

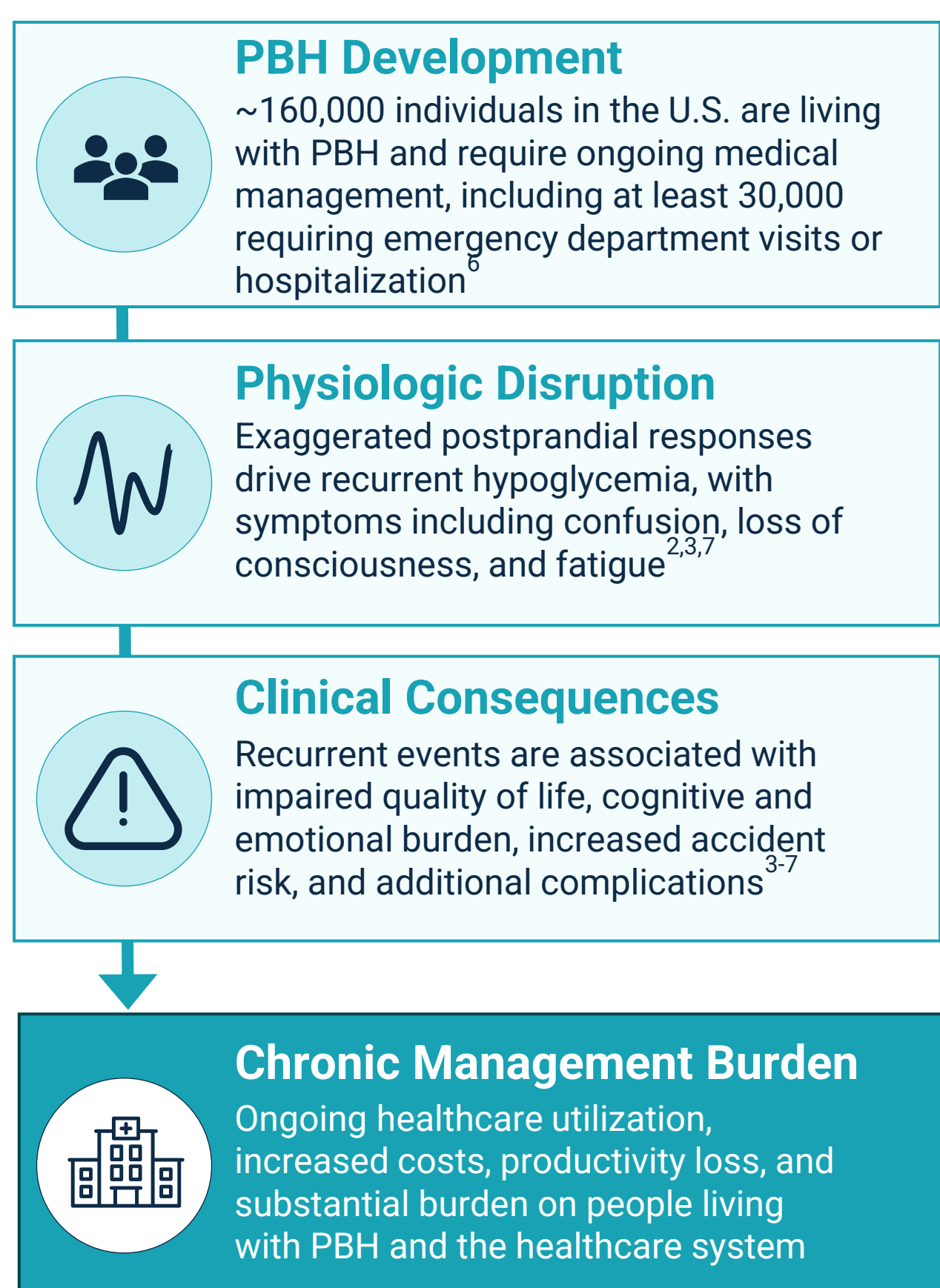
Characterizing the Burden of Post-Bariatric Hypoglycemia in the United States

