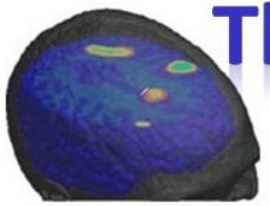

The EDAPT Clinic

SacEDAPT

UNDERSTANDING PSYCHOSIS

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Outline for Talk

- What is Psychosis?
  - Symptoms, Epidemiology, Course of Illness
- How does Psychosis develop?
  - High risk period
- What causes Psychosis?
  - Brain, genetics, environment…

Common Misconceptions

Split Personality?

Only males?

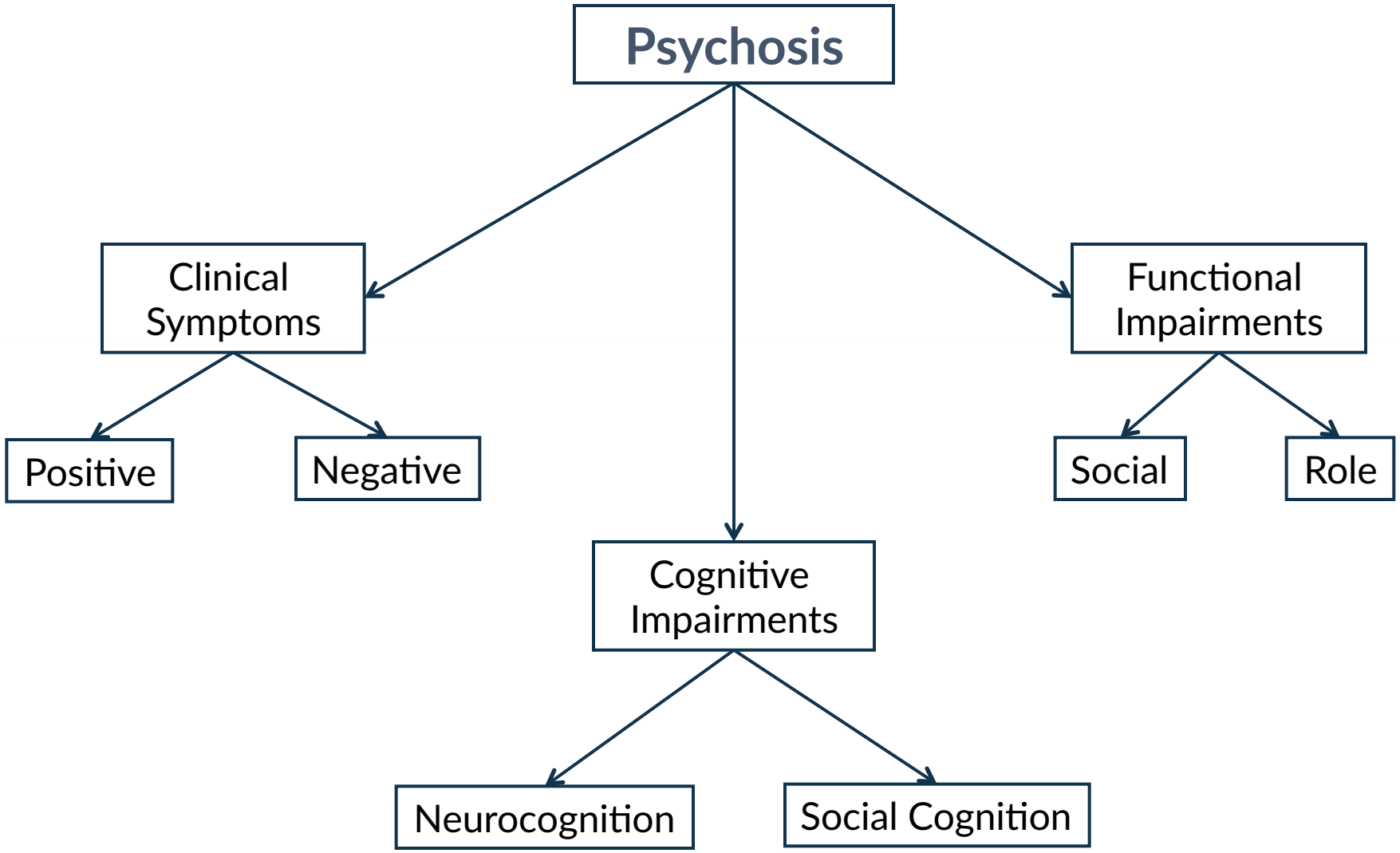
Can't function in society?

Homeless?

The mom's fault?

Violent?
Dangerous?

Reality


Psychosis
Clinical Symptoms
Functional Impairments
Positive
Negative
Social
Role
Cognitive Impairments
Neurocognition
Social Cognition

Clinical Symptoms

Positive Symptoms

- Exaggerations in normal human experiences (e.g. thoughts, sensory experience) that aren't tied to reality, held with conviction (even if opposing evidence) & negatively impact everyday functioning

- Delusions/Unusual thinking
  - Paranoia
  - Unusual/bizarre beliefs
- Hallucinations
  - Auditory (most common), visual, somatic, olfactory
- Thought disorder
  - Disorganized communication, thought blocking

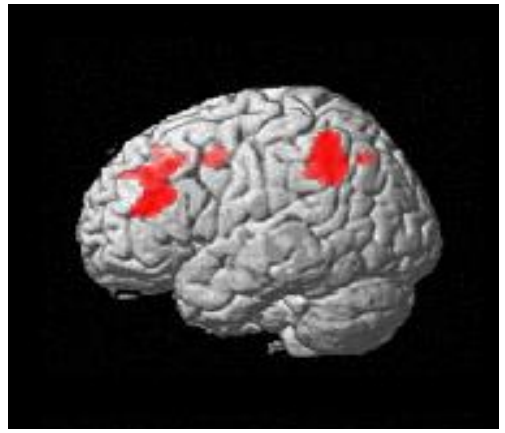
Clinical Symptoms

Negative Symptoms

- Loss or withdrawal of qualities that make us emotionally-connected and motivated human beings

- Anhedonia - loss of interest in pleasurable activities (e.g. social interactions, hobbies)
- Avolition - lack of motivation for goal-directed behavior (e.g. work/school, chores, hygiene)
- Flat Affect - reduced expression of emotion through face, body and voice
- Poverty of Speech – reduced verbal output

