



Ascension Brighton

Center for Recovery

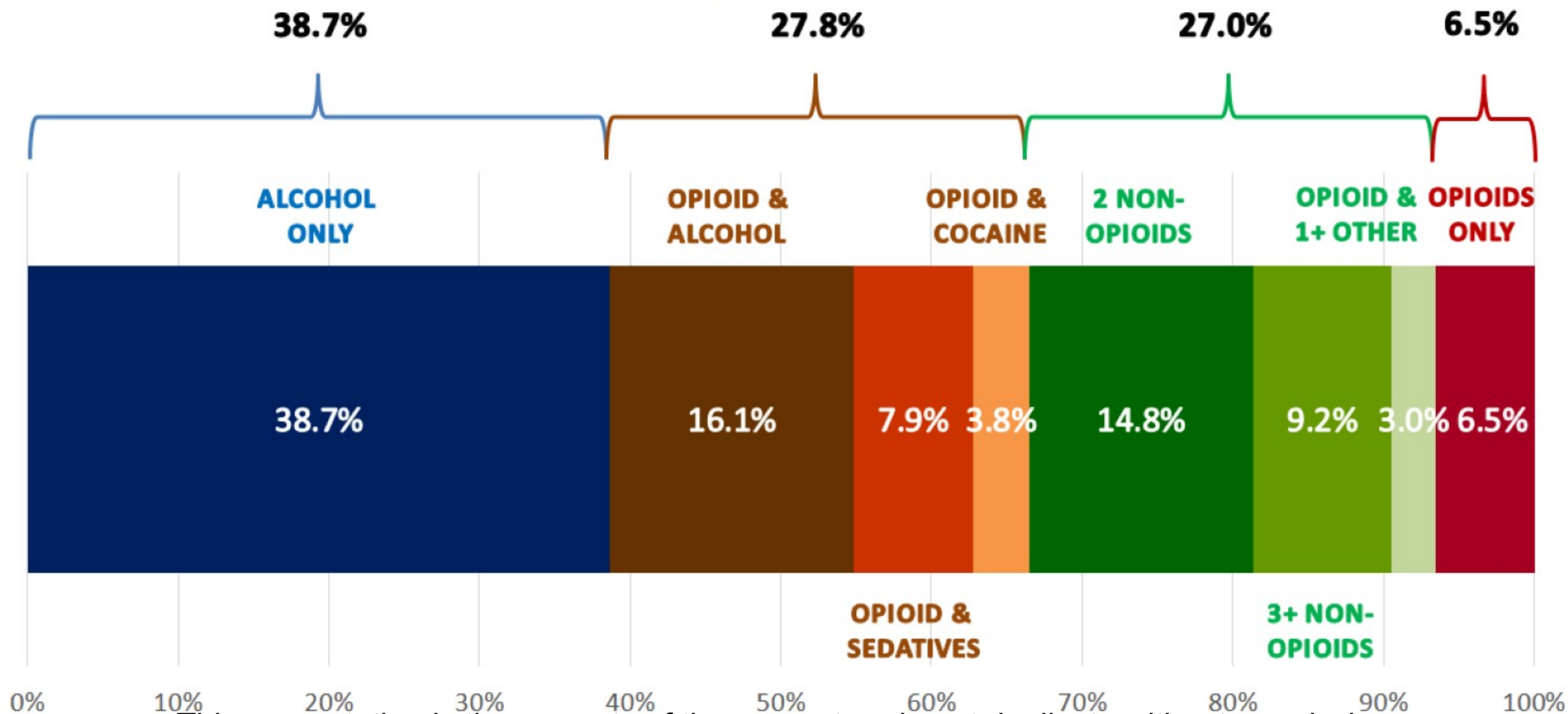
Raymond Waller, MPH – Hospital Administrator

