

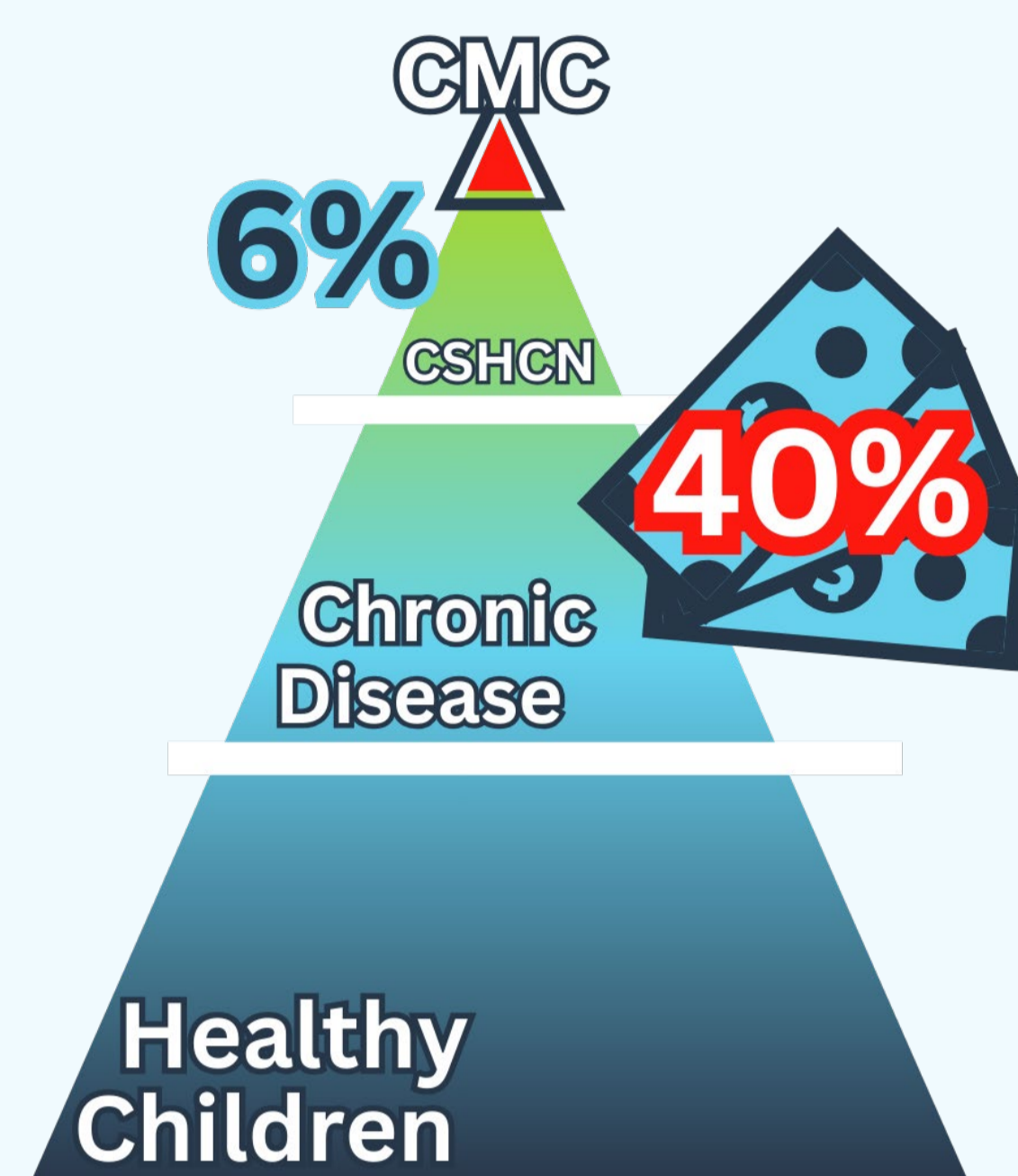
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BACKGROUND

- Failure to Thrive (FTT) affects up to **10%** of outpatient and **5%** of hospitalized children
- Children with Medical Complexity (CMC)** represent **6%** of Medicaid pediatric patients yet account for **~40%** of pediatric healthcare costs



GAP IN KNOWLEDGE

- Limited evidence evaluating Remote Patient Monitoring (RPM) for pediatric FTT
- Sparse data on cost impact and feasibility in children with medical complexity

STUDY AIM



To evaluate whether RPM combined with structured caregiver education improves:

- Weight trajectories
- Hospital and emergency department (ED) utilization
- Cost of care

