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RESEARCH LETTER

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Falling behind: The growth of frail, high-need beneficiaries receiving home based primary care in traditional Medicare 2014–2021

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Home-based primary care (HBPC) is an important service for complex, high-need patients that has been shown to improve health outcomes while significantly lowering the total cost of care.[1] As a result of the HBPC care model, which includes an interdisciplinary team, proactive outreach, and high visit frequency, the recipients of HBPC are less likely to be hospitalized and spend more total days at home, than similar patients who do not receive HBPC. These findings have recently been reconfirmed with the release of results from Year 2 of the High Needs Direct Contracting (HN-DC) model.[2] As the population ages, HBPC will be an important tool for controlling healthcare costs and providing healthcare access.

In the present study, we investigate growth in the share of the high-need population that can benefit from HBPC and whether there has been corresponding growth in receipt of HBPC. We use the eligibility criteria for Medicare's Independence at Home (IAH) demonstration, which are effective at identifying a high-need, high-cost population that is eligible for HBPC.[3] At IAH inception in 2012, IAH-qualifying (IAHQ) individuals comprised less than 6% of traditional Medicare (TM) beneficiaries, yet accounted for 29% of TM spending.[4] In 2021, they constituted 11% of TM beneficiaries and accounted for 44% of TM spending.

TABLE 1 Number of IAH-qualified beneficiaries by State in 2021, their share of FFS spending, the share of IAHQ beneficiaries receiving HBPC, the share of IAHQ beneficiaries attributed to an HBPC practice (plurality of their care from HBPC), ordered by the Share of IAHQ beneficiaries in the state.

	IAHQ beneficiaries		IAHQ receiving HBPC		IAHQ affiliated w/a HBPC practice			IAHQ beneficiaries		IAHQ receiving HBPC		IAHQ affiliated w/a HBPC practice	
Nation/ state	*N*	% of FFS Payments	*N*	% of IAHQ	*N*	% of IAHQ	State	*N*	% of FFS payments	*N*	% of IAHQ	*N*	% of IAHQ
NATION	3,273,244	44.4%	397,377	12.1%	285,708	8.7%							
CT	43,100	52.2%	3741	8.7%	2836	6.6%	NH	20,833	44.5%	1881	9.0%	1090	5.2%
MA	112,735	51.4%	9773	8.7%	5760	5.1%	VA	98,434	42.4%	12,268	12.5%	8871	9.0%
FL	269,220	46.4%	50,150	18.6%	36,951	13.7%	NV	26,567	47.9%	6527	24.6%	4615	17.4%
RI	11,221	49.5%	674	6.0%	377	3.4%	GA	82,650	41.4%	6824	8.3%	4906	5.9%
LA	52,464	48.3%	2822	5.4%	1803	3.4%	SC	64,524	41.2%	9832	15.2%	7848	12.2%
MS	49,995	47.1%	2745	5.5%	1333	2.7%	NC	103,140	40.6%	12,467	12.1%	8957	8.7%
AL	55,892	44.4%	2821	5.0%	1941	3.5%	ME	15,356	40.3%	1327	8.6%	848	5.5%
OK	56,509	46.4%	4748	8.4%	3350	5.9%	NE	22,617	38.6%	1306	5.8%	778	3.4%
PA	147,209	46.5%	15,894	10.8%	11,972	8.1%	MN	39,995	38.4%	5879	14.7%	4537	11.3%
NJ	103,591	47.5%	16,796	16.2%	13,016	12.6%	UT	18,209	37.6%	2402	13.2%	1682	9.2%
IL	150,906	46.4%	23,370	15.5%	16,412	10.9%	VT	9975	42.4%	701	7.0%	399	4.0%
NY	191,612	48.2%	25,616	13.4%	19,039	9.9%	WI	47,243	38.1%	4512	9.6%	3382	7.2%
TX	224,047	46.6%	33,326	14.9%	25,626	11.4%	IA	36,379	35.3%	1450	4.0%	773	2.1%
OH	120,236	46.2%	15,079	12.5%	10,843	9.0%	AZ	53,101	35.9%	9010	17.0%	6517	12.3%
MI	101,693	44.8%	17,034	16.8%	13,090	12.9%	CO	34,885	35.9%	6530	18.7%	4341	12.4%
KY	52,150	44.3%	4780	9.2%	3551	6.8%	ND	7229	33.5%	444	6.1%	280	3.9%
MO	67,261	43.1%	4710	7.0%	3225	4.8%	ID	14,207	33.4%	1367	9.6%	905	6.4%
MD	80,998	46.3%	9869	12.2%	7465	9.2%	SD	8973	32.9%	254	2.8%	165	1.8%
IN	73,318	43.7%	8409	11.5%	6092	8.3%	NM	15,437	35.9%	955	6.2%	607	3.9%
DE	16,427	44.2%	1391	8.5%	962	5.9%	WA	51,994	33.9%	7904	15.2%	4006	7.7%
WV	24,238	45.4%	1162	4.8%	797	3.3%	WY	6819	33.6%	467	6.8%	333	4.9%
TN	70,723	42.5%	8386	11.9%	5839	8.3%	OR	25,602	32.7%	2021	7.9%	1189	4.6%
AR	40,554	42.4%	2102	5.2%	1270	3.1%	MT	9772	28.2%	731	7.5%	548	5.6%
KS	38,792	41.9%	3527	9.1%	2630	6.8%	HI	6182	33.2%	394	6.4%	295	4.8%
CA	286,127	47.3%	29,555	10.3%	20,464	7.2%	AK	4176	26.2%	377	9.0%	279	6.7%
DC	5632	46.9%	699	12.4%	583	10.4%							