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N = 5327

Patient Makeup At Brighton By Substance of Abuse

October, 2016 - October, 2018



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Brain



2% of Body Mass

Consumes 20% of Body Energy



Thiamine & Glucose

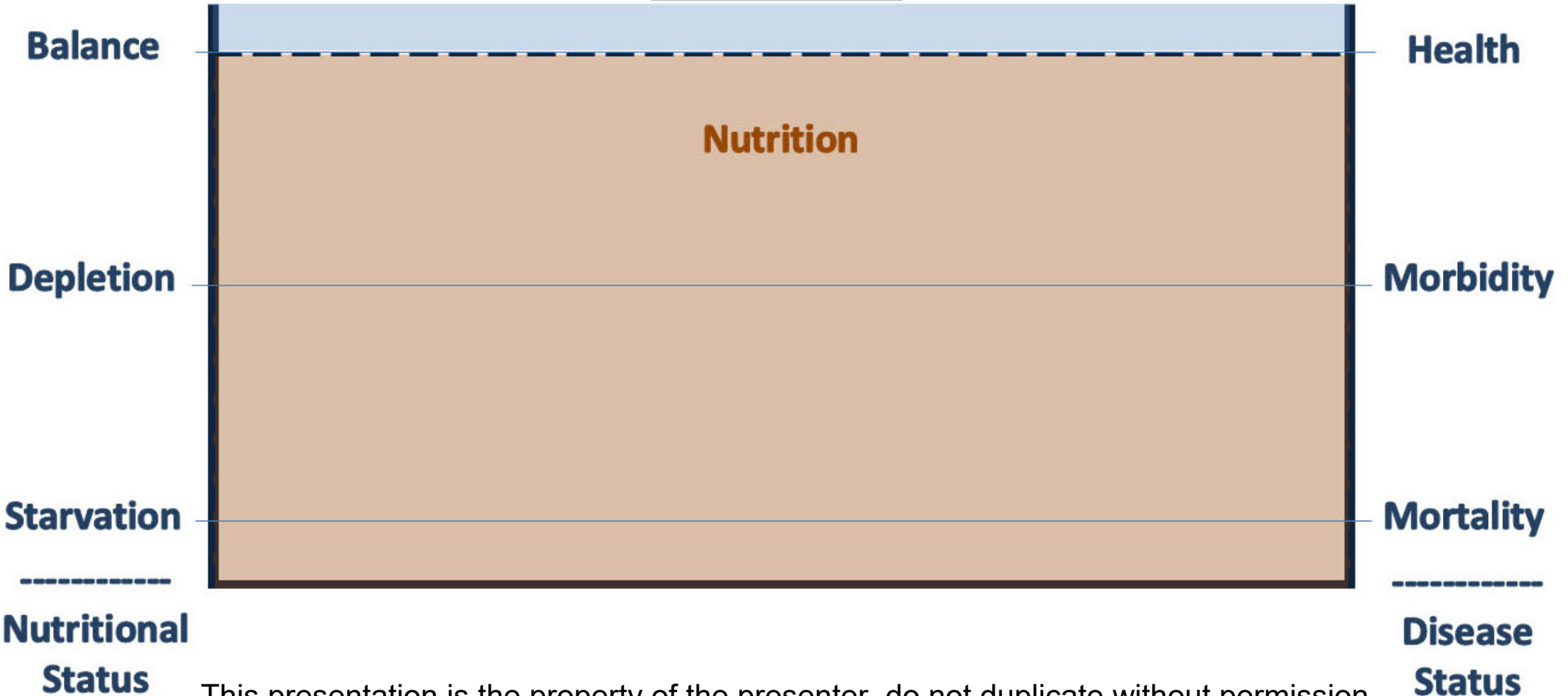


Mitochondria >> Brain Metabolism

Production of ATP



Homeostasis Diabetes



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Chronic Stress



Cortisol



Oxidative Stress

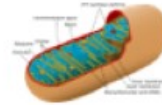
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Homocysteine