ACKNOWLEDGEMENT



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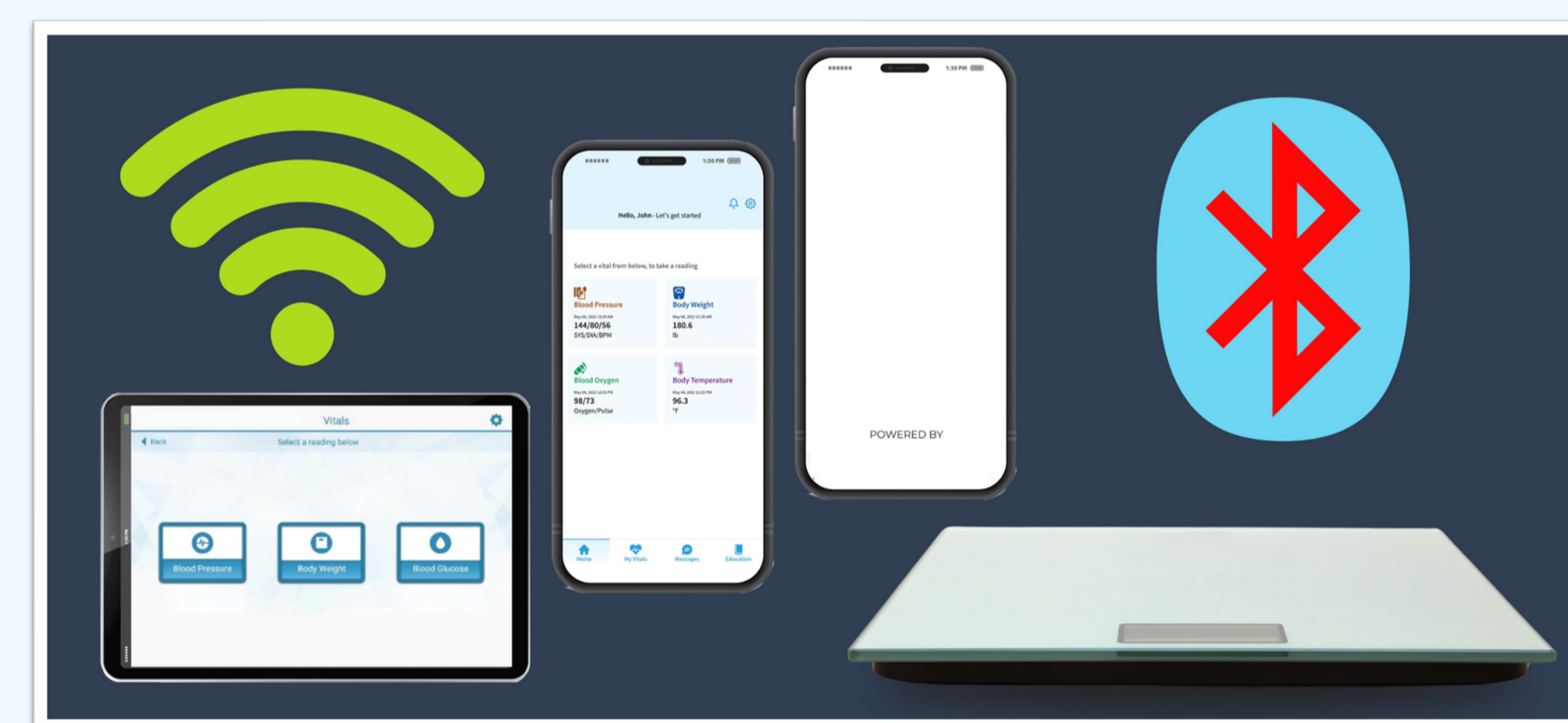
STUDY DESIGN

- IRB-approved** (UMMC IRB-2023-243)
- Quasi-experimental, pre-/post-comparison
- n=15**
 - Ages 1-10
 - FTT diagnosis
 - requiring feeding tube support



INTERVENTION

- Weekly Bluetooth-enabled weight monitoring
- Structured caregiver education during check-ins
- Multidisciplinary Complex Care Team oversight