Cognitive Impairments



Psychosis is a brain based disorder

- Impairments in attention, working memory, problem solving, cognitive control

- Social Cognition
  - Processing social & emotional stimuli
  - Impairments in: Emotion perception & regulation, theory of mind

→Impairments present prior to onset & predict everyday functioning

Functional Impairments

- Everyone wants meaningful roles, goals and relationships in their life!
  - Challenges are frustrating to clients and families!
- Role Functioning = Responsibilities and involvement in Job/school/ home/community
- Social functioning = # of friends, nature of relationship, amount of social contact, social engagement
- Strongly related to severity of negative & cognitive symptoms
- Functioning prior to illness onset tends to predict outcome and should be considered in developing treatment goals

Psychotic Symptoms Occur within Many Diagnoses

Non-Affective Psychosis	Affective Psychosis	Other
Schizophrenia	Bipolar Disorder w/psychotic features	Dementias/Alzheimer's
Schizophreniform	Depression w/psychotic features	Borderline Personality
Schizoaffective	PTSD	Substance Induced
Delusional Disorder		Organic – Head injury, seizures, etc
Brief Psychotic Disorder		
Unspecified Psychotic Dx		

Epidemiology

- Found in 2% of population world wide
  - Approximately 31.7 per 100,000 new cases per year → 475 NEW individuals per year in Sacramento County
- More common in men than women
- Mean age of onset = 20
  - Range = 15 – 35 years
  - Men earlier than women (17 vs 22 yrs)
  - Early onset (before puberty) is uncommon but does exist.

Epidemiology

HOWEVER… psychotic-like symptoms are common

- 28% of individuals endorsed psychosis-screening questions in national comorbidity survey

- 20.9% of individuals presenting for treatment at urban primary care centers report one or more psychotic symptoms, most commonly auditory hallucinations

→ Indicative of psychosis spectrum ranging from normal to illness…

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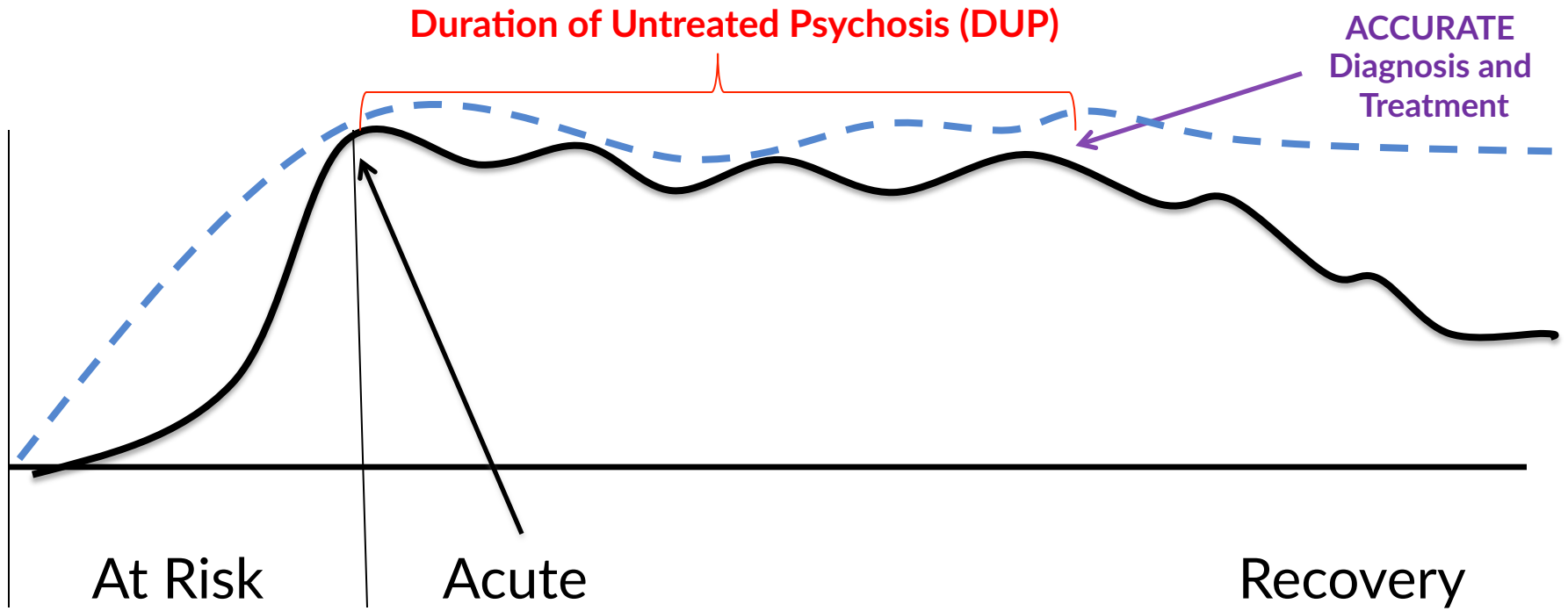
Kendler et al. 1996; Olfson et al. 2002; van Os et al. 2009

Symptoms Start Before Diagnosis

Positive symptoms = Hallucinations, Delusions, Thought Disorder

Negative symptoms = Lack of motivation, interest in pleasurable activities, flat affect, paucity of speech