B2, B6, B9 & B12



Mitochondrial Dysfunction

Lipid Degradation



DHA, EPA & Other PUFA



Lipid Rafts

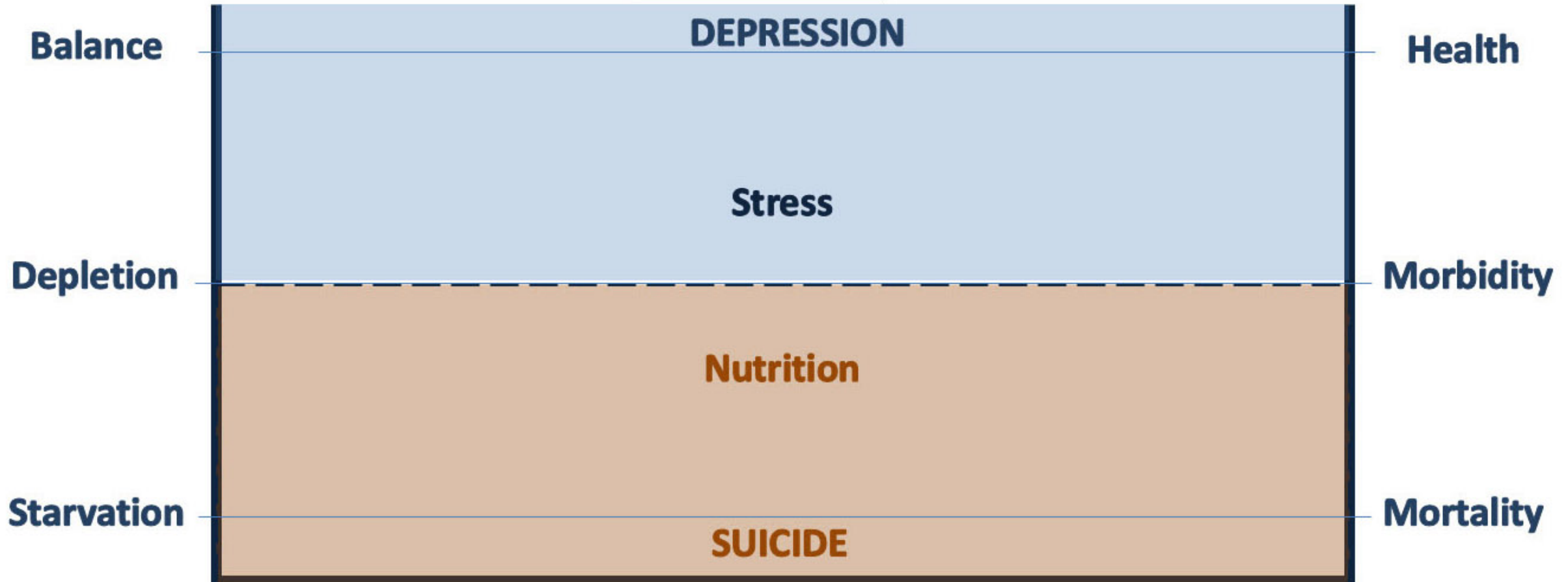
Omega 3

Impacts Neurotransmitter Signaling

Depression / Suicide



Substance Abuse Diabetes



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Apoptosis



Depression >> Suicidal Ideation

2017 Study, I.U. School of Medicine

90% SI Predictive Without Asking SI

77% Predictive Future Hospitalizations

Nutrition!!!

