

## ONLINE SUPPLEMENTARY DOCUMENT

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### **Supplement for Cost-Benefit Analysis for Universal Cataract Surgical Coverage in India**

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## Supplementary Tables

**Supplementary Table 1: Variables Used for the Analysis and their Sources.**

Variable	Source
Cataract prevalence (mean, lower bound, and upper bound)	Global Burden of Disease (GBD) Study 2019. Institute for Health Metrics and Evaluation (IHME)
Cataract disability-adjusted life-year (DALYs) (mean, lower bound, and upper bound)	Global Burden of Disease (GBD) Study 2019. Institute for Health Metrics and Evaluation (IHME)
Number of cataract surgeries performed	Report: National Health Profile (NHP) 2020 Table No: 3.2.2 Variable: Cataract Surgeries Achievement
Mean total cost per surgery	National Sample Survey (NSS) 2017-18
PM-JAY cataract package costs	Report: Cataract Management under Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY) Working paper - 003 Figure: 2 Variable(s): Cataract Management Packages under PM-JAY (per capita surgical costs)
Per surgery costs of cataract surgery at Aravind Eye Hospital–Madurai, July 2013	Report: A Sustainable Model For Delivering High-Quality, Efficient Cataract Surgery In Southern India. Table: Exhibit 1 Variables: Societal cost using mean IOL cost, medical (direct) cost using mean IOL cost, and patient (indirect) cost.
Government Health Financing Indicators for all the states and UTs with Legislature (2017-18)	Report: National Health Accounts 2021. Table: A-7 - Government Health Financing indicators for all the states and UTs with Legislature (2017-18) Variable: Gross Health Expenditure (GHE), Gross State Domestic Product (GSDP), GHE as % of GSDP, Per capita Total Gross Health Expenditure (TGHE), Population

**Supplementary Table 2. Definition of Key Terminology.**

Key Terms	Definition
Unmet Need	Number of people with cataract who did not get cataract surgery
Enhanced coverage scale-up costs	The total cost of cataract surgeries to eliminate cataract
Societal value of health lost	The loss of economic productivity due to cataract
Value of Life-Year	Monetary value of each year of life, even beyond the years of active workforce contribution, considering the gains in the GDP and the population-level life expectancy
Net Benefits	Enhanced coverage scale-up costs subtracted from the societal value of health lost

**Supplementary Table 3: Cost of Cataract Surgery Adjusted for Inflation for the Year 2020 and Converted to USD.** IOL-Intraocular lens, NSS - National Sample Survey, PHACO -Phacoemulsification, PMJAY - Pradhan Mantri Jan Arogya Yojana, SICS -Small Incision Cataract Surgery.

Source	Cost and year	Cost in INR (2020)	Cost in USD (2020)	Patient/Provider Cost
Mean cost, NSS	INR 10038.30242 (2017)	11962.75	161.436	Direct and indirect costs (patient's perspective)
PMJAY Cataract Surgery (PHACO) with hydrophobic acrylic IOL + Glaucoma	INR 10500 (2019)	11083.94	149.577	Direct costs (provider's perspective)
PMJAY Cataract Surgery (PHACO) with hydrophobic acrylic IOL	INR 7500 (2019)	7917.10	106.84	Direct costs (provider's perspective)
PMJAY Cataract Surgery (PHACO) with foldable IOL Unilateral	INR 7000 (2019)	7389.30	99.7179	Direct costs (provider's perspective)
PMJAY Cataract Surgery (SICS) with non-foldable IOL + Glaucoma	INR 6500 (2019)	6861.49	92.595	Direct costs (provider's perspective)

PMJAY Cataract Surgery (SICS) with IOL Unilateral	INR 6000 (2019)	6333.68	85.472	Direct costs (provider's perspective)
PMJAY Cataract Surgery (SICS) with non-foldable IOL	INR 5000 (2019)	5278.07	71.227	Direct costs (provider's perspective)
Per surgery costs of cataract surgery at Aravind Eye Hospital–Madur ai, July 2013  Societal cost using mean IOL cost	USD 120.24 (2016)	10882.62	146.86	Direct (patient's and provider's perspective) and patient-indirect cost
Per surgery costs of cataract surgery at Aravind Eye Hospital–Madur ai, July 2013  Medical (direct) cost using mean IOL cost	USD 95.37 (2016)	8631.401	116.48	Direct costs (patient's and provider's perspective)
Per surgery costs of cataract surgery at Aravind Eye Hospital–Madur ai, July 2013  Patient (indirect) cost	USD 24.87 (2016)	2251.219	30.38	Patient-indirect Costs

**Supplementary Table 4: Enhanced Cataract Coverage Costs for Meeting Total Needs for Cataract Surgery.** All costs are adjusted to millions of USD for the year 2020. NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO -Phacoemulsification, IOL-Intraocular lens, SICS -Small Incision Cataract Surgery.

