- CASE 4 -
TELEMEDICINE FOR MOVEMENT DISORDERS IN OLDER ADULTS

Interdisciplinary, primary and specialty palliative care.

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MOVEMENT DISORDERS + PALLIATIVE CARE 101

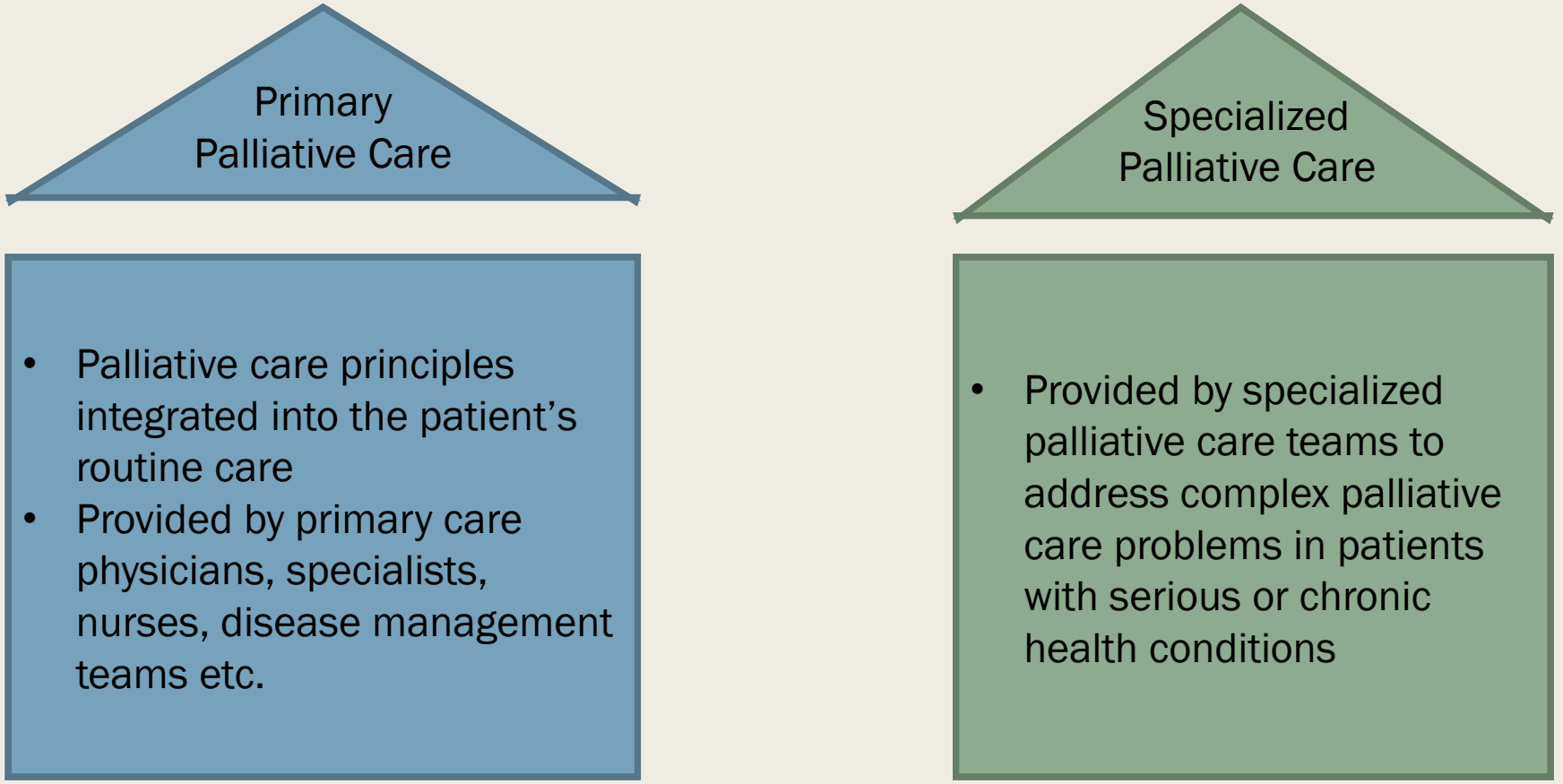
Movement Disorders (MD)