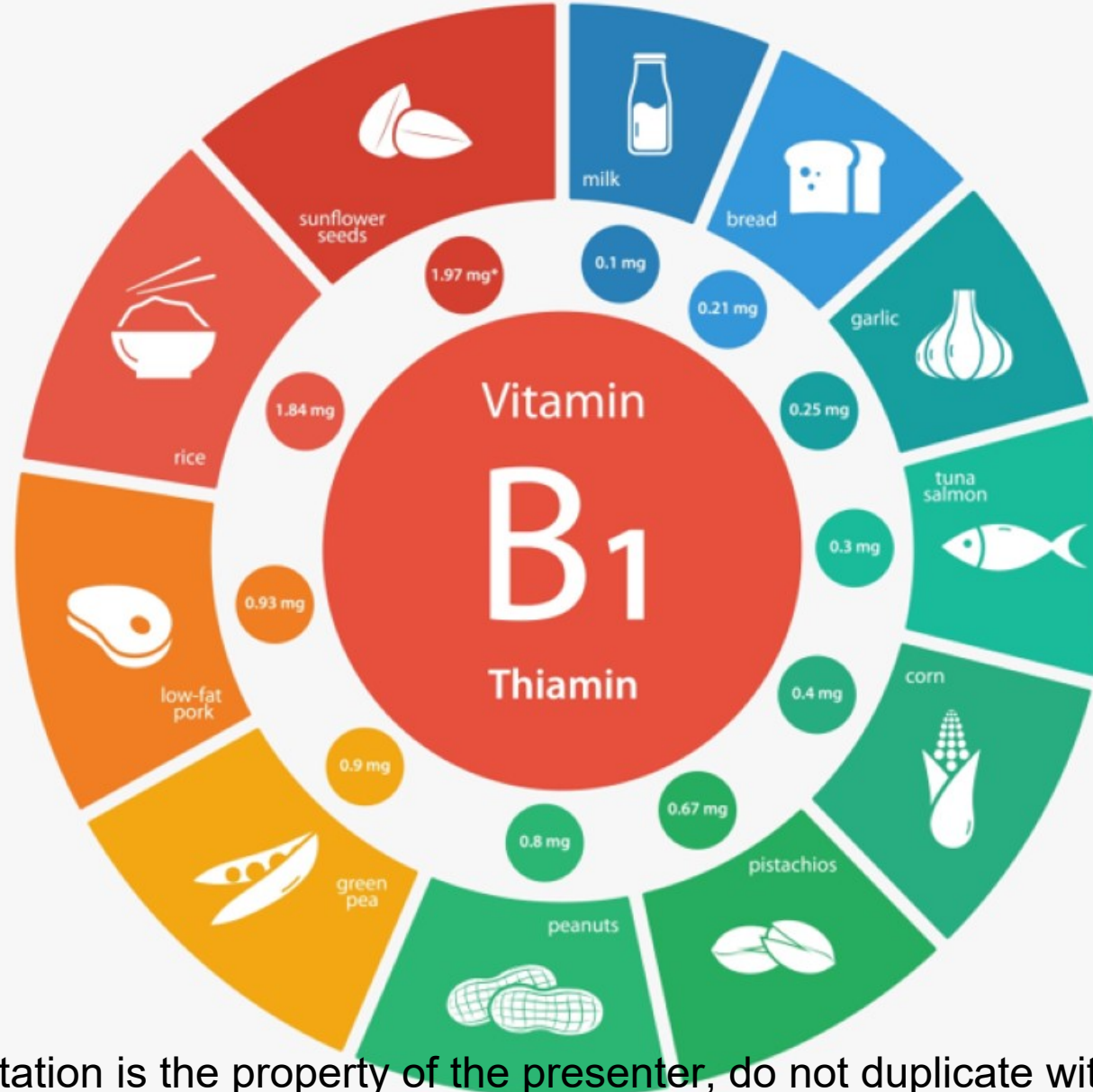
References

1. Niculescu, A., Le-Niculescu, H., Levey, D., Phalen, P., Dainton, H., Roseberry, K., et al. (2017). Precision medicine for suicidality: from universality to subtypes and personalization. *Molecular Psychiatry*, 22, 1250–1273.
2. Jing, D., Ming, Z., Hongkun, B., Bai, et al. (2017). The role of nutrients in protecting mitochondrial function and neurotransmitter signaling: implications for the treatment of depression, PTSD, and suicidal behaviors. *Critical Reviews in Food Science and Nutrition*, 15(56), 2560–2578.
3. Niculescu, A., Levey, D., Phalen, P., Le-Niculescu, H., Dainton, H., Jain, N., Belanger, E., James, A., George, S., Weber, H., Graham, D., Schweitzer, R., Ladd, T., Learman, R., Niculescu, E., Vanipenta, N., Khan, F., Mullen, J., Shankar, G., Cook, S., Humbert, C., Ballew, A., Yard, M., Gelbart, T., Shekhar, A., Schork, N., Kurian, S., Sandusky, G., Salomon, D., (2015). Understanding and predicting suicidality using a combined genomic and clinical risk assessment approach. *Molecular Psychiatry*, 20(11), 1266–1285.