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BACKGROUND

- Metabolic and bariatric surgery is a highly effective treatment for obesity, leading to durable weight loss and improvement in cardiometabolic comorbidities¹
- A subset of individuals develop post-bariatric hypoglycemia (PBH), a rare chronic condition characterized by recurrent postprandial hyperinsulinemic hypoglycemia²⁻⁶
- PBH is associated with a broad spectrum of clinical manifestations, including autonomic and neuroglycopenic symptoms, which can contribute to impaired daily functioning and reduced quality of life^{3,4,6}
- Recurrent hypoglycemic events may lead to healthcare utilization, safety risks (including hypoglycemia unawareness), and ongoing management burden³⁻⁷
- Clinical management remains limited, with no PBH-specific FDA-approved therapies
- The population-level clinical, economic, and humanistic burden of PBH remains poorly characterized

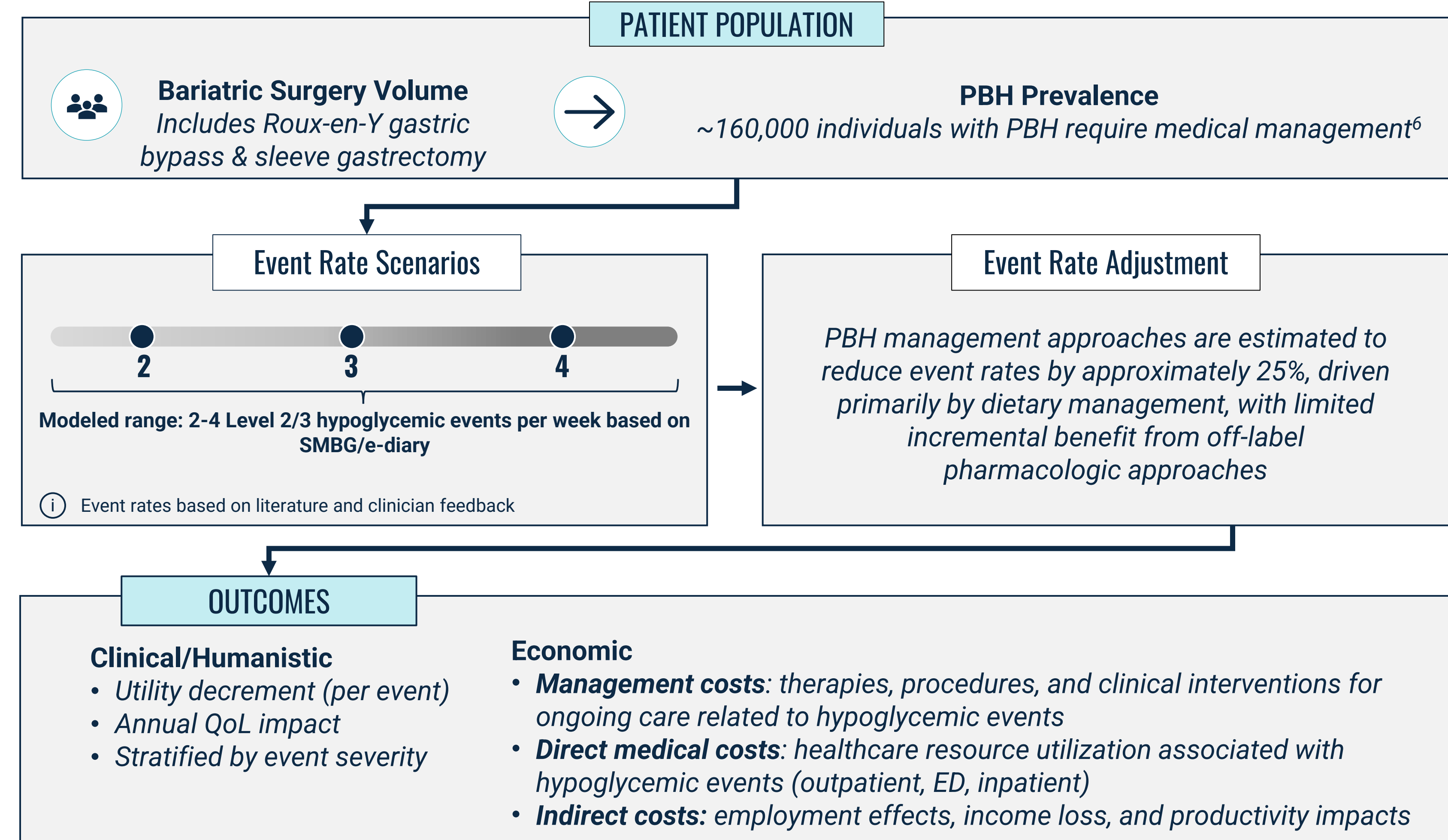


OBJECTIVE: To characterize the **clinical, economic, and humanistic burden of PBH** in the US and evaluate how burden varies by severity in the context of metabolic and bariatric surgery benefits

METHODS

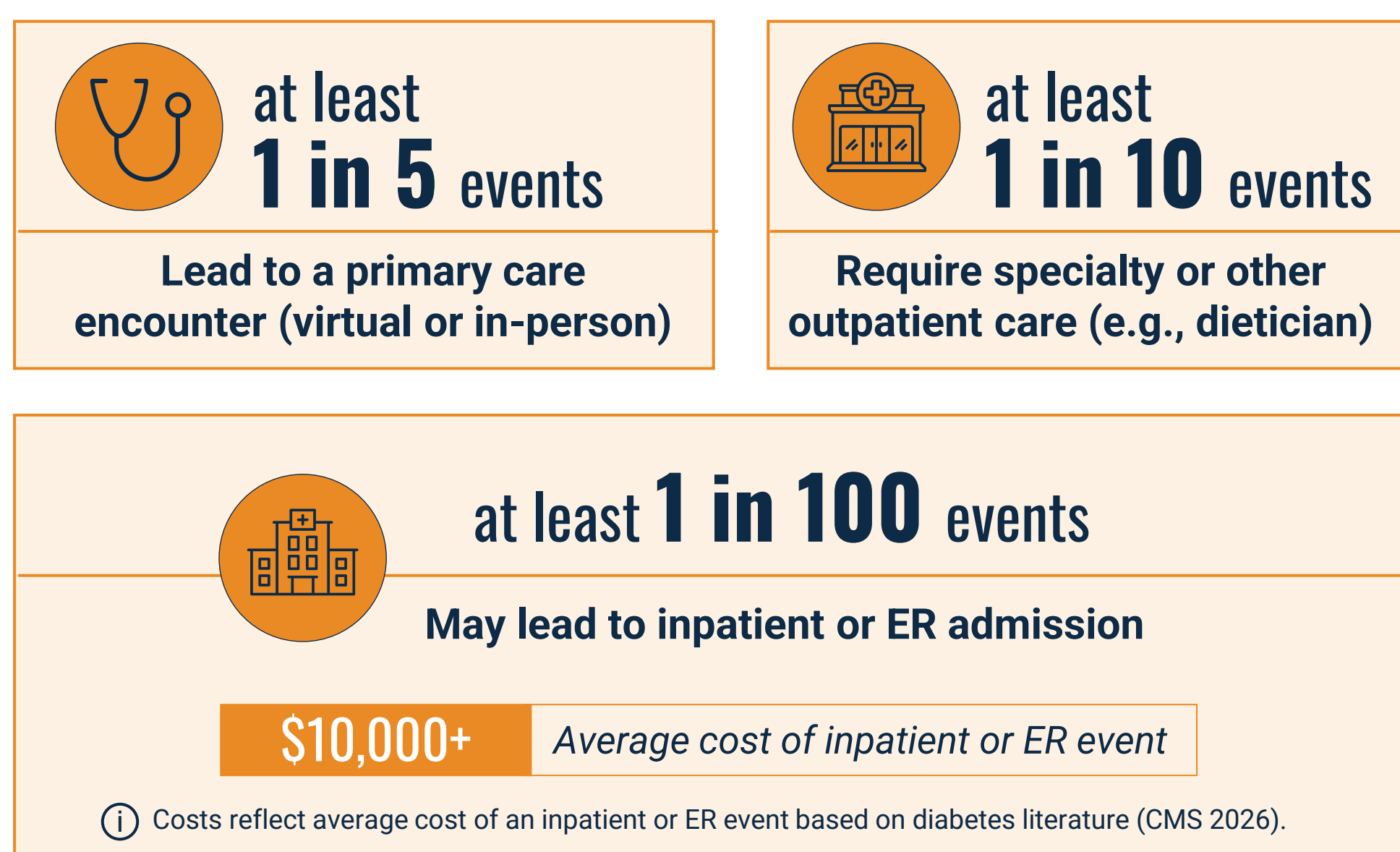
- A pragmatic literature review identified ~100 publications⁸ on PBH-related impacts, including healthcare resource utilization, direct and indirect costs, and quality-of-life and humanistic outcomes
- An early adapted economic model leveraged established hypoglycemia burden frameworks from diabetes; in the absence of robust PBH-specific data, assumptions were informed by published evidence and physician input to reflect the distinct pathophysiology and clinical course of PBH