- Neurological conditions that cause abnormal increased or reduced movements that impede the normal flow of motor activity
- Often progressive, increasing in severity over time
- Some have cognitive and behavioral features
- Most are without a cure; treatment is palliative in nature, focused on symptom management
- Some are hereditary; whole family becomes patient

Definition reference: Flemming, K.; Jones, L. *Mayo Clinic Neurology Board Review: Clinical Neurology for Initial Certification and MOC*. Oxford University Press, 2015. ISBN 9780190244934.

Palliative Care (PC)

- Specialized medical care for people living with serious illnesses
- Relief from symptoms and stress
- Appropriate at any age and any stage of any serious illness
- Improve quality of life for patients and families



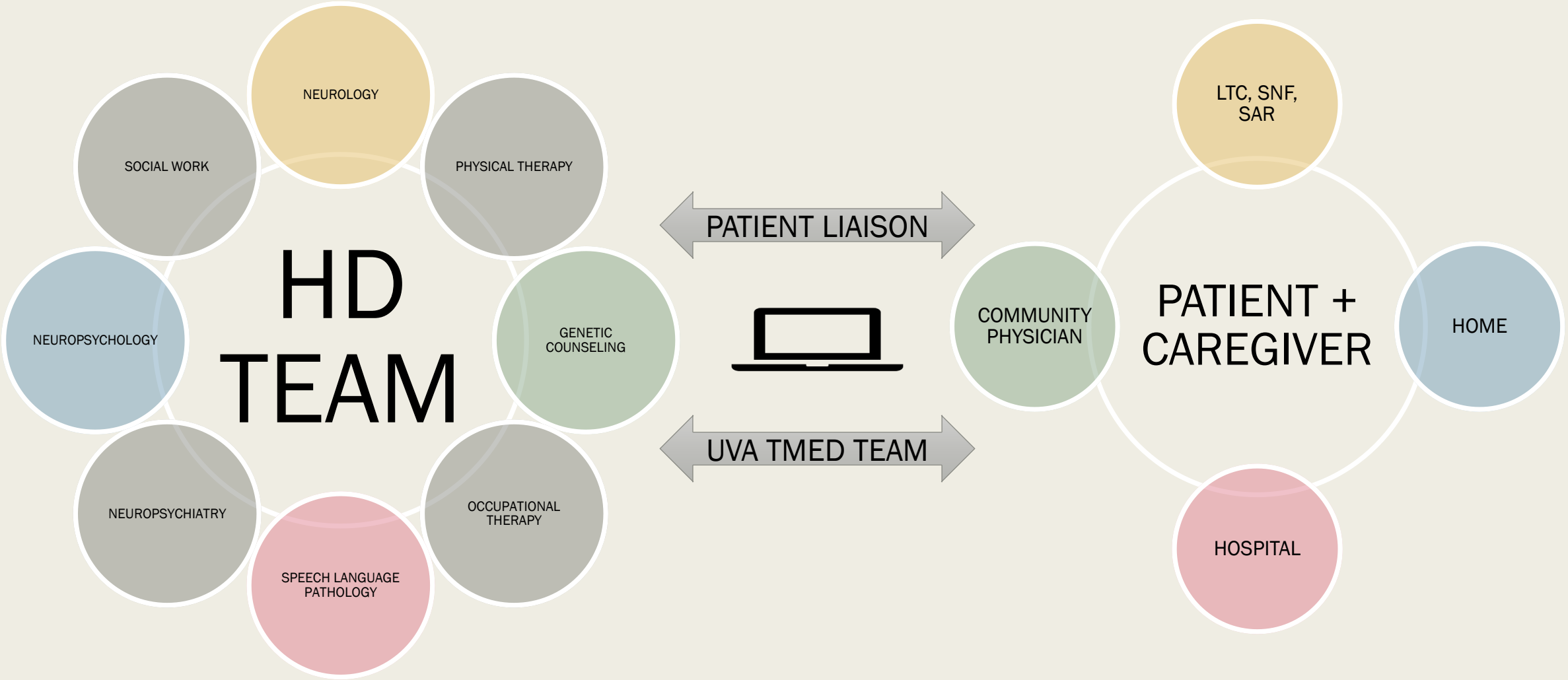
CASE 4A

Telemedicine encounter in the home setting with HD patient and his wife.