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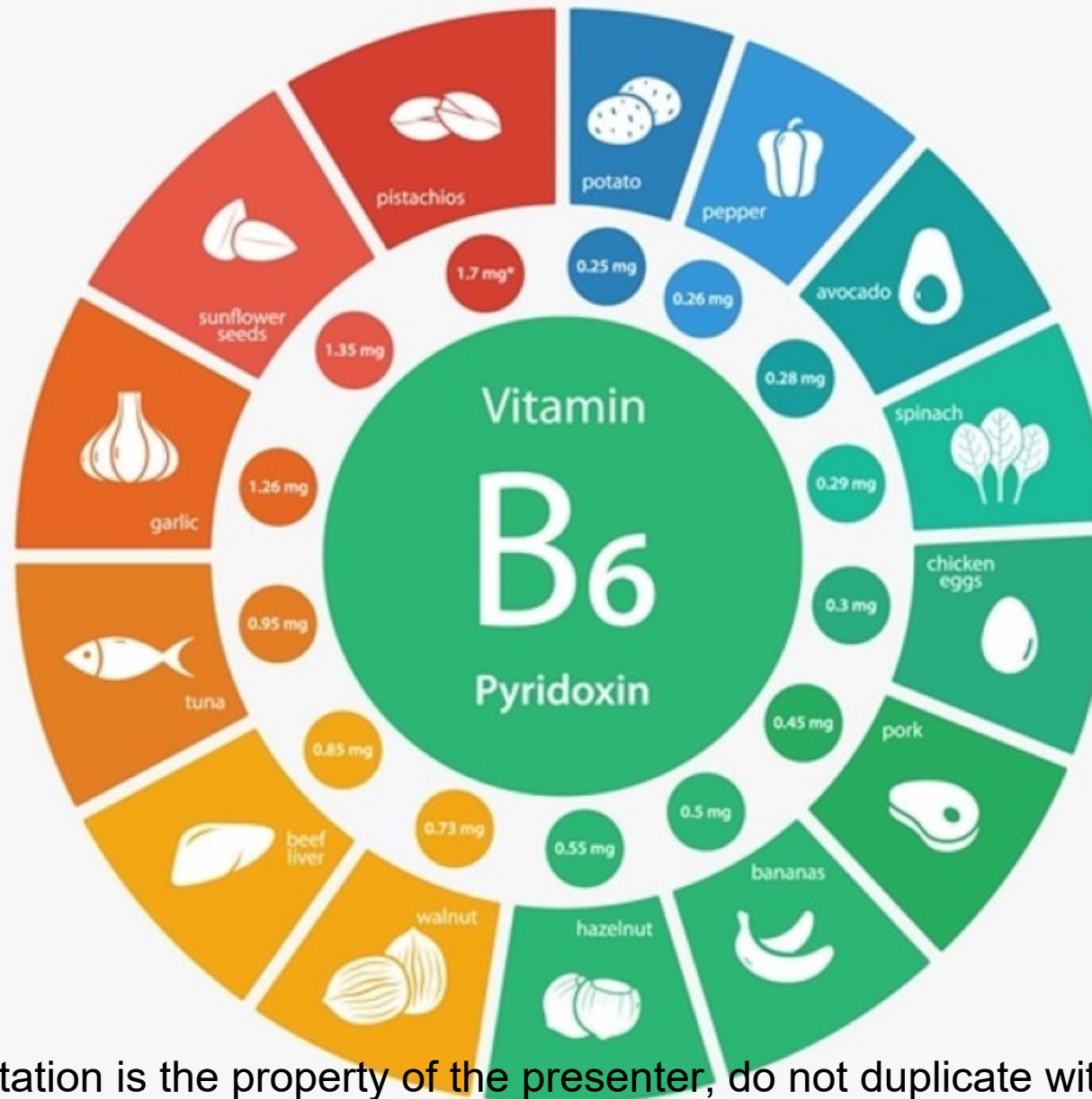
Foods high in vitamin B₁