States	Mean Cost, NSS	PHACO with hydrophobic acrylic IOL + Glaucoma, PMJAY	PHACO with hydrophobic acrylic IOL, PMJAY	PHACO with foldable IOL Unilateral, PMJAY	SICS with non-foldable IOL + Glaucoma, PMJAY	SICS with IOL Unilateral, PMJAY	SICS with non-foldable IOL, PMJAY	Societal cost using mean IOL cost, Aravind Eye Hospital	Medical (direct) cost using mean IOL cost, Aravind Eye Hospital	Patient (indirect) cost, Aravind Eye Hospital
Jammu & Kashmir and Ladakh	36.66 (32.29, 41.55)	40 (35.22, 45.33)	28.57 (25.16, 32.38)	26.66 (23.48, 30.22)	24.76 (21.80, 28.06)	22.90 (20.13, 25.90)	19.04 (17, 21.50)	39.27 (34.59, 44.51)	31.11 (27.43, 35.30)	8.13 (7.15, 9.20)
Himachal Pradesh	19.41(16.80, 22.28)	28.10 (24.30, 32.23)	20.05 (17.36, 23.02)	18.71 (16.20, 21.48)	17.38 (15.04, 19.95)	16.04 (13.90, 18.14)	13.37 (11.57, 15.34)	27.57 (23.87, 31.65)	21.90 (18.93, 25.10)	5.70 (4.93, 6.54)
Punjab	15.60 (13.46, 18.04)	104.10 (89.83, 120.40)	74.33 (64.17, 86)	69.37 (59.90, 80.26)	64.42 (55.61, 74.52)	59.46 (51.33, 69.80)	49.60 (42.80, 57.33)	102.18 (88.21, 118.21)	81.04 (69.95, 93.75)	21.12 (18.21, 24.45)
Uttarakhand	79.31 (69.70, 90.50)	38.61 (33.91, 44.10)	27.60 (24.22, 31.49)	25.74 (22.60, 29.39)	23.90 (21, 27.29)	22.06 (19.37, 25.19)	18.38 (16.14, 21)	37.91 (33.3, 43.29)	30.07 (26.40, 34.33)	7.84 (6.88, 8.95)
Haryana	90.60 (79.61, 102.70)	95.46 (83.90, 108.20)	68.18 (59.91, 77.27)	63.65 (55.91, 72.12)	59.09 (51.92, 67)	54.60 (47.93, 61.82)	45.45 (40, 51.51)	93.73 (82.36, 106.23)	74.34 (65.31, 84.25)	19.38 (17.03, 21.97)

NCT of Delhi	16.06(14.10,18.23)	68.18 (59.81,77.36)	48.70 (42.72,55.26)	45.45 (39.88,51.60)	42.21 (37.02,48.20)	39 (34.18,44.21)	32.47 (28.48,36.90)	66.95 (58.73,75.9)	52.10 (46.58,60.24)	13.84 (12.12,15.71)
Rajasthan	373.24 (326.27,424.90)	217.02 (189.71,247.05)	155.01 (135.50,176.46)	144.70 (126.47,164.70)	134.34 (117.44,152.93)	124.01 (108.40,141.17)	34 (30.05,38.53)	213.08 (186.27,242.57)	169.00 (147.73,192.38)	44.07 (38.53,50.17)
Uttar Pradesh	624.42 (562.80,721.46)	711.64 (631.24,809.30)	508.31 (450.89,578.05)	474.43 (420.83,539.95)	440.54 (391,501.10)	406.65 (360.70,462.44)	34 (30.05,39.10)	698.72 (619.78,94.58)	554.18 (491.56,630.20)	144.54 (128.20,164.34)
Bihar	285 (250.07,324.41)	345.30 (302.94,393)	246.62 (216.38,280.71)	230.18 (201.96,262)	213.74 (187.53,243.28)	197.30 (173.10,224.57)	164.41 (144.25,187.14)	339.01 (297.44,385.87)	268.10 (235.91,306.04)	70.12 (61.52,79.82)
Sikkim	2.26 (1.99,2.59)	1.94 (1.71,2.21)	1.39 (1.22,1.60)	1.29 (1.14,1.47)	1.20 (1.06,1.37)	1.11 (0.97,1.26)	0.9 (0.81, 1.05)	1.91 (1.68,2.18)	1.54 (1.33,1.72)	0.39 (0.34,0.45)
Arunachal Pradesh	4.45 (3.91,5.06)	3.15 (2.80,3.60)	2.25 (1.98,2.60)	2.10 (1.85,2.39)	1.95 (1.71,2.22)	1.80 (1.56,2.05)	1.50 (1.32,1.71)	3.1 (2.73,3.53)	2.45 (2.16,2.80)	0.64 (0.56,0.73)
Nagaland	3.61 (3.18,4.08)	4.60 (4.06,5.20)	3.28 (2.89,3.71)	3.06 (2.70,3.46)	2.85 (2.51,3.21)	2.63 (2.31,2.97)	2.19 (1.93,2.47)	4.52 (3.99,5.11)	3.58 (3.16,4.05)	0.93 (0.82,1.05)
Manipur	28.56 (25.10,32.66)	9.79 (8.60,11.88)	6.99 (6.14,3.71)	6.52 (5.73,7.45)	6.05 (5.32,6.92)	5.59 (4.91,6.39)	4.65 (4.09,5.32)	9.61 (8.44,10.99)	7.62 (6.69,8.71)	1.98 (1.74,2.27)
Mizoram	0	3.33	2.37 (2.08,	2.22	2.06 (1.80,	1.90 (1.66,	1.58 (1.39,	3.27 (2.87,	2.60 (2.27,	0.67 (0.60,

