



A New Frontier: Capturing Savings from Code Advancement

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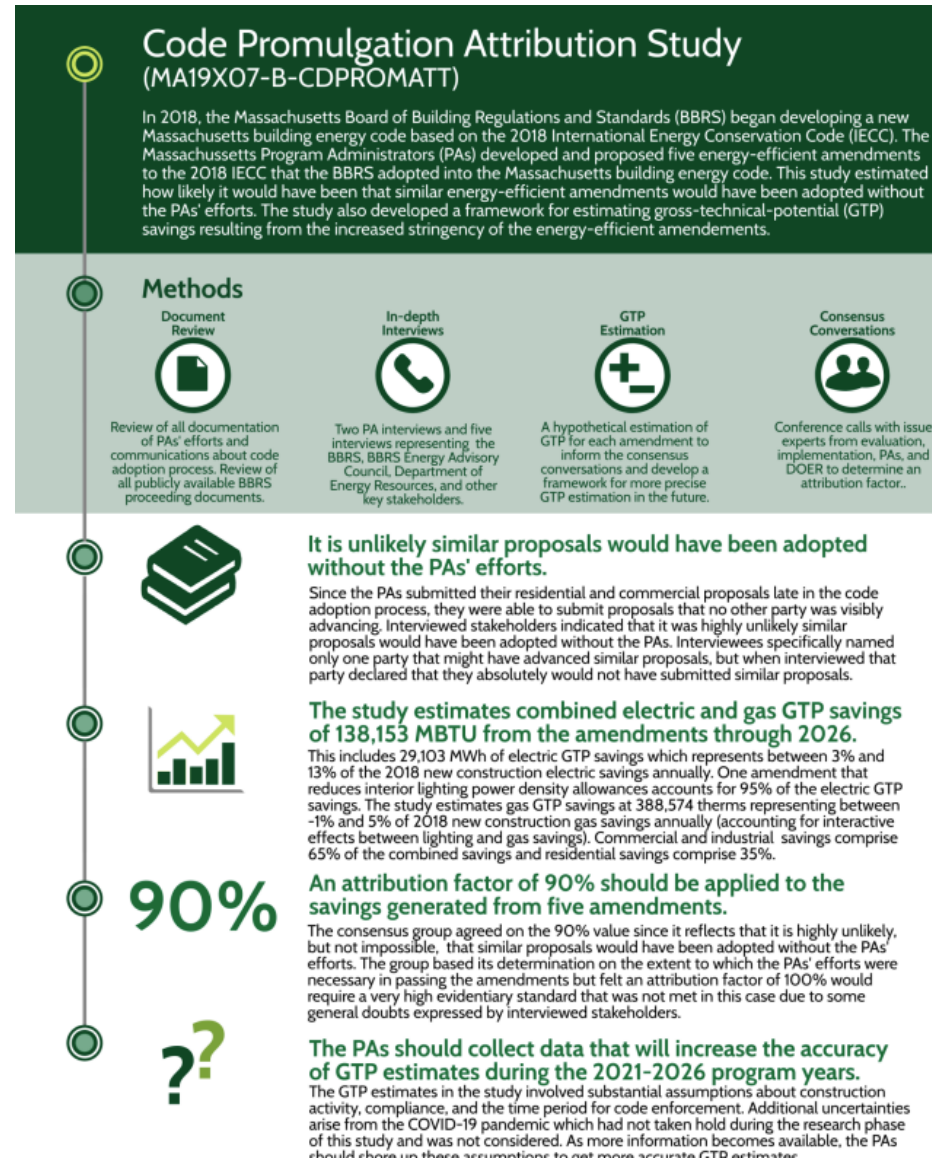
Kevin Rose, NEEA (formerly National Grid)