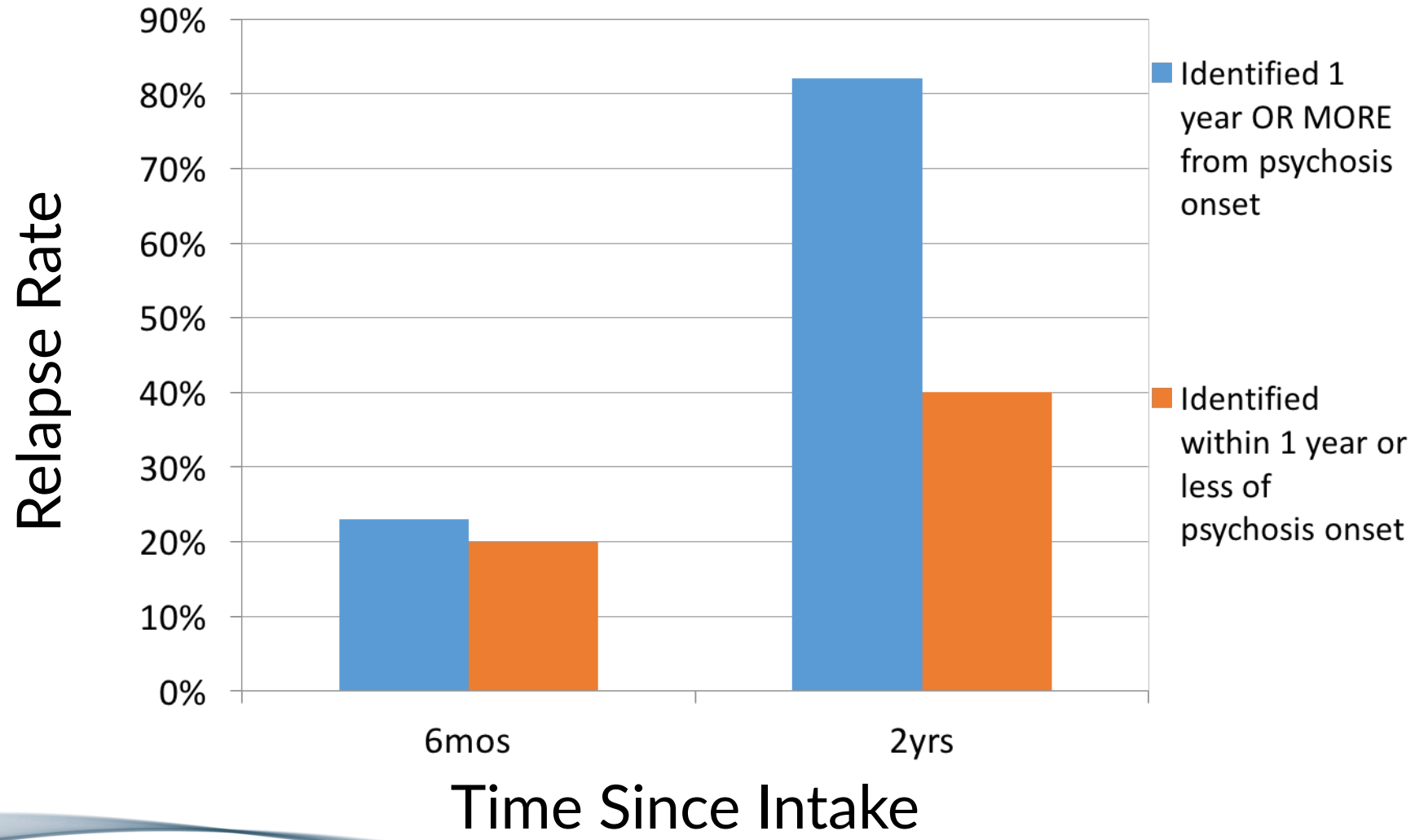


Course of Illness

- Average delay between symptom onset and starting treatment = 18.5 months (Kane et al., 2015)
  - Duration of Untreated Psychosis (DUP) → single best predictor of long term outcome

- "Early" Psychosis = first 5 years after onset of symptoms.
  - "Critical period" during which treatment has its biggest impact
  - Often focus on MAINTAINING functioning, rather than recovering functioning that was lost

Relapse Rates Increase with DUP



Adapted From: Crow et al., British J Psychiatry, 1986

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Course of Illness

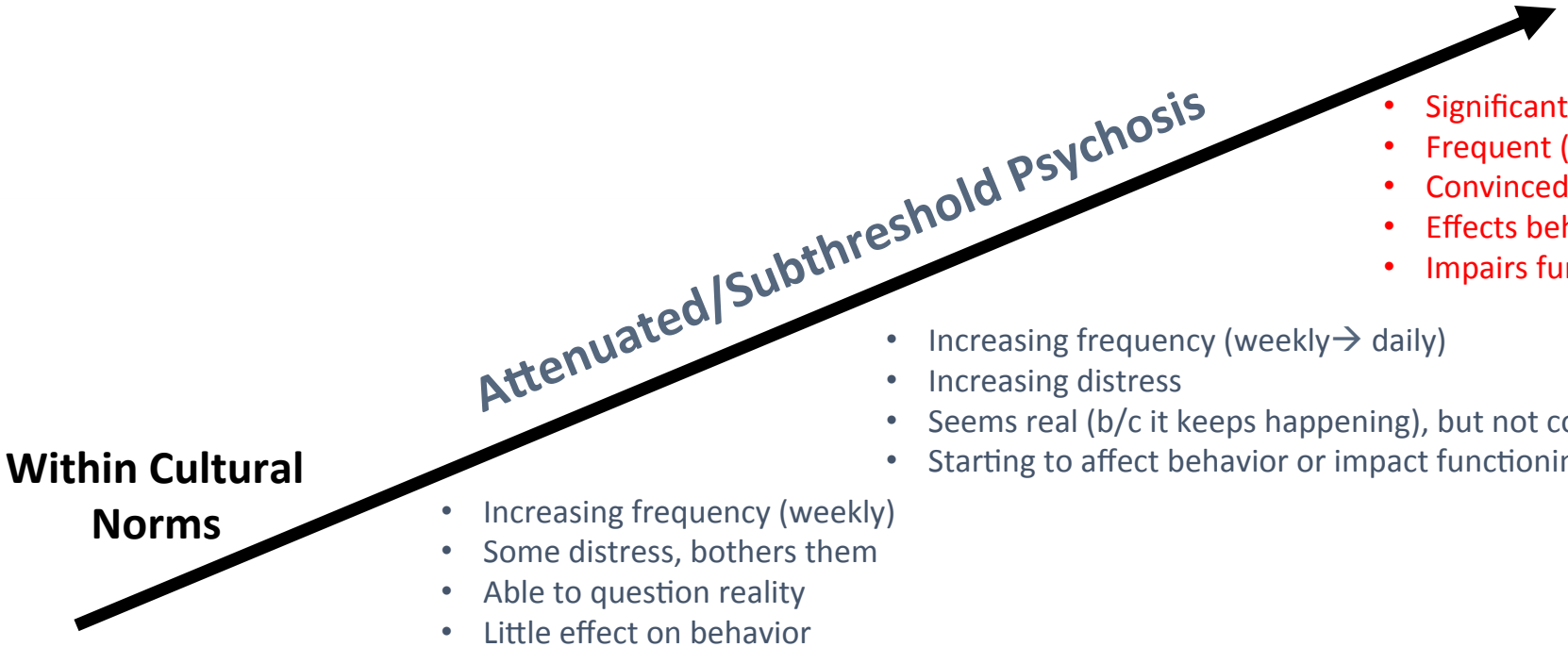
- Early functioning tends to be best predictor of later functioning
- High rates of disability – 20+% of Social Security benefits are used to care for individuals with SZ
- 25-50% of individuals with SZ will attempt suicide, 10% will succeed
  - Most common during early phase of illness
- Recovery is possible!
  - Not just about controlling symptoms (typically with meds)
  - Focus on hope, wellness, independence, citizenship, and pursuit of meaningful goals and roles (Ahmed et al., 2016)
  - Associated with engagement from family and support persons in treatment model

When Do Early Signs of Psychosis Occur?