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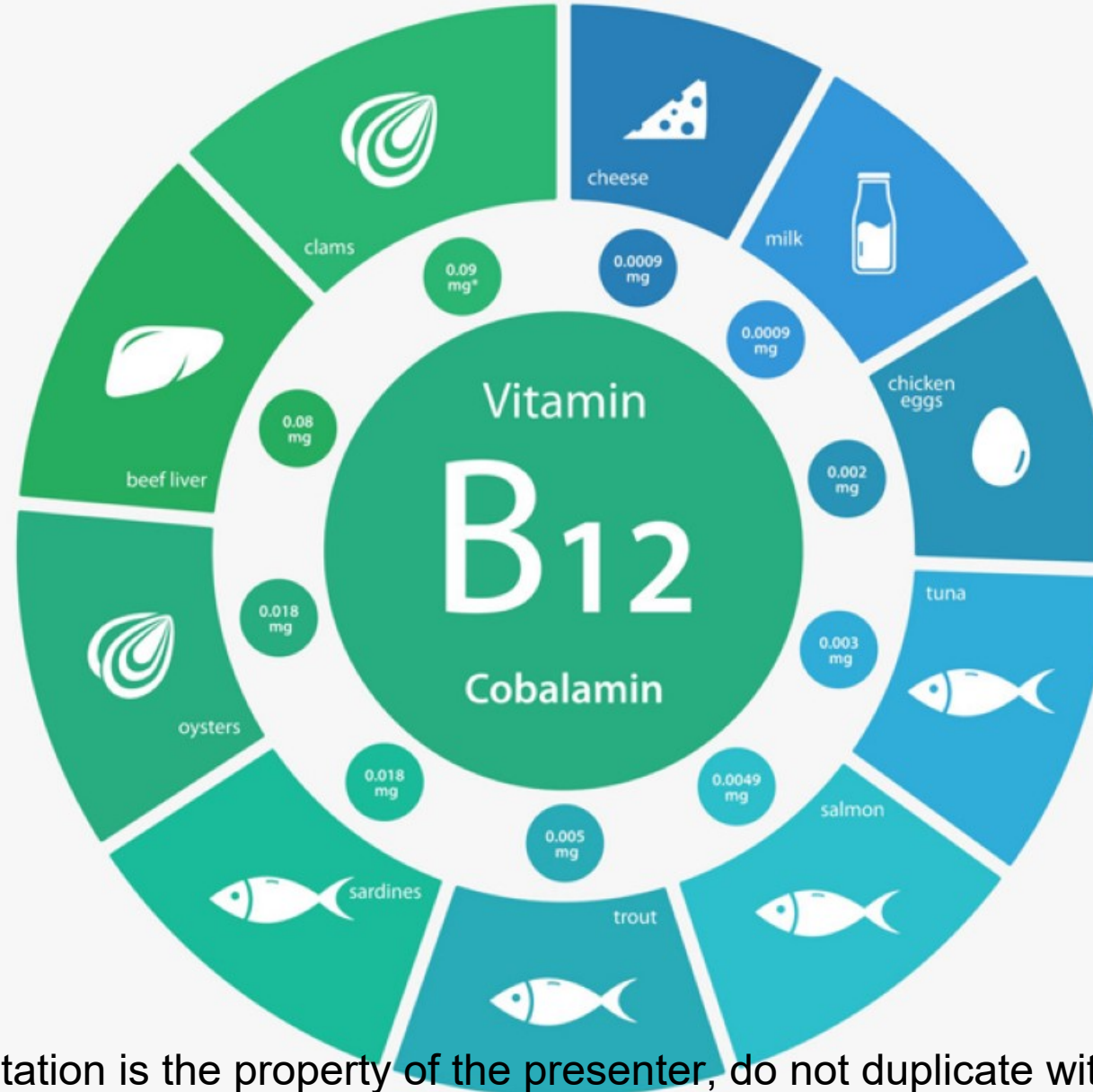
Foods high in vitamin B₆