FIGURE 1. Model Structure



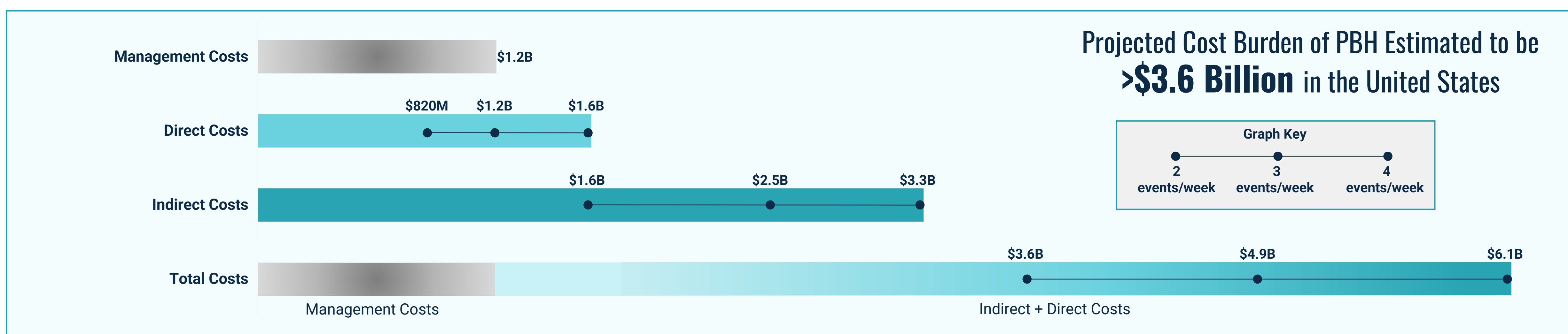
RESULTS

FIGURE 2. Level 2/3 Hypoglycemic Event Healthcare Utilization



Patterns of healthcare utilization may vary over disease course. Event rate estimates reflect Level 2/3 hypoglycemic events only and do not include healthcare utilization related to ongoing management. Event rates are based on literature and clinical feedback

FIGURE 5. Modeled Annualized Costs of Level 2/3 Hypoglycemic Events



Costs are modeled across event rates of 2, 3, and 4 events/week. Dots represent 2, 3, and 4 events/week (left to right). Management costs are assumed to be constant across event rate scenarios. Total costs account for direct costs, indirect costs, and management costs. M: million; B: billion