Rehabilitation services = primary palliative care.

UVA Huntington's Disease Clinic Telemedicine Program

University of Virginia Health System, Neurology



“Movement disorders…are well suited to telemedicine because they are primarily visually assessed, generally limit mobility, and require ongoing multidisciplinary care.”

- Research
  - *Efficient way to increase access to MD specialty care & expertise*
  - *High patient interest in receiving remote specialty care*
  - *Majority of remote specialist recommendations considered beneficial by local clinicians*
  - *Policy/ tech issues hinder TMED growth and adoption*
  - *Potential for education and psychosocial programs*
  - *Potential for major growth in remote symptom monitoring and detection via sensors/ smartphone apps*
- UVA Experience
  - *Telemed exam more representative of normal function*
  - *Strengthens relationship with patients and families*
  - *Window into home environment offers valuable therapeutic insight*
  - *Window into patient/ caregiver interaction in home offers valuable insight*

Quote reference: Achey M, Aldred JL, Aljehani N, et al. *The past, present, and future of telemedicine for Parkinson's disease. International Parkinson and Movement Disorder Society Telemedicine Task Force*. Mov Disord. 2014 Jun;29(7):871-83. doi: 10.1002/mds.25903.

Mr. and Mrs. Tarp

- 69 year-old male with known family history of Huntington's Disease, dx in 2011
- Mrs. Tarp (2nd wife) is his sole caregiver; Mr. Tarp's 1st wife is sole caregiver for his son
- Lives three hours from HD specialty team at UVA; first telemedicine encounter scheduled with interdisciplinary clinic after several canceled appointments
- Experiencing anxiety and depression
- Needs some assistance for all ADLs; dependent for some
- Needs more physical support than Mrs. Tarp can provide

Telemedicine HD clinic consultation

- Neurologist
- Physical therapy
- Occupational therapy
- Speech language pathology

Encounter outcomes

- Chorea medications adjusted
- Anxiety discussed and monitored; planned for psych telemed encounter if needed
- Home health PT/OT referrals to address new safety issues identified by rehab team
- Reconnection with Tarp Family

Post-visit follow-up across care continuum

- Consult with family on home health team's recommendations
- Monitor chorea medication changes
- Support family through crisis situation
  - *Receive call from HH PT*
  - *Consult with psychiatrist at another HD Center of Excellence to arrange emergency admission closer to home*
  - *Consult with inpatient psych team post-admission*
  - *Consult with HH team re: psych needs post-admission*
  - *Arrange telemed follow-up with UVA neuropsychiatrist post-admission*