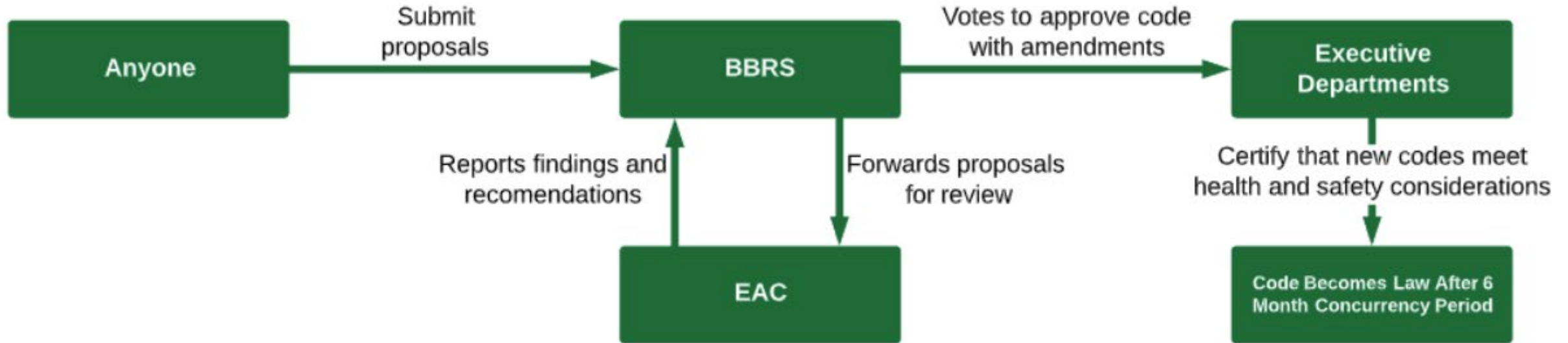
Brendan Giza-Sisson, Eversource

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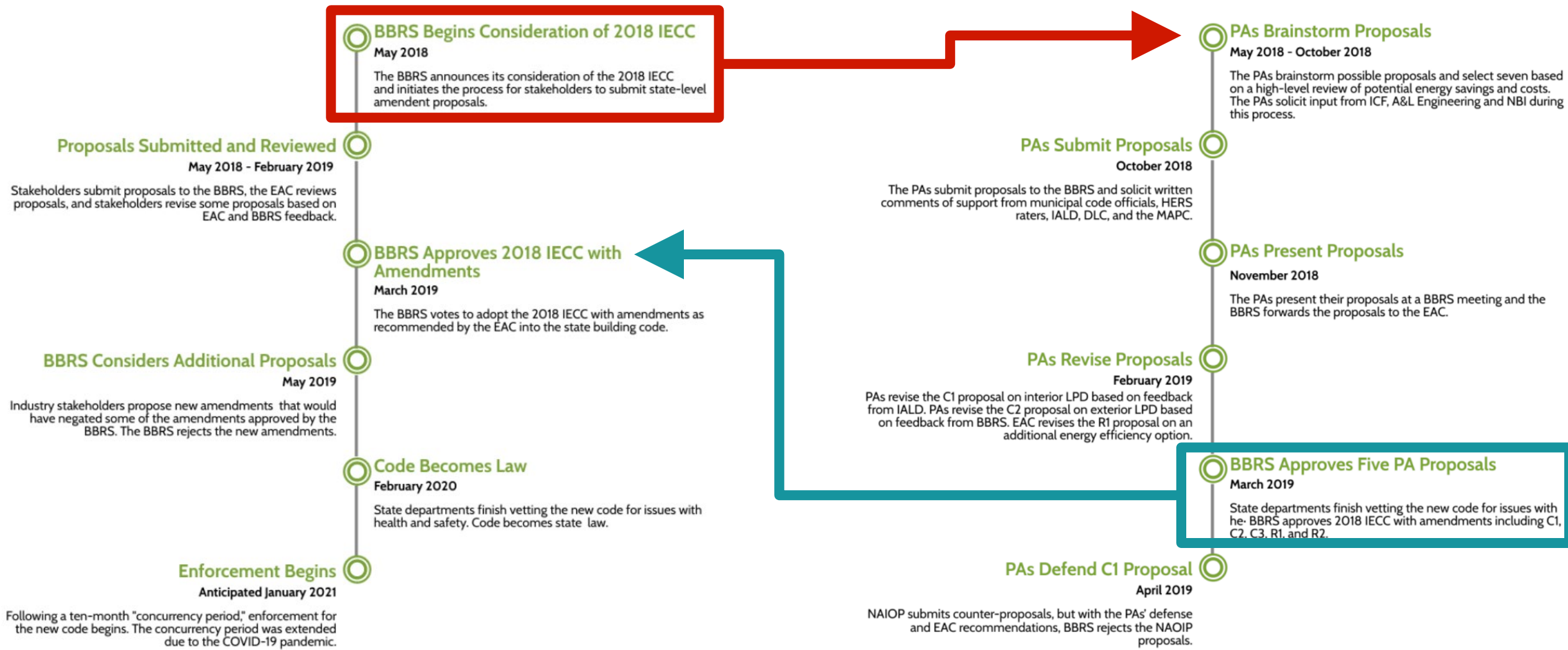
- In 2018, MA Program Administrators (PAs) developed and submitted amendments to the 2018 IECC
- NMR evaluated:
 - Gross potential energy savings
 - Attribution to the PA's efforts