CONCLUSIONS AND IMPLICATIONS

KEY FINDINGS	INTERPRETATION	LIMITATIONS & FUTURE DIRECTIONS
<ul style="list-style-type: none"> First economic/burden model quantifying quality-of-life and economic burden of level 2/3 hypoglycemia in PBH PBH is associated with substantial clinical, economic, and humanistic burden Findings highlight the need for standardized care and more effective, PBH-specific management strategies 	<ul style="list-style-type: none"> Modeled event frequency scenarios (2–4/week) reflect heterogeneity and uncertainty in current evidence Trial-based estimates may underrepresent real-world burden Recurrent hypoglycemia may act as a cumulative exposure, increasing risk of impaired awareness and downstream complications over time⁷ 	<ul style="list-style-type: none"> Model informed by limited PBH burden-specific data, with assumptions based on published evidence⁹ and physician input Modeled reduction assumes consistently applied intervention, which may not reflect real-world practice Does not capture long-term cumulative consequences of recurrent hypoglycemia or ongoing PBH management costs not directly linked to a Level 2/3 hypoglycemic event Further research is needed to better characterize real-world event rates, care seeking, and longitudinal burden

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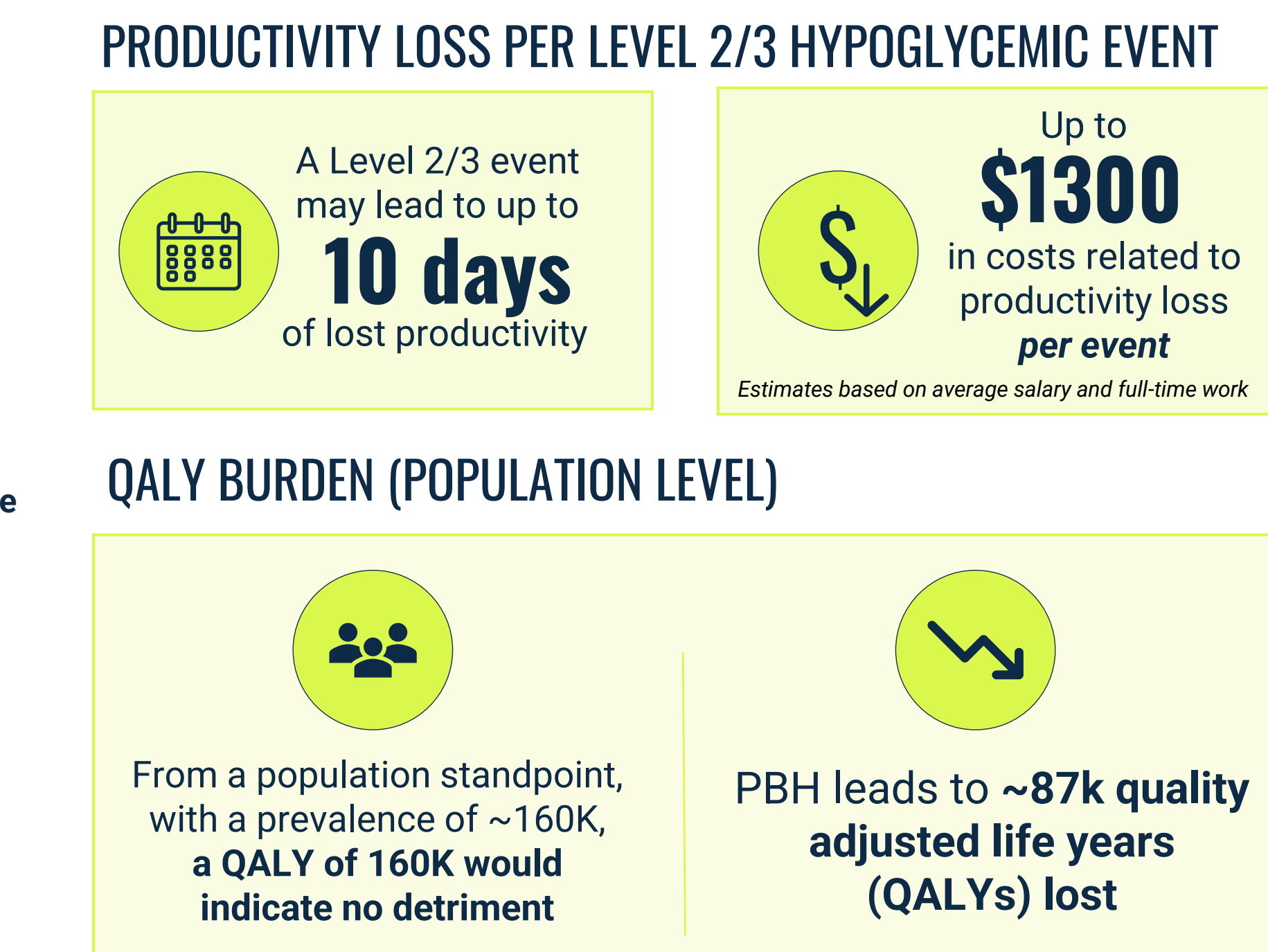
Disclosures
CC reports consulting fees, license/APA compensation, and scientific advisory board compensation from Amylyx. KF and SG are full-time employees of and may have stock option ownership in Amylyx Pharmaceuticals, Inc. VF, ME and PM are acting within vendor capacity through Health Economics and Outcomes Research Ltd and report consulting fees from Amylyx.