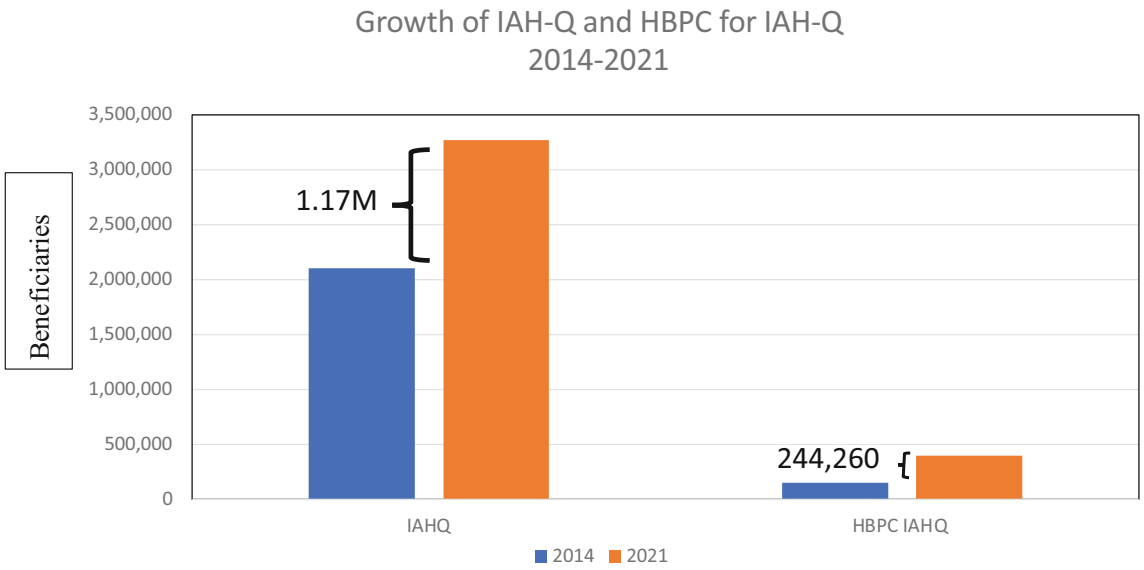

FIGURE 1 The number of Independence at Home Qualified TM beneficiaries in 2014 and 2021, and the number of IAHQ beneficiaries receiving HBPC in 2014–2021. The 925,740 difference between the additional 1.17 M IAHQ beneficiaries and the additional 244,260 IAHQ beneficiaries receiving HBPC is how much further inadequate supply has fallen behind the high-need population growth.

STUDY DESIGN

Using a cross-sectional cohort design previously described,[3] patients receiving HBPC were identified using 2021 Medicare fee-for-service (FFS) claims and attributed to HBPC practices using ACO REACH claims attribution rules, which attribute patients to the practice that provides the plurality of their primary care[5] Practices were identified by provider NPIs, grouped at NPPES addresses, grouped within TINs, as in Primary Care First.[6] We used 100 attributed patients as the lower threshold to identify a discrete HBPC practice. Beneficiaries were assessed for meeting all IAH criteria (hospitalization and post-acute care in prior 12 months, 2+ chronic conditions, and 2+ impairments in activities of daily living [ADL] [proxied by the JEN Frailty Index (JFI) > 5])[7] both at the start of 2021 and during the subsequent 12 months.

