package there may be side effects</p> <p>You may be asked to come to meetings in school time</p>	Things get worse without effective input
Will it hurt?	Sometimes you will be asked to do things that seem hard e.g. getting up and doing activities or speak about things that are painful and upsetting but the people helping you are trained to help you do these things.	Friends and family are likely to want to help but are not trained and sometimes when people are not sure what to say or do they can say things that feel hurtful or insensitive or advise things that are not helpful.



# Performance management, quality improvement and The THRIVE Model



Alongside The THRIVE Model, performance management can be approached with the MINDFUL model (Wolpert, 2014)

A 6-step process applied to each of the four elements of THRIVE provision, lead by the relevant funder/commissioner

1

- Regular (may be 3 yearly) meeting between commissioners, providers and service user representatives
- Jointly agree high level key performance indicators in weak areas
  - Using a mix of process and outcome measures, based on CORC annual reports u other sources
  - **COPING**. e.g.: access to online support/levels of resilience
  - **GETTING HELP**. e.g.: access to NICE interventions/levels of recovery or reliable change
  - **GETTING MORE HELP**. e.g.: out of area placements/funding
  - **GETTING RISK SUPPORT**. e.g.: response to A&E admissions/management of crises



# Performance management, quality improvement and The THRIVE Model



2

Alongside The THRIVE Model, performance management can be approached with the MINDFUL model (Wolpert, 2014)

A 6-step process applied to each of the four elements of THRIVE provision, lead by the relevant funder/commissioner

- Data will be collected routinely to help inform and shape service provision
- Measures, tools and approaches to support this will be tailored to each element of the THRIVE Model
  - **COPING**. e.g.: include measures of resilience
  - **GETTING HELP**. e.g.: include measures of symptom change
  - **GETTING MORE HELP**. e.g.: include measures of impact on life
  - **GETTING RISK SUPPORT**. e.g.: include measures of risk management



# Performance management, quality improvement and The THRIVE Model



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A 6-step process applied to each of the four elements of THRIVE provision, lead by the relevant funder/commissioner

# 3

- Leads for each area of provision would collate information against relevant goals to the KPIs regularly (e.g. monthly) and feed this information back to relevant staff
- Data will be considered relative to other involved in similar THRIVE activity using appropriate statistical analyses.





# Performance management, quality improvement and The THRIVE Model



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## 4

- When outcomes or activity vary significantly from other in a negative way:
- That group of staff to be supported to explore if variation is warranted or not using the Queensland evidence pyramid
- These meetings should include directed discussions
  - Are these differences unwarranted?
  - What would staff do differently?



# Performance management, quality improvement and The THRIVE Model



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A 6-step process applied to each of the four elements of THRIVE provision, lead by the relevant funder/commissioner

# 5

- Staff are encouraged to try improvements aimed at addressing unwarranted variation and enhancing service quality
  - Use of statistical process control methodology (e.g.: run charts)
  - Use of PDSA cycles
  - Use of learning sets



# Performance management, quality improvement and The THRIVE Model



Alongside The THRIVE Model, performance management can be approached with the MINDFUL model (Wolpert, 2014)

A 6-step process applied to each of the four elements of THRIVE provision, lead by the relevant funder/commissioner

# 6

- Quarterly joint meetings of users, commissioners and providers
  - Review progress against KPIs for each element of the THRIVE Model
  - Spread learning across service



# THRIVE

## The AFC-Tavistock Model for CAMHS

*Miranda Wolpert, Rita Harris,  
Melanie Jones, Sally Hodges,  
Peter Fuggle, Rachel James,  
Andy Wiener, Caroline Mckenna,  
Duncan Law, Peter Fonagy*



Alignment with best practice in child mental health

Alignment with emerging payment systems

Options for more targeted quality improvement

Greater clarity about agency leadership

Potential for more targeted funding

Options for more targeted performance management

Potential for more transparent discussion between providers and users