- Anyone can submit amendment proposals
- All submitted amendments are reviewed and voted on
 - BBRS enlisted the Energy Advisory Council (EAC), a group of industry professionals and energy efficiency experts

Code Adoption: Amendment Proposal Timeline & Process

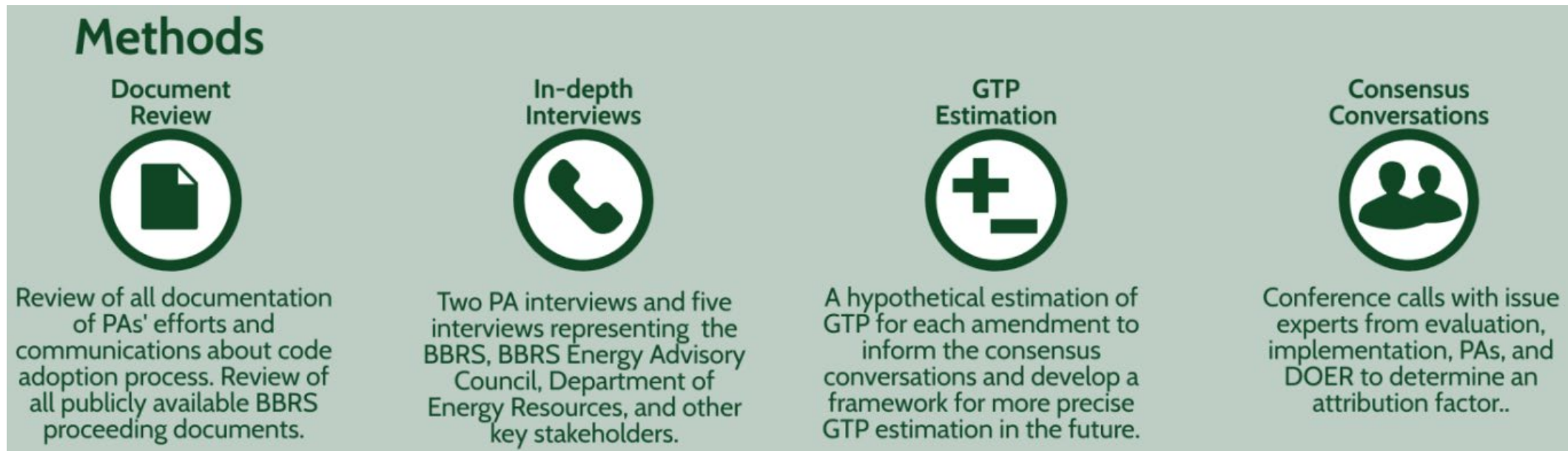


Code Adoption: Proposed Amendments

Sector	Amendment	Description
C&I	C1: More Stringent Interior LPD	Lower lighting power density (LPD) to slightly below MA industry standard practice (ISP)
	C2: Lower Exterior LPD	Additional 10% exterior LPD reduction
	C3: Expansion of Daylight-Responsive Controls	Expansion of daylight-responsive controls requirement
Residential	R1: Additional Residential Efficiency Packages	Requirement of one additional efficiency option: high-efficiency HVAC, heat recovery ventilator, or high-efficiency domestic hot water for some projects
	R2: Grade I Insulation Installation	Specifies Grade I insulation installation standard



- NMR faced two challenges:
 1. Determining an estimate of overall savings *for each amendment*
 2. Determining an estimate of savings *attributable to the efforts of the PAs*