- Early warning signs (subthreshold symptoms = “at risk phase”) can appear 1-3 years prior to full psychosis
  - Likely association with brain maturation

- Psychotic Symptoms exist on a continuum from subthreshold to fully psychotic
  - Early signs present as changes in thoughts, experiences, behavior and functioning
  - Perceptual abnormalities, unusual beliefs, uncharacteristic behaviors

PSYCHOSIS CONTINUUM



- Significant Distress
- Frequent (weekly, daily)
- Convinced it is real
- Effects behavior
- Impairs functioning

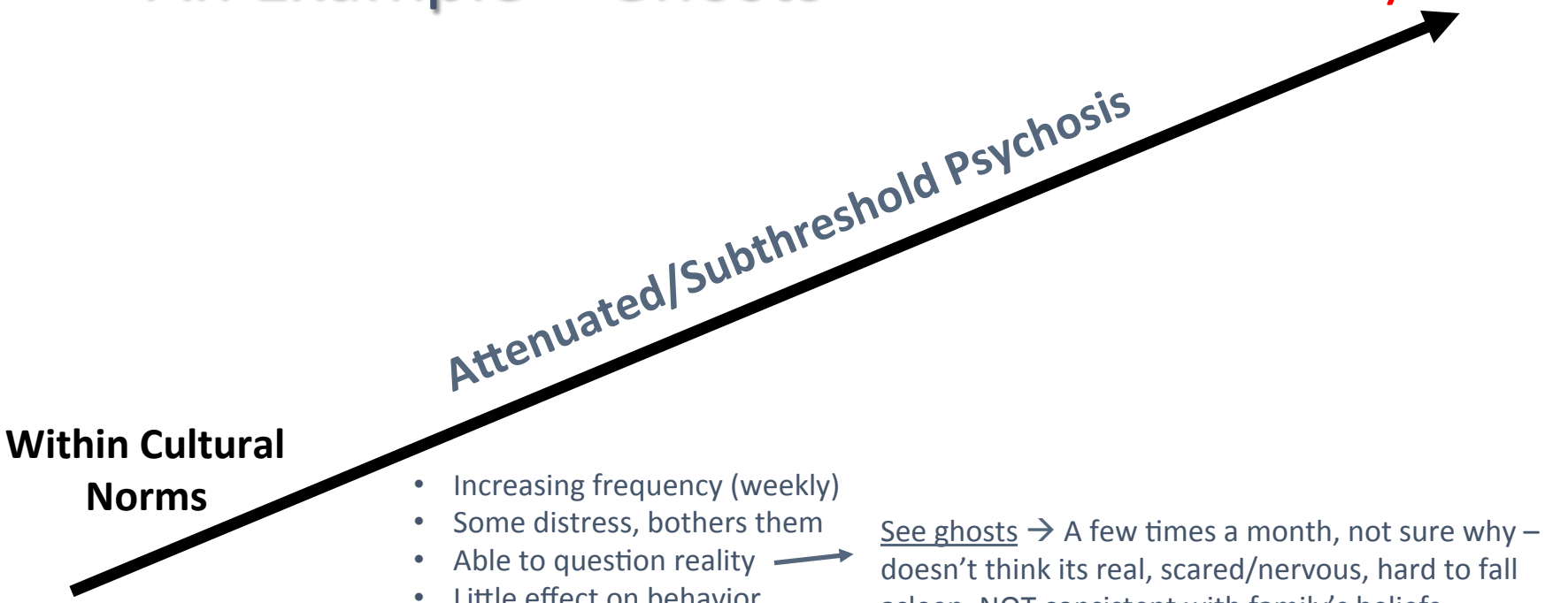
- Increasing frequency (weekly→ daily)
- Increasing distress
- Seems real (b/c it keeps happening), but not convinced
- Starting to affect behavior or impact functioning

- Increasing frequency (weekly)
- Some distress, bothers them
- Able to question reality
- Little effect on behavior

- No Distress
- Infrequent/rare
- No effect behavior/functioning
- Consistent with cultural beliefs

PSYCHOSIS CONTINUUM

An Example = Ghosts



- Increasing frequency (weekly)
- Some distress, bothers them
- Able to question reality
- Little effect on behavior

<u>See ghosts</u> → A few times a month, not sure why – doesn't think its real, scared/nervous, hard to fall asleep, NOT consistent with family's beliefs

- No Distress
- Infrequent/rare
- No effect behavior/functioning
- Consistent with cultural beliefs

<u>Saw a ghost</u> → One time, thought it was loved one who had recently passed, felt comforted, no change on behavior, consistent with family's beliefs