CASE 4B

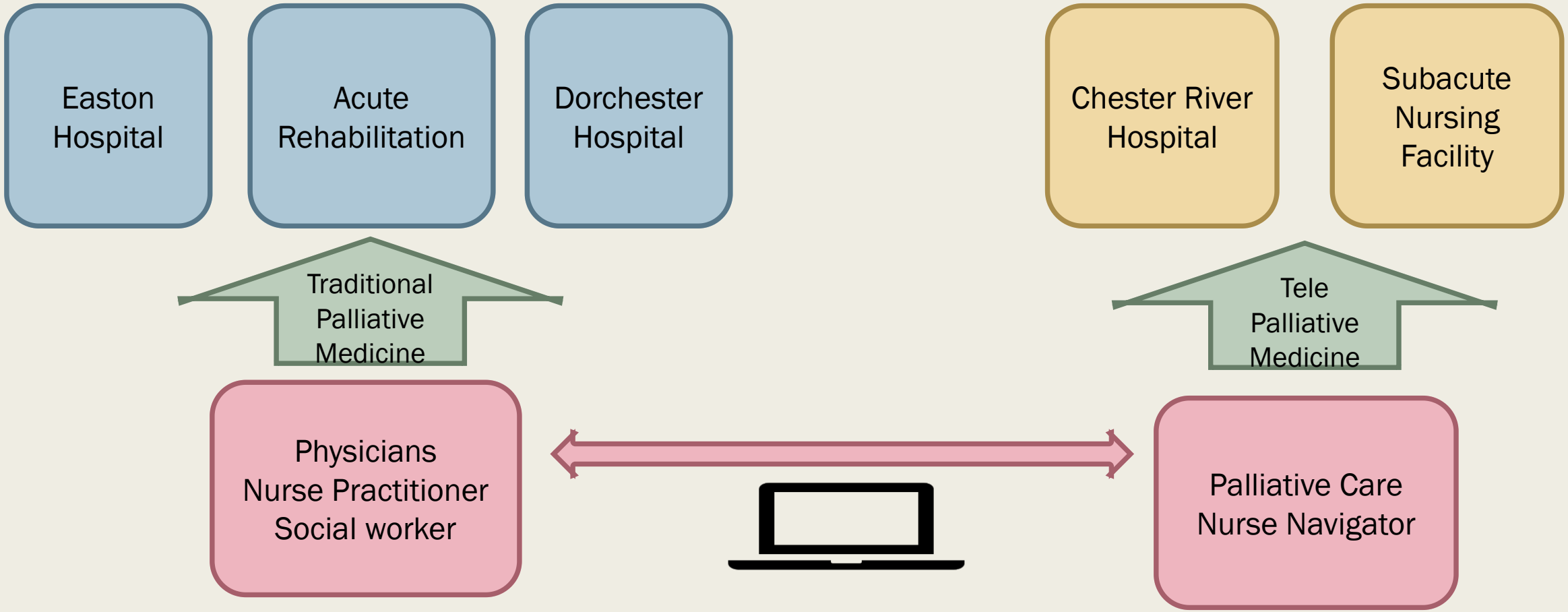
Telemedicine encounter in the hospital setting with PD patient and his wife.

Specialty palliative care consult ➔ rehabilitation plan.

Shore Regional Palliative Care Program

University of Maryland Shore Regional Health

Lakshmi Vaidyanathan, MD, MBA



PC and TMED

- Research
  - *Scarce evidence to date*
  - *Remote symptom monitoring*
  - *After hours phone calls*
  - *Videoconferencing*
  - *Technology usable and acceptable*
- UM Shore experience
  - *Technology usable & acceptable*
  - *Improves access*
  - *Improves workflow*
  - *Scarce resource utilization*
  - *Leverages all disciplines*
  - *Inclusive*

Mr. and Mrs. Jones

- 80-year man with a 12-year history with Parkinson's Disease
- Dependent for most ADLs, physical and cognitive impairment
- Hospitalized after a fall resulting in a hip fracture, complicated post-surgical course
- Temporary feeding tube placed during hospitalization
- Tele Palliative Medicine consult requested to assist with symptom management, clarify treatment goals, establish plan of care

Tele palliative care consultation

- Assessment of symptoms
- Cognitive and functional status assessment
- Evaluation of patient’s and wife’s understanding of his disease and prognosis
- Review of patient’s advance directive and discussion about treatment preferences

Consultation outcomes

- Patient and his wife agreed to temporary tube placement to resume Parkinson's medication
- Established patient's wishes regarding nutritional support; confirmed family's understanding of patient's status and wishes
- Completed MOLST (Medical Orders for Life Sustaining Treatment)

Post-visit follow-up across care continuum

- Patient transferred to subacute rehab
- Telemedicine follow-up scheduled with palliative care team
  - *Symptoms readdressed*
  - *PT, OT, SLP recommendations reviewed*
- Wife took patient home with hospice bridge program
- Patient died at home with hospice services about 1 month later, in accordance with his wishes

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THANK YOU

Please feel free to contact us with questions or comments!

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