

# Actuaries Summit

**Think Differently**



**Actuaries  
Institute**

21-23 May 2017 • Grand Hyatt Melbourne





# Balancing the Challenges of Mental Health Claims in Insurance

Jane Dorter, Michael Dermody, and  
Joshua Martin.

© 2017 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

*This presentation has been prepared for the Actuaries Institute 2017 Actuaries Summit. The Institute Council wishes it to be understood that opinions put forward herein are not necessarily those of the Institute and the Council is not responsible for those opinions.*

# Agenda

- Mental health conditions, treatments and complexities
- Complexities arise because of interactions between biological, psychological and social factors
- Studies on these factors and relationship to mental health
- Technology and data opportunities
- Role of actuaries

# Mental Health

Mental illnesses can be considered:

‘a health problem that significantly affects how a person feels, thinks, behaves, and interacts with other people’

Different illnesses are classified based on how they impact these aspects...



# Overview of Mental Health Conditions

## Types of mental illness

**Mood Disorders** - Mood disorders refer to conditions that disturb a person's mood to the point where it becomes difficult to function in relationships or at work.

- Depression (including subtypes)
- Bipolar disorder
- Substance-induced mood disorder

**Anxiety Disorders** - People with anxiety disorders may be unable to stop worrying about seemingly unimportant things, and they perceive situations as much worse than they actually are.

- Generalised anxiety disorder
- Social anxiety disorder
- Agoraphobia
- Obsessive - compulsive disorder (OCD)
- Post traumatic stress disorder (PTSD)
- Panic disorder

**Psychotic Disorders** - Psychosis or psychotic disorders describe illnesses that can make you have distorted thoughts or lose touch with reality.

- Schizophrenia
- Brief psychotic disorder
- Delusional disorder
- Substance-induced psychotic disorder

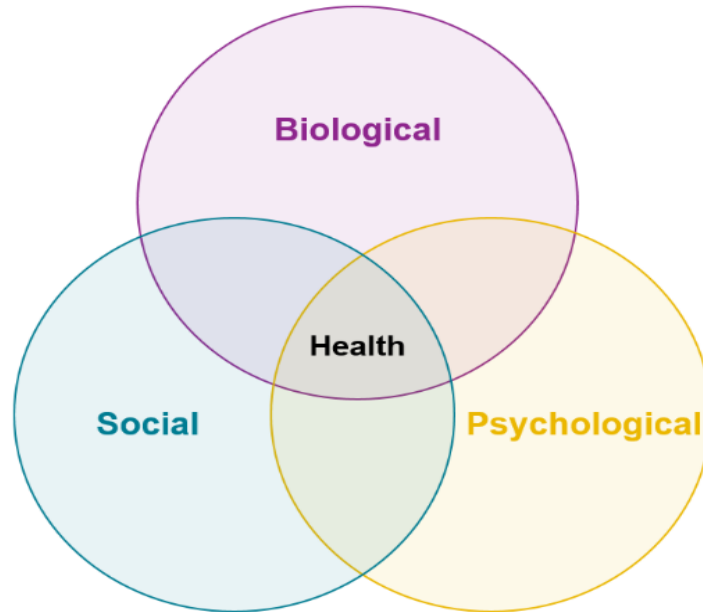
**Personality Disorders** - People with personality disorders find it hard to change their behaviour or adapt to different situations. They may have trouble sustaining a job or forming positive relationships with others.

- Antisocial personality disorder
- Borderline personality disorder
- Narcissistic personality disorder
- Dissociative identity disorder
- Avoidant personality disorder
- Histrionic personality disorder

**Eating Disorders and Body Image** - Unusually preoccupied with food and their weight

- Anorexia nervosa
- Binge-eating disorder (BED)
- Body dysmorphic disorder
- Bulimia nervosa
- Disordered eating

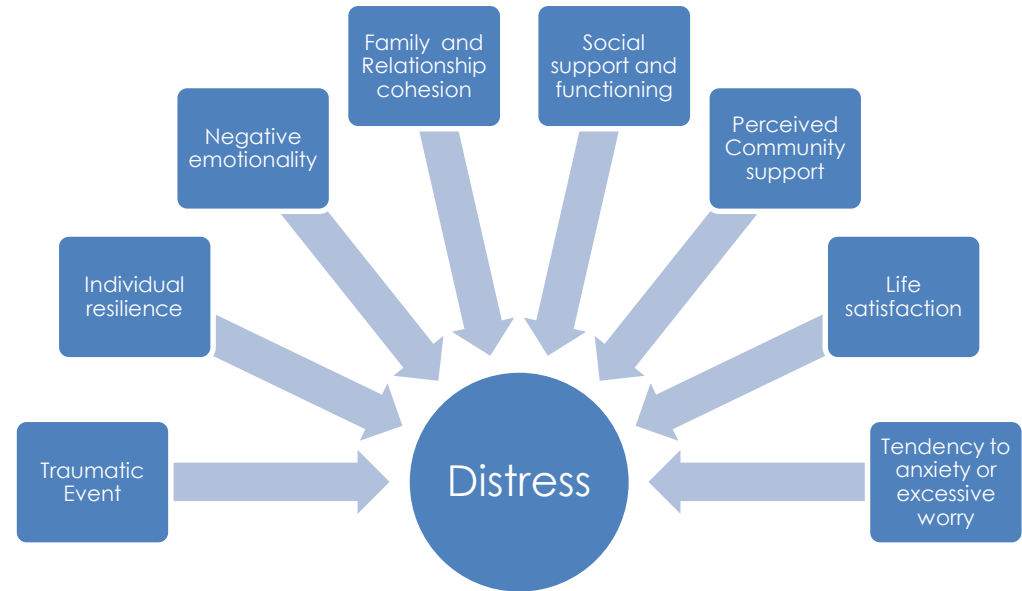
# Mental Health is Impacted by Biological, Social and Psychological Factors