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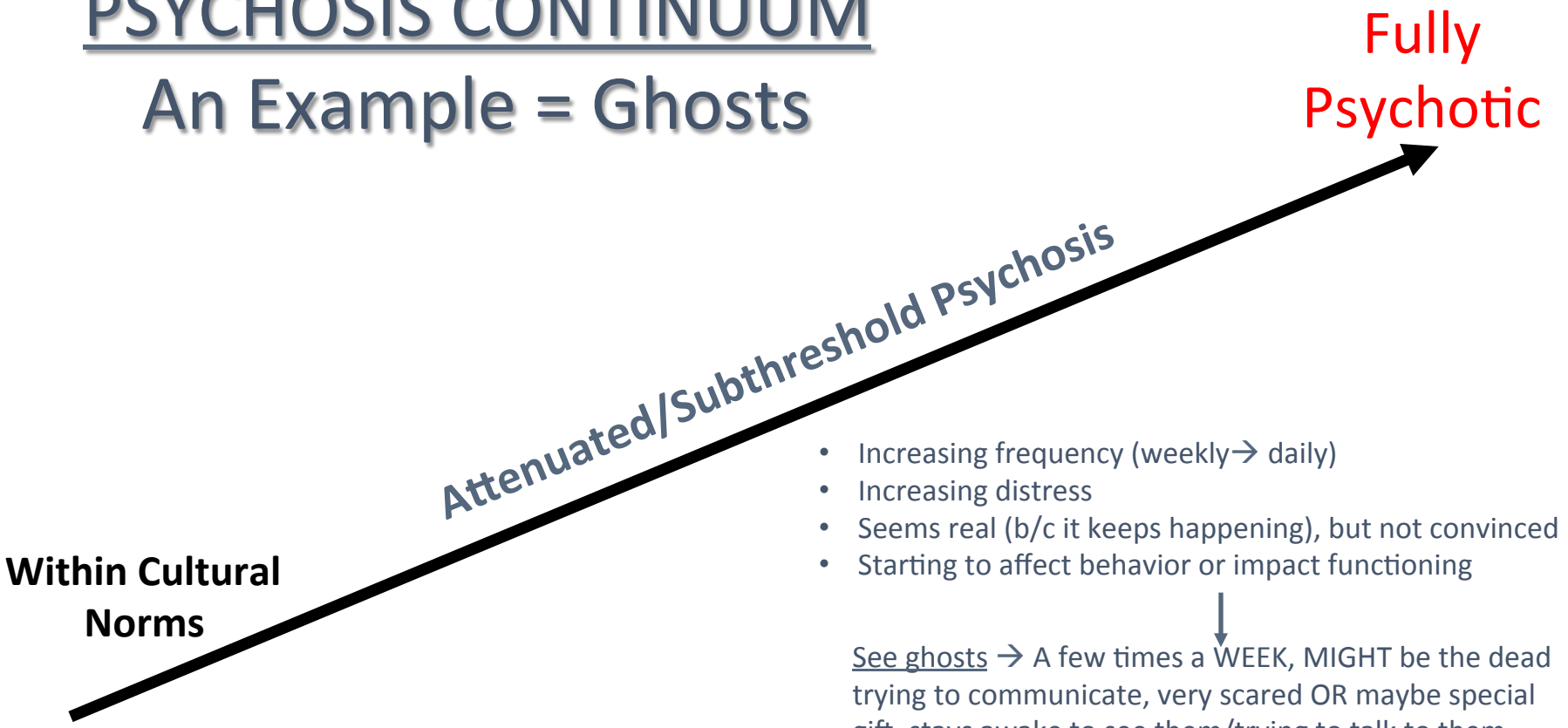
PSYCHOSIS CONTINUUM

An Example = Ghosts

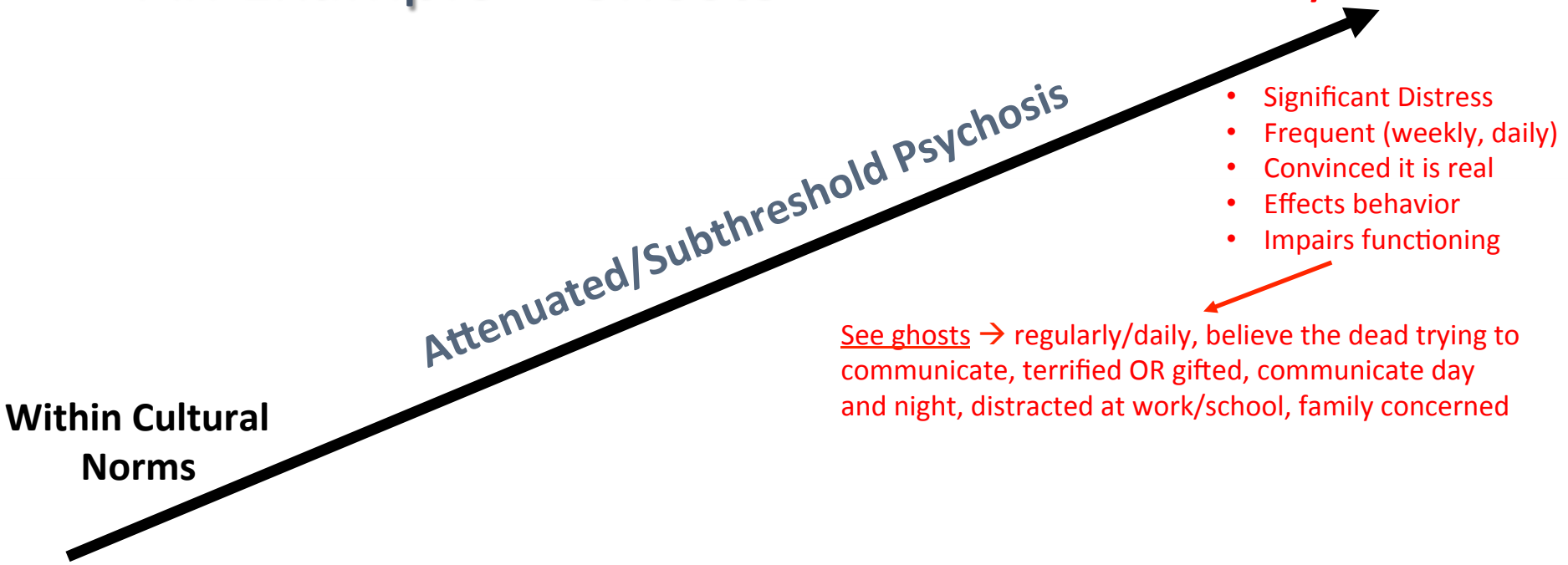


- Increasing frequency (weekly→ daily)
- Increasing distress
- Seems real (b/c it keeps happening), but not convinced
- Starting to affect behavior or impact functioning

See ghosts → A few times a WEEK, MIGHT be the dead trying to communicate, very scared OR maybe special gift, stays awake to see them/trying to talk to them, NOT consistent with family's beliefs

PSYCHOSIS CONTINUUM

An Example = Ghosts



Important Issues to Consider:

- Developmental norms
  - Metacognition (thinking about their thinking) is hard for young children → need to be concrete in your questions, look at effect on behavior
  - Some behaviors are normal for younger children but not adolescents (e.g. imaginary friends)

- Cultural or familial context of the experience
  - e.g. belief in ghosts by the family, or religious experiences

- Environmental factors
  - e.g. bullying at school, unsafe neighborhood
  - Do symptoms occur outside of these contexts, like at the grocery?