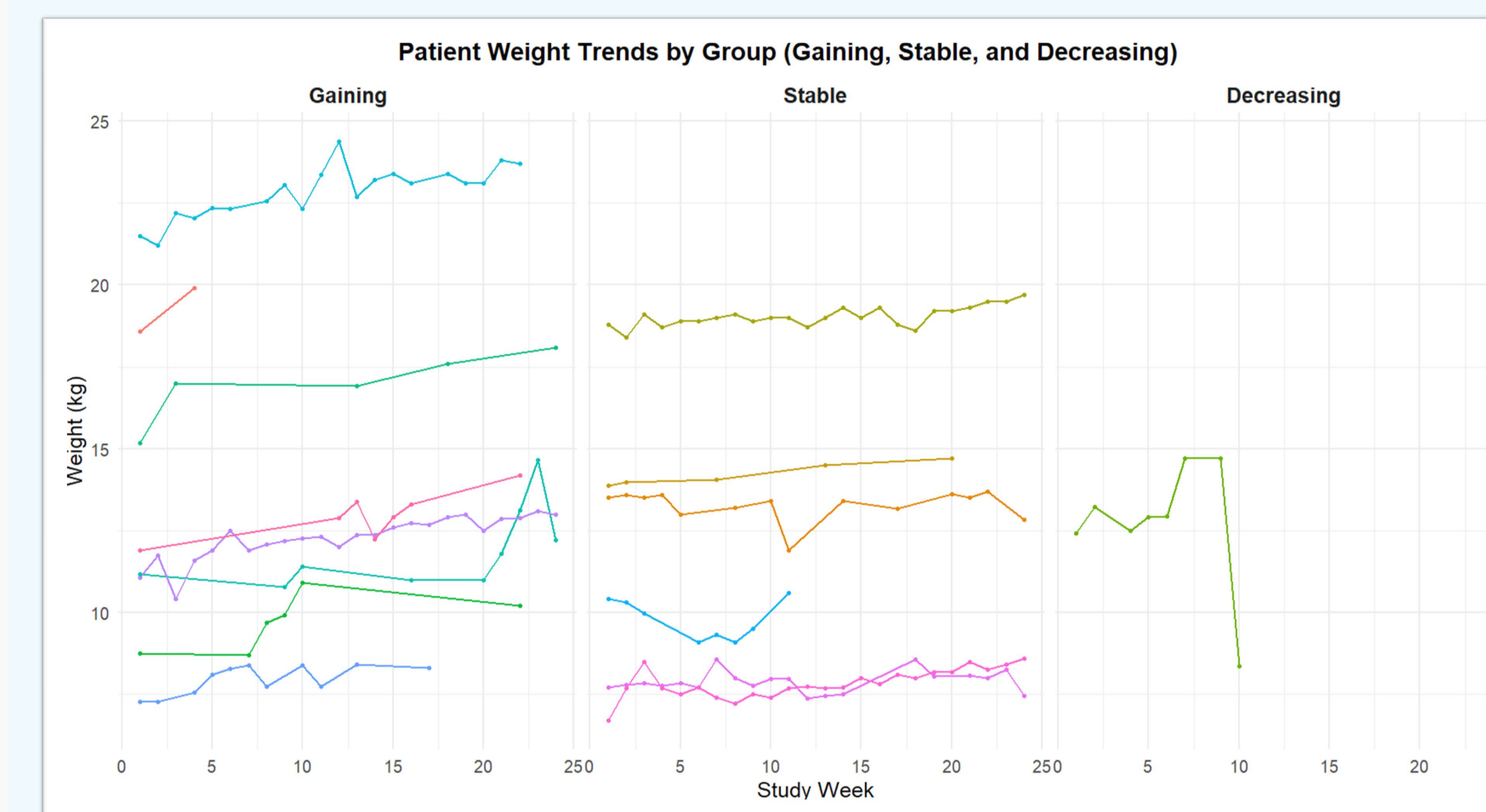
STUDY PHASES

- Pre-intervention: 6 months
- During intervention: 6 months
- Post-intervention: 6 months

OUTCOMES

- Primary**
 - Weight trajectory
- Secondary**
 - Hospitalizations
 - ED visits
 - Cost of care

RESULTS



- 42%** upward weight trends
- 50%** maintained stable weights
- 8%** declined (associated with illness and lower adherence)

Hospitalizations (per 6 months)

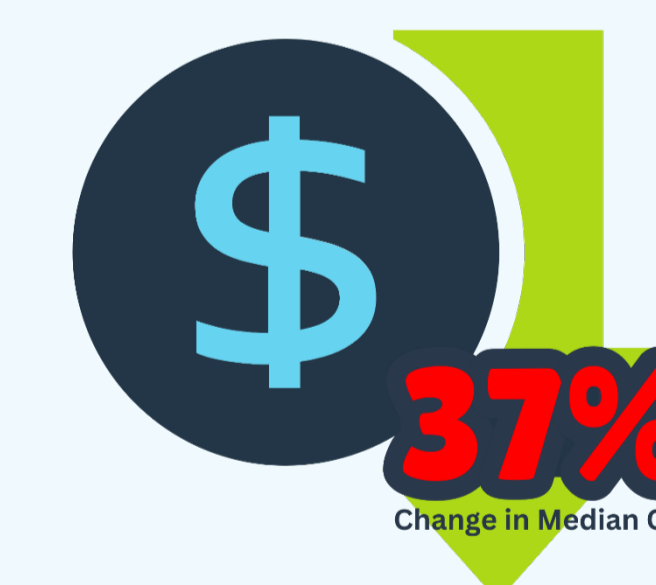
- Pre: **0.67** → During: **0.87** → Post: **0.73**
- 92% reduction in hospitalizations from baseline to post-intervention (24 → 2 events)**

ED Visits (per 6 months)

- Pre: **1.20** → During: **0.67** → Post: **0.93**

Median cost per patient

- Pre: **\$2,308**
- During: **\$3,268**
- Post: **\$1,462**



KEY FINDINGS

- RPM shifted care from reactive → proactive
- Supported early identification of weight decline
- Reduced reliance on acute care
- Median costs and utilization decreased for most families

NOTABLE INSIGHTS

- A small number of high-utilizers disproportionately influenced mean costs
- Median values more accurately reflected program effectiveness in this population

LIMITATIONS



- Small sample size
- Variable caregiver adherence
- Socioeconomic and technology barriers

FUTURE DIRECTIONS

- Initiate RPM at hospital discharge for newly diagnosed FTT
- Simplify technology and enhance caregiver training
- Expand to larger, more diverse cohorts

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