# Overview of Mental Health Conditions

## Distinguishing between BPS factors

- Boundary between normal distress and mental illness difficult to ascertain
- Medicalization of normal reactions to abnormal situations
- 41% of workers comp mental health claims due to reaction to stressors rather than specific DSM V diagnosis.



# Overview of Mental Health Conditions

Separating impairment, disability and handicap.

Impairment	Disability	Handicap
In the context of health experience an impairment is any loss or abnormality of psychological, physiological or anatomical structure or function.	In the context of health experience a disability is any restriction or lack (resulting from the impairment) of ability to perform an activity in the manner, or within the range considered normal, for a human being	In the context of health experience a handicap is a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual.

The benefit terms in insurance products are framed around a level of “handicap” or “disability” in the WHO disability framework, rather than only considering whether the insured has been clinically diagnosed with a mental illness(es) (“impairment”).



# Overview of Biopsychosocial (BPS) Approaches

## Clinical application of BPS

- BPS isn't new. It has existed in the clinical world for some time.
- Strongest predictors of prolonged absence are psychosocial rather than biomedical (Gabbe et al, 2007)

### Psychosocial (individual)

- Beliefs about pain or injury
- Coping strategies
- Passive role in treatment
- Previous experiences
- Family situation

### Perceptions of work

- Relationship with line manager
- Unpleasant work, low job satisfaction
- Under performance management
- Lack of role security

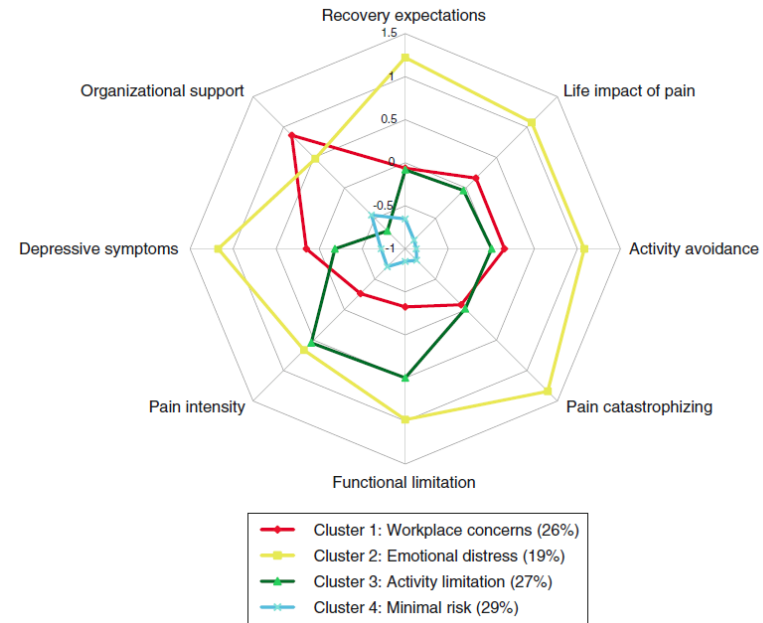
### Context

- Company policy on rehabilitation
- Legislation/litigation
- Contractual requirements of policy