What Else Might I See?

Psychosis-spectrum symptoms often appear alongside a variety of COMMON NON-SPECIFIC clinical issues:

- A significant deterioration in the ability to cope with life events and stressors
  - Decrease in work or school performance
  - Decreased concentration and motivation
- Withdrawal from family and friends
- Decrease in personal hygiene

Careful Assessment is Needed

Non-specific symptoms *CAN* look similar to:

- Depression or Anxiety
- Substance Abuse
- Reaction to abuse or trauma
- Attention Deficit Hyperactivity Disorder
- Reaction to family stress
- Learning Disabilities
- Pervasive Developmental Disorders

How to Ask About Symptoms

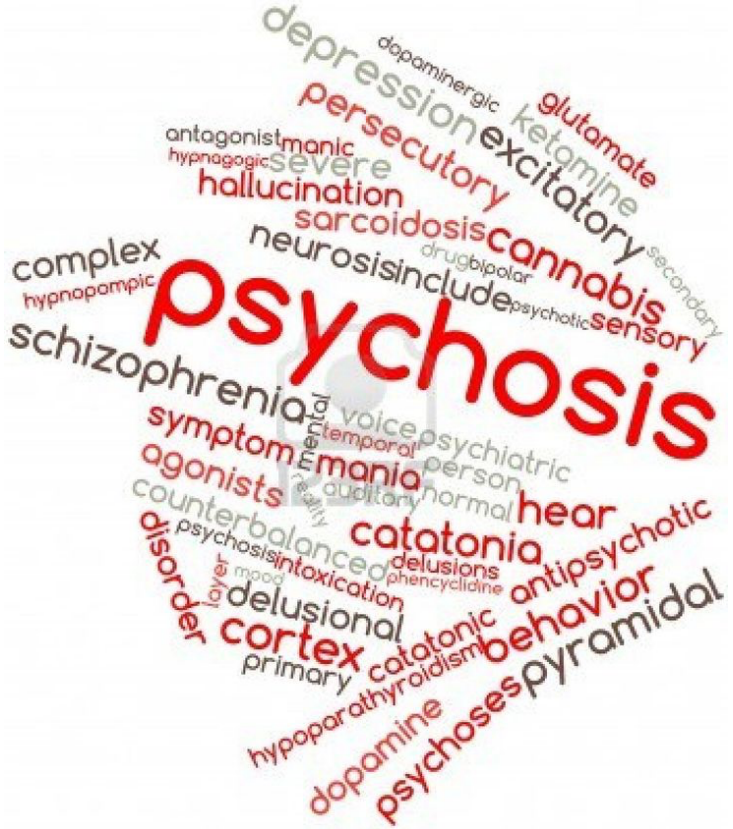
- Typical questions most clinicians use to ask about psychosis:
  - Do you ever see or hear things that others don't see or hear?
  - Do you ever think people are out to get you?

- **BETTER** questions to ask:
  - Do you feel like your mind is playing tricks on you?
  - Do you feel like you eyes/ears are playing tricks on you?
  - Are there ever times when you don't feel safe?
  - These questions are broad, non-threatening and can take you in many directions (OCD, abuse, etc) but will also pick up on attenuated psychosis if its there.

What causes Psychosis?

<u>Diathesis-Stress Model</u>

- Biological Factors
  - ⇧ Vulnerability to psychosis
- Environmental Factors
  - Prenatal Factors
  - Social
  - Family Factors



Onset triggered by <u>Biological X Environmental interaction</u>

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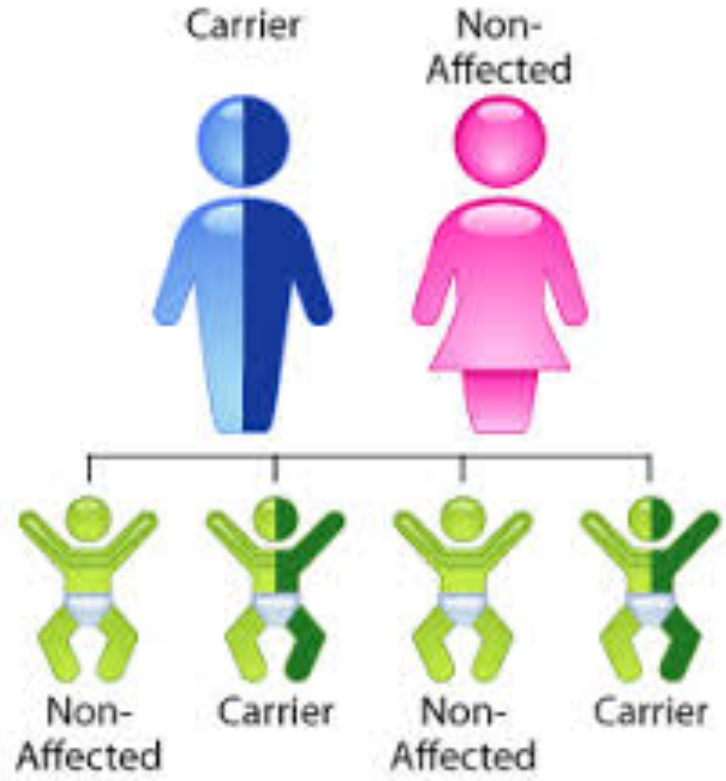
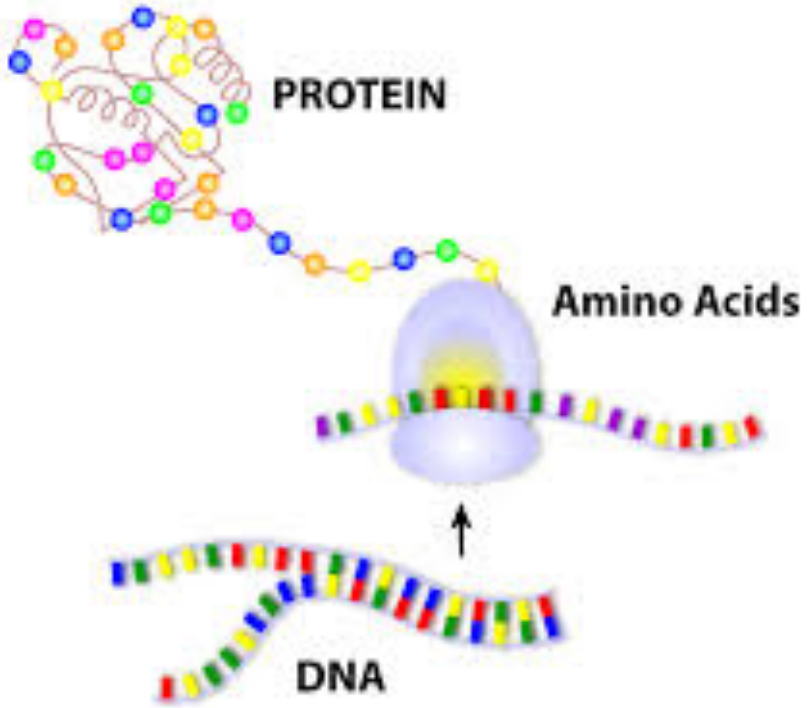
Biological Factors: Genetics