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Foods high in vitamin B₁₂



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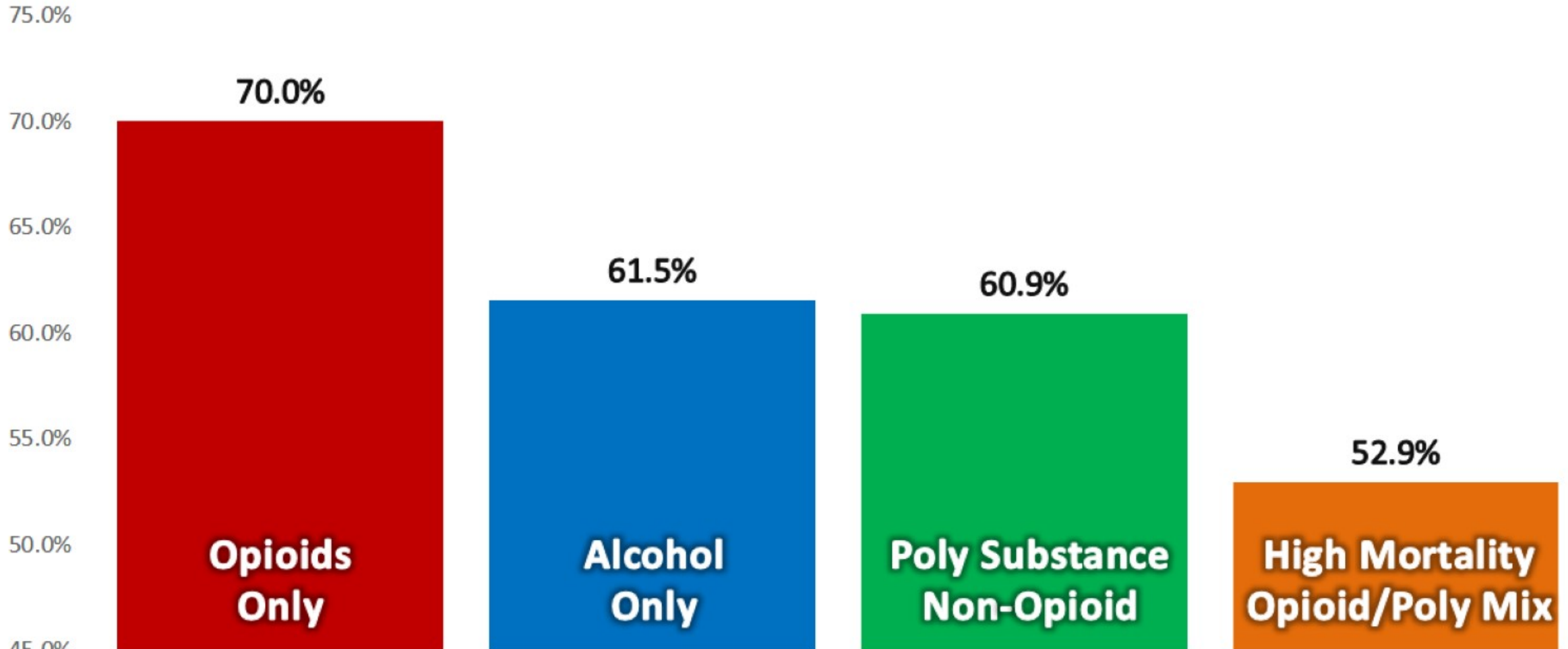
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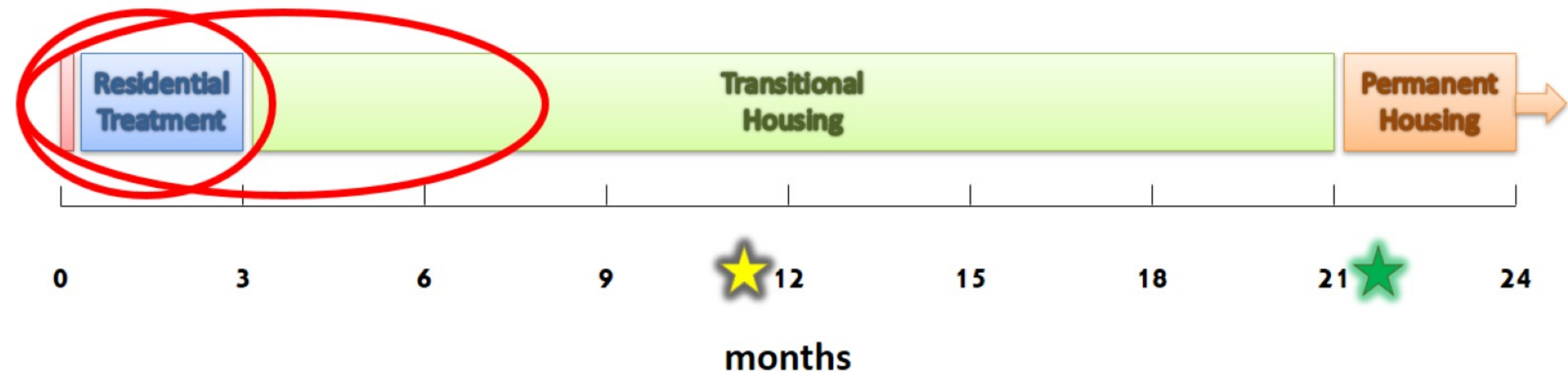
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**Twenty (20) Month Pilot Program Data For:
Continued Connection Program Lite.
Program Engagement At 6-Month Mark
February, 2017 - October, 2018**