# Studies of Social and Psychological Risk Factors for Mental Health

Overseas analysis and evidence of importance of BPS factors

- US workers comp example

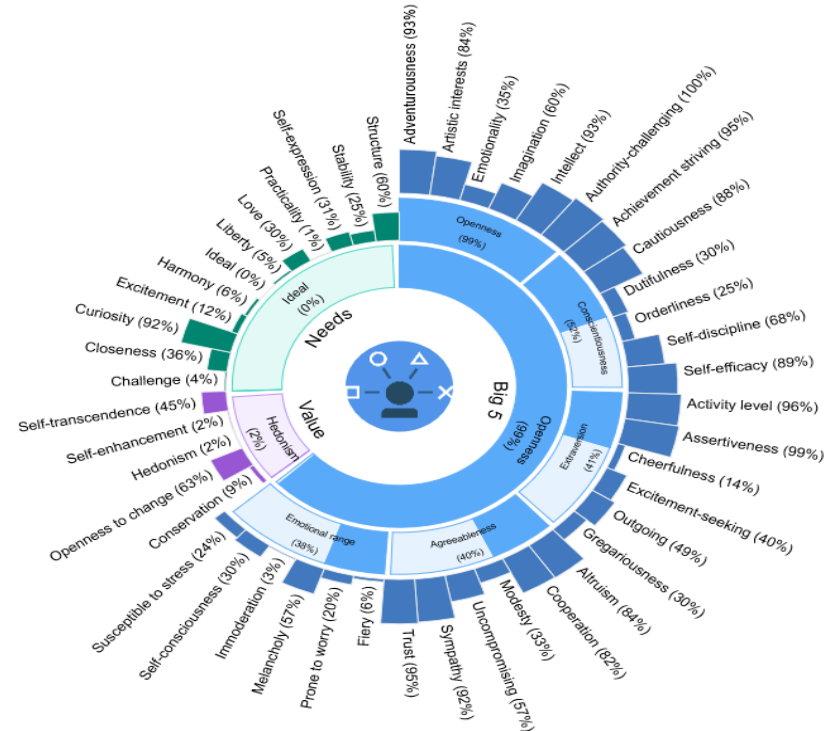


# Studies of Social and Psychological Risk Factors for Mental Health

Return to Work Expectations	Co-operation and Trust	Workplace and Work Environment	Personality
Person on claim	Stress in claims process	Workplace conflict	Emotional stability
Of the doctor	Fairness and perceived injustice	High job demands	Conscientiousness
Of the claims manager		Low levels of autonomy	
Benchmark for condition based on clinical database (e.g. MD Guidelines, ODG)		Job insecurity	

# How Technology can Enable

- Use of cognitive intelligence:
  - Understanding personality traits at claim time can support greater understanding of individual need and an ability to match intervention with the right capability.
  - Capturing personality traits using IBM Watson



# How Technology can Enable

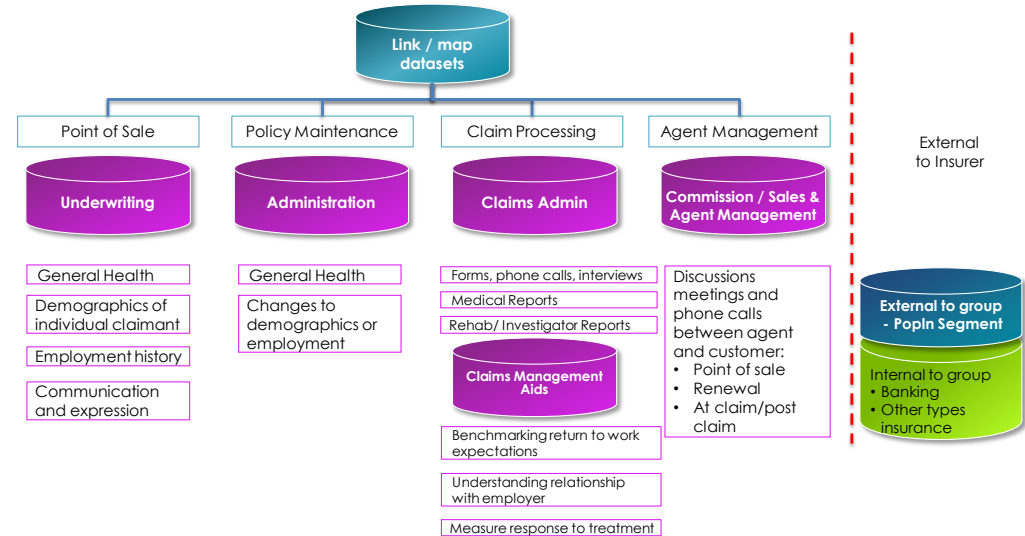
- Use of cognitive intelligence:
  - Sentiment Analysis – Improving relationships with people on claim
    - Analysis of different forms of communication (vocal / written)
  - Highlights the opportunity that improved data capture provides.
  - Allows case managers to adjust their approach in real time

# Actuarial Analysis and Data Sources

- The role of actuaries
- Expand business understanding and claims context
- Making the actuarial basis more predictive
- Sharing insights and the feedback loop
- Identifying risks, opportunities and uncertainties

# Actuarial Analysis and Data Sources

- Data sources:
  - There are a large number of potential data sources and systems involved in insurance
  - Extracting and linking data has challenges



# Conclusion

- Mental health conditions and treatment is complex
- Claims management approaches recognise social and psychological aspects
- One key to further improvement is efficient and accurate identification of these
- New and emerging technologies have the potential to enable this
- Actuaries need to build on our existing capability and provide insights using advanced techniques