- Prevalence in General Population = 2%
- Highly heritable
- Risk increases with relationship
  - 10% for first degree relative (mom, dad, sis, brother) or fraternal twin
  - 50% concordance for monozygotic (identical) twin

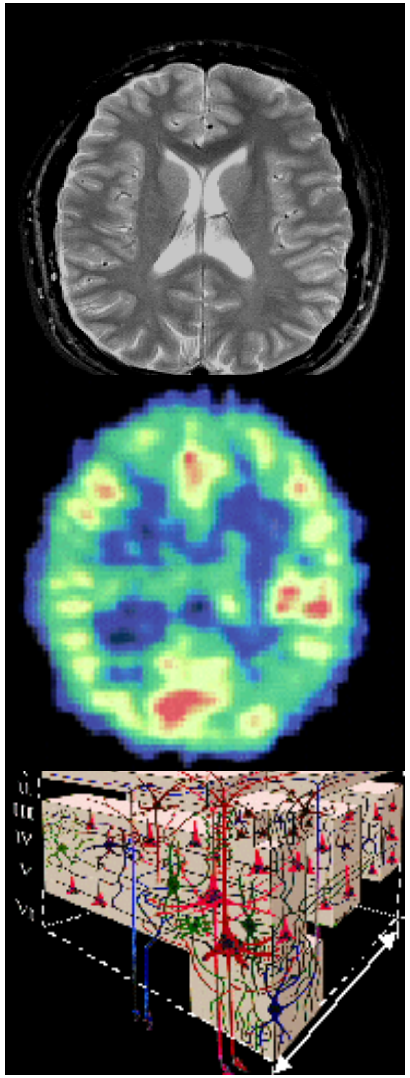


What is “transmitted?”

- Genes affect behavior not directly, but by producing proteins involved in brain structure and function
- Psychosis involves structural and functional changes to several brain systems (e.g., frontal lobe, medial temporal lobe)
  - Unaffected first-degree relatives of patients also have some of these changes
- Different genes may be involved in disturbance in different brain systems



Biological Complexity

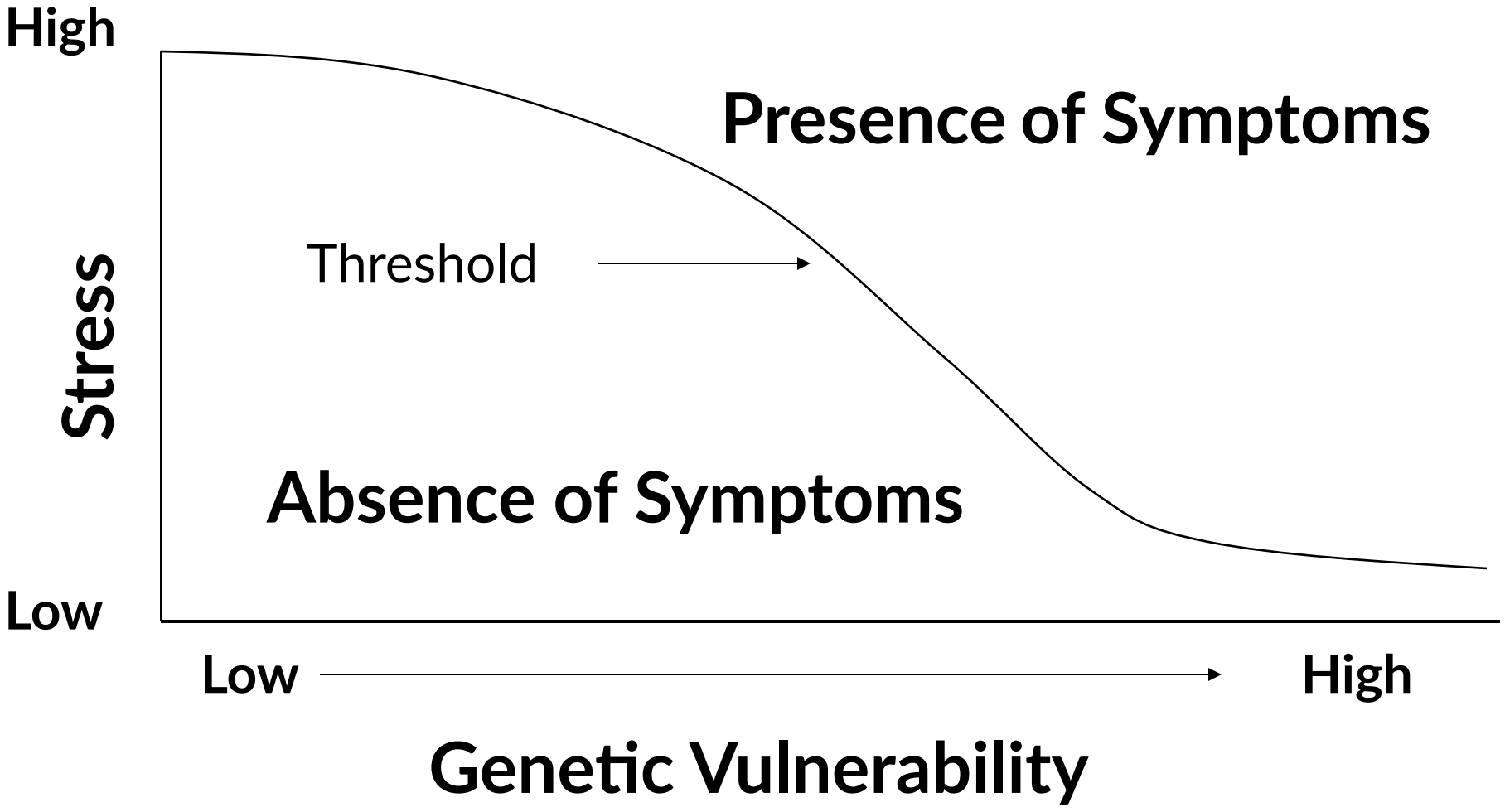


- Multiple systems impacted at multiple levels!
- Structural-Anatomical: cortical gray matter reduction, subcortical changes, sulcal & ventricular enlargement
- Functional-Physiologic: reduced or irregular activation during various cognitive tasks
- Cellular-Molecular: NT systems abnormalities → altered receptor distributions, increased cell density, decreased/aberrant connections between cells

Why is it hard to find “the” genes?