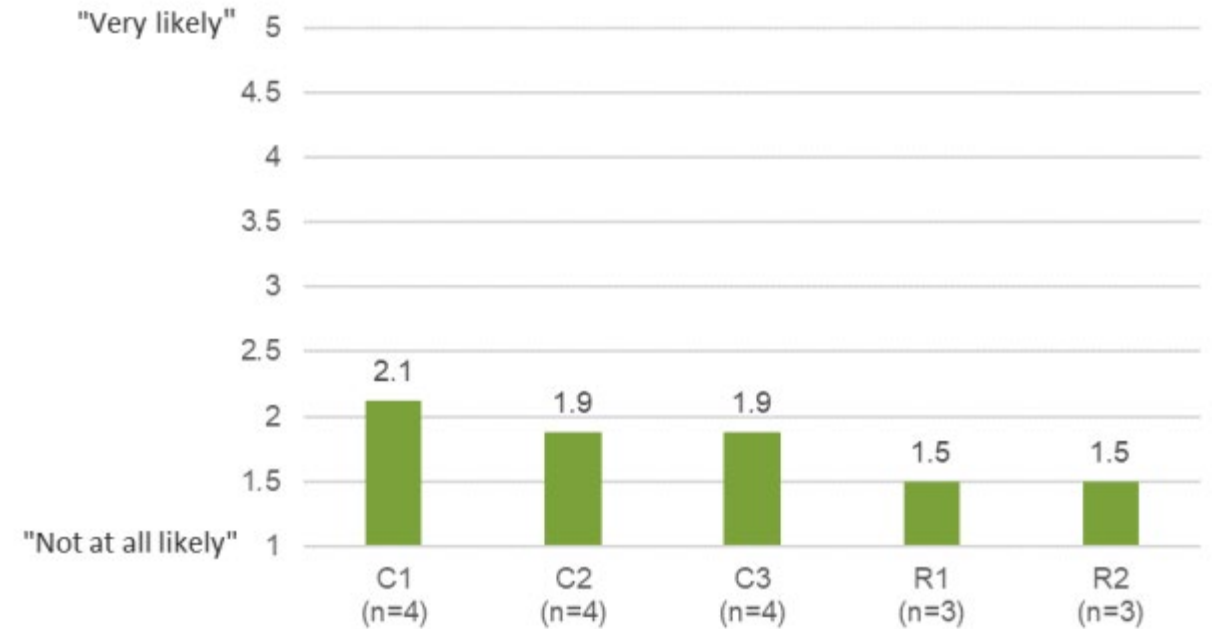


Estimated Annual Combined Savings (Million BTU)

Amend.	2022	2023	2024	2025	2026
C1	10,509	21,408	27,981	17,469	6,569
C2	406	829	1,085	676	252
C3	259	529	686	427	157
R1	19,505	18,604	10,803	0	0
R2	0	0	0	0	0
Annual Total	30,679	41,371	40,554	18,571	6,979
Cumul. Total	30,679	72,050	112,604	131,175	138,153
% of 2018 NC Savings	5%	6%	6%	3%	1%



- Two primary research questions:
 1. How likely would another party have been to submit proposals like those the PAs submitted?
 2. How important was the advocacy of another party in getting the proposals adopted?





- The PAs submitted their proposals relatively late in the adoption process
- Key stakeholders affirmed that similar proposals were unlikely without the PAs involvement
- The PAs solicited feedback from nearly all supporters of their proposals

90%

- Why not 100%?
 - Some doubt
 - Possible binary outcomes
 - “Necessary” vs “Sufficient”



- Code advocacy programs can lead to cost-effective savings, but not without some caveats
 - PAs must document, document, document
 - Savings might not be realized for several years
 - Cannibalized savings from other programs could be a concern
 - Treatment of lifetime savings poses a challenge



Thank You

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A photograph of a brick wall with a large, rectangular, brown sign mounted on it. The sign features the letters 'NMR' in large, green, 3D block letters. Below 'NMR', the words 'Group, Inc.' are written in a smaller, dark, sans-serif font. The sign is slightly weathered and has a thin gold-colored border. The background shows a red brick wall and a blurred window with white frames.

NMR

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