Hypoglycemic Event Definitions
Level 2: Glucose <54 mg/dL (3.0 mmol/L). Level 3: A severe event characterized by altered mental and/or physical functioning requiring assistance.

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FIGURE 4. Productivity and Humanistic Impact

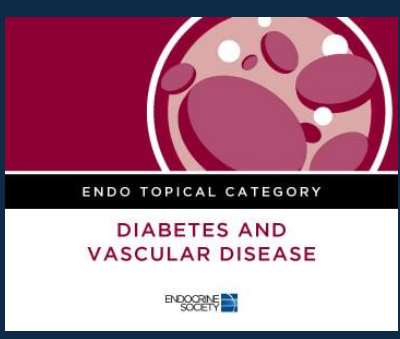


QALYs are based on utility values from patient reported outcome assessments anchored at 0 (death) and 1 (perfect health); very low or negative values reflect health states associated with substantial reductions in perceived quality of life

COMMUNITY EXPERIENCE WITH PBH

“Several ambulance rides, unexplained injuries, countless times of standing up and blacking out. 18 years, sleeping with night-time sweats for unexplained reasons. Being diagnosed as seizure disorder and placed on different medications only to still have seizures... Diet alone doesn’t change the way this surgery reacts.”

– PBH community member



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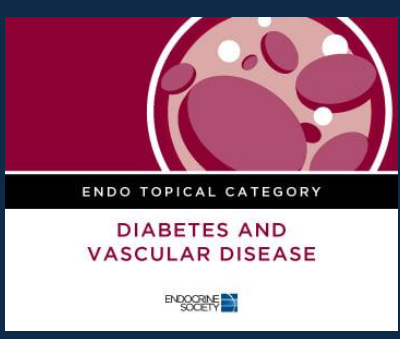
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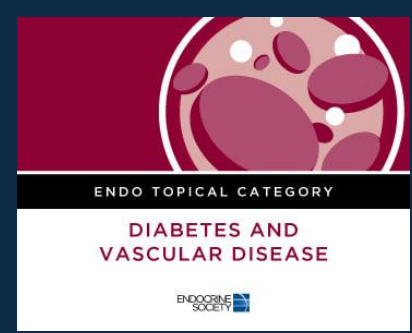
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Characterizing the Burden of Post-Bariatric Hypoglycemia in the United States

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