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DETROIT



Patient Profile: African American / 40tys / Indigent / High School Diploma or Less / Correctional Involvement / Multiple Chronic Conditions / Minimal Supports / History of Trauma / Poly-Substance Abuse

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HOUSTON



Therapeutic
Community

0

3

6

9

12

15

★ 18

21

★ 24

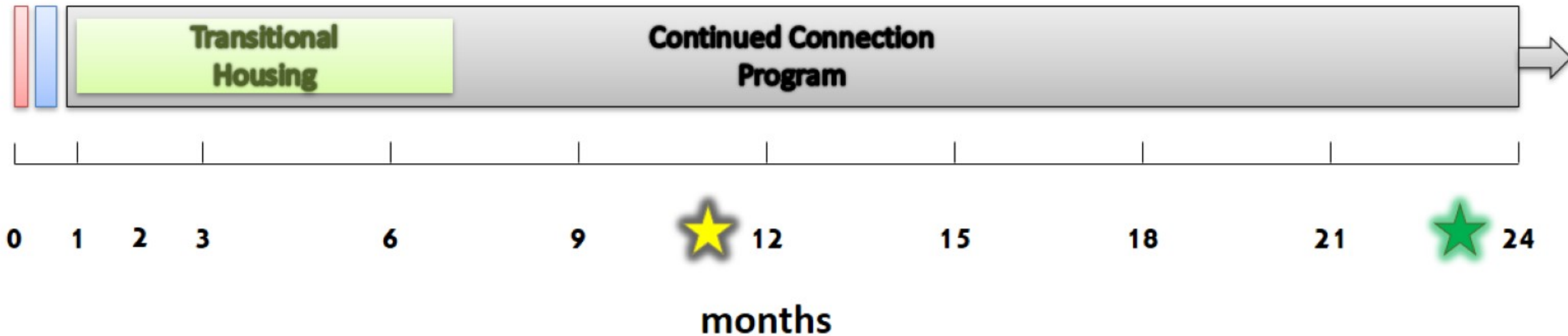
months

Patient Profile: Caucasian / 40tys / Middle Class Background / High School Diploma or Some College /
Minimal Supports / History of Trauma / Poly Substance Abuse

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Ascension



Patient Profile: Caucasian / 40tys / Middle Class / Some College or Higher / Possible Mental Health Diagnosis / Family Supports / History of Trauma / Poly-Substance Abuse

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RECOMMENDATIONS

- **Engagement**
- **Length**
- **Leverage**
- **Family**
- **Outpatient**
- **Grants**
- **No Approach Is Workable Without Repletion**

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