- Heterogeneity
  - Different genes may be important in different families, gene pools.
  - Different patients show different symptoms
- Many genes are involved, each has a very small effect
  - Unaffected relatives may have some degree of genotypic risk
- De novo (new) mutations may account for more cases than originally understood
- Some genes may depend on environmental stressors (e.g., birth complications) to be expressed

Vulnerability-Stress Model



Types of Environmental Factors

- Prenatal Factors
  - Birth Complications → Hypoxia
  - Malnutrition
  - Viral Infections → 2nd Trimester
- Social Factors
  - Adverse social and economic conditions
  - Trauma
- Family Factors
  - High stress, poor communication, problem solving, etc
- Drug Use

What are effective treatments?

- Biological Factors
  - Medication
  - Substance use management
- Cognitive/Psychological Factors
  - Cognitive Behavioral Therapy
  - Supported Education/Employment
  - Cognitive Remediation
  - Skills Training
- Environmental/Family Factors
  - Peer/Family Support
  - Integrating families into therapy

Our Clinic Rationale

- Duration of untreated psychosis is associated with poor outcome
- Early in illness treatment response is robust
- Loss of function and treatment resistance follow repeated relapses
- Early intervention can improve functional outcome
- Tailored treatment pathways and therapies for early treatment and rehabilitation

Learn more at http://earlypsychosis.ucdavis.edu

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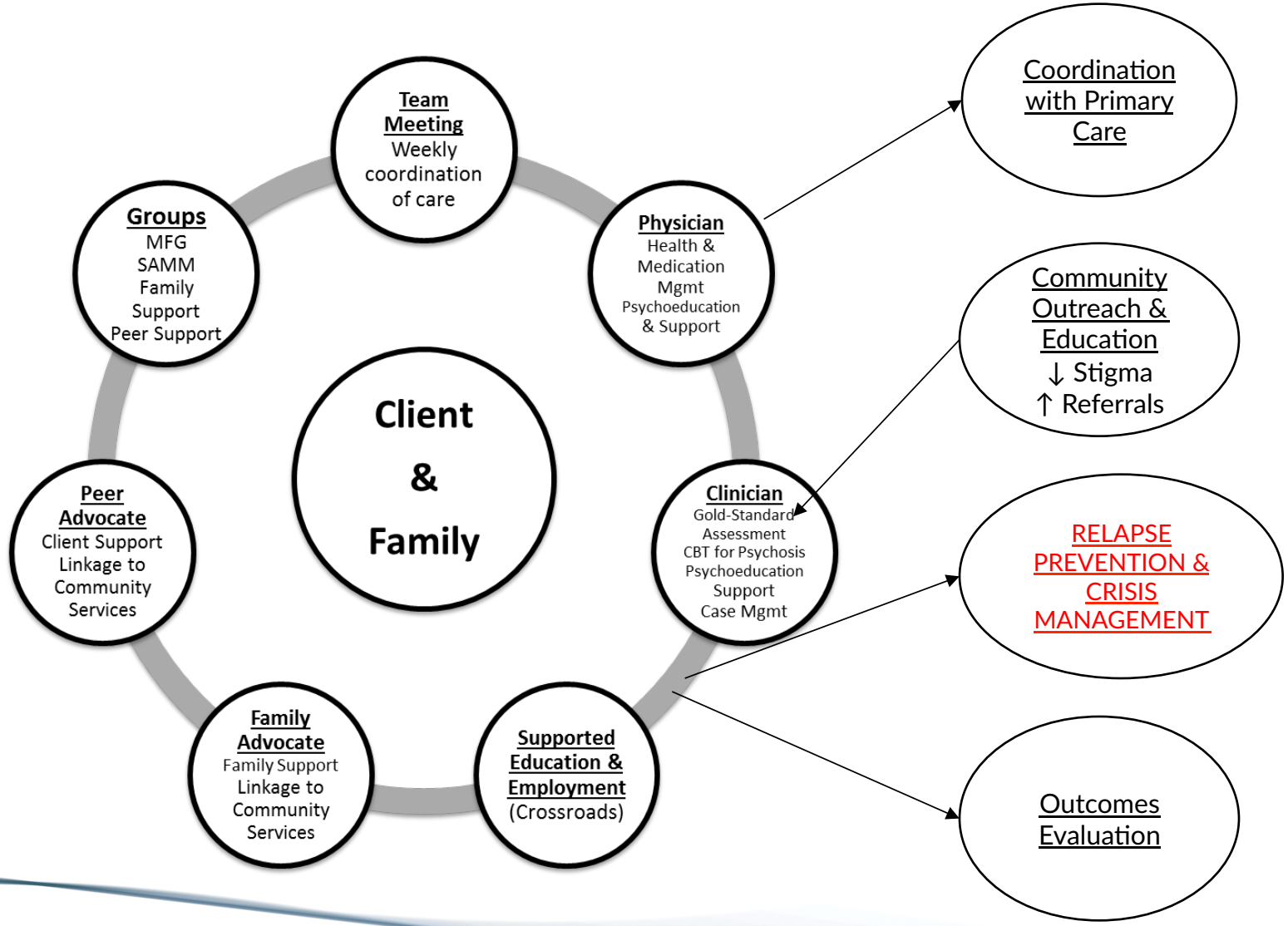
Coordinated Specialty Care Model



http://www.nimh.nih.gov/health/topics/schizophrenia/raise/coordinated-specialty-care-for-first-episode-psychosis-resources.shtml

QUESTIONS??