For 2014 and 2021, we identified the number of TM beneficiaries by state, the number of IAHQ TM beneficiaries, the number of IAHQ beneficiaries receiving HBPC, and the number of IAHQ beneficiaries attributable to an HBPC practice (Table 1).

RESULTS

From 2014 to 2021, the number of IAHQ TM beneficiaries grew from 2.1 to 3.2 M, an increase of 1.1 M beneficiaries, or 52%. Only a very small fraction of these beneficiaries received HBPC: 153,117 in 2014 (7.6%) and 397,377 in 2021 (12.1%), with 285,708 (8.7%) receiving the plurality of their primary care from an HBPC practice. Nearly 88% of beneficiaries who meet the IAH-qualifying set of criteria do not receive HBPC. Despite the relative growth of IAH beneficiaries receiving HBPC, the gap between need and supply has continued to grow. (Figure 1) The additional 244,260 IAHQ beneficiaries receiving HBPC between 2014 and 2021 were less than 20% of the additional 1.17 M IAHQ beneficiaries in TM. Overall, the number of IAHQ beneficiaries who do not receive HBPC grew by 925,000 to 2.8 M, a 53% increase.

In 2014, there were 1112 HBPC practices, with 347,994 attributed patients (of whom 44% were IAHQ). The number of HBPC practices grew to 1406 (26% increase) in 2021, with 447,344 attributed patients (of whom 54% were IAHQ), with significant access inequality among states (Supplemental Figure 1, Panels A and B). In absolute terms, IAHQ beneficiaries not receiving HBPC were most heavily concentrated in CA, TX, and FL (Supplemental Figure 1, Panel C).

DISCUSSION

While the number of IAHQ Medicare beneficiaries receiving HBPC has tripled in the decade since the inception of IAH and its successor demonstrations, HN-DC and High Needs ACO REACH,[8] the number of IAHQ beneficiaries has grown faster than the number receiving HBPC. As a result, nearly 90% of IAHQ beneficiaries in 2021 did not receive HBPC.

Inadequate payment in FFS is an important reason, with the mean payments to HBPC practices, despite the addition of new billing codes, reaching only $144 per beneficiary per month in 2021, half of the $290 median primary care payment available under HN-DC. Despite this, nearly

all of the growth in HBPC has been among patients meeting CMS medical necessity criteria for a house call in traditional Medicare, outside of the CMS demonstrations that specify the interdisciplinary team care high-need patients require.[9] The number of IAHQ and HN beneficiaries participating in IAH and its successor models has been less than 50,000 in the decade since IAH inception.[1]

While value-based payment models offer more sustainable reimbursement, access to these models is limited. No new practices have been allowed to join IAH since its inception; the High Needs ACO REACH demonstration also is not accepting new participants.[9] With a decade of IAH (and HN-DC) showing that HBPC can generate sufficient savings to fund adequate monthly payments to support the interdisciplinary care that high-need beneficiaries require,[1] it is time for a permanent, value-based model in traditional Medicare that can support the widespread growth in HBPC that is required to close the large gap between high-need beneficiaries and HBPC supply.

AUTHOR CONTRIBUTIONS

All the authors contributed to the concept, design, data acquisition, analysis, and preparation of the manuscript.

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CONFLICT OF INTEREST STATEMENT

Dr. Lally is chair of the Public Policy Committee for the American Academy of Home Care Medicine. Drs. Lally, Kinosian, and Deligiannidis are uncompensated board members of the American Academy of Home Care Medicine. Dr. Kinosian is Treasurer for the American Academy of Home Care Medicine, and a participant in the Complete Care Academy Collaborative, a High Need Accountable Care Organization Realizing Equity, Access, and Community Health (HN-ACO-REACH). Drs. Boling, and Kinosian are uncompensated board members, representing their practices, for the Complete Care Academy Collaborative. Drs. Deligiannidis, Boling, Kinosian, and Taler are salaried employees of their respective institutions, which participated in IAH. Dr. Lally is an owner of Bloom Health and Ms. Johnson is an employee of Bloom Health, which participates in High Need ACO-REACH. Drs. Yao, Lee and Ms. Kubisiak report no conflicts.

SPONSOR'S ROLE

None.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Supplement Figure 1: Heat map of the share of IAHQ receiving HBPC in 2021 and 2014 (A&B) and the share of TM IAHQ Medicare Beneficiaries not attributed to an HBPC practice in 2021 (C), showing the growing inequality of access for IAHQ among states. The number of IAHQ not receiving HBPC by state (Panel C), showing the partial alignment of HBPC growth with IAHQ growth.

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