		(2.91, 3.80)	2.71)	(1.94, 2.53)	2.35)	2.17)	1.81)	3.74)	3.01)	0.77)
Tripura	3.47 (3.06,3.96)	13.20 (11.61, 14.20)	9.41 (8.29, 10.71)	8.80 (7.74, 10)	8.16 (7.19, 9.28)	7.53 (6.63, 8.56)	6.27 (5.53, 7.14)	12.94 (11.41, 12.72)	10.2 (9.04, 11.60)	2.67 (2.35, 3.04)
Meghalaya	35.09 (30.83,39.89)	7.01 (6.16, 7.98)	5 (4.40, 5.70)	4.67 (4.11, 5.31)	4.34 (3.81, 4.93)	4 (3.35, 4.55)	3.33 (2.39, 3.79)	6.89 (6.06, 7.83)	5.40 (4.80, 6.21)	1.42 (1.25, 1.62)
Assam	60 (52.80,68.07)	9.24 (8.14, 10.49)	66.03 (58.15, 74.97)	61.60 (54.27, 70.20)	57.22 (50.40, 65)	52.83 (46.52, 60)	44.02 (38.77, 50.01)	90.76 (79.93, 103.06)	71.98 (63.40, 81,70)	18.72 (16.53, 21.31)
West Bengal	277.28 (242.24,316.8 8)	298.96 (261.17, 341.62)	215.35 (186.55, 244.01)	199.30 (174.11, 227.80)	185.50 (161.67, 211.48)	17.08 (14.92, 19.52)	142.35 (124.36, 162.70)	293.52 (256.43, 335.42)	232.80 (203.38, 266.03)	60.71 (53.04, 69.38)
Jharkhand	156.43 (137.46,178.0 1)	114.60 (100.70, 130.39)	81.85 (71.92, 93.13)	76.39 (67.13, 86.93)	70.94 (62.33, 80.73)	65.48 (57.54, 74.51)	54.57 (48.05, 62.09)	112.52 (98.87, 128.03)	89.24 (78.41, 101.54)	23.27 (20.45, 26.48)
Odisha	136.63 (119,155.66)	159.99 (139.31, 182.25)	114.27 (99.50, 130.18)	106.65 (92.87, 121.50)	99.04 (86.24, 112.82)	91.42 (79.60, 104.14)	76.18 (66.33, 86.78)	157.08 (136.78, 17895)	124.60 (108.48, 141.92)	32.49 (28.29, 37.01)
Chhattisgarh	100.25 (88.41,112.80 )	118.60 (104.60, 133.45)	84.71 (74.71, 95.32)	79.06 (69.73, 89)	73.42 (64.75, 82.61)	67.72 (59.80, 76.25)	56.47 (50.01, 63.54)	116.45 (102.7, 131.03)	92.35 (81.45, 103.92)	24.08 (21.24, 27.10)
Madhya Pradesh	135.35 (117.77,154.3	206.82 (179.94,	147.72 (128.53,	137.89 (120.01,	128.03 (111.39, 145)	118.18 (102.82,	98.50 (86.54, 112.29)	203.07 (176.68,	161.05 (140.12,	42.01 (36.54,

	3)	235.82)	168.44)	157.21)		134.80)		231.54)	183.64)	48.00)
Gujarat	165.21 (145.60,187.3 8)	225.02 (198.29, 255.22)	160.72 (141.63, 182.30)	150.03 (132.19, 170.15)	139.28 (122.90, 158)	128.60 (113.30, 146)	107.15 (94.42, 121.53)	220.93 (194.69, 250.59)	175.23 (154.41, 199)	45.70 (40.27, 51.83)
Maharashtra	671.30 (590.05,763.4 0)	471.38 (414.32, 536.03)	336.69 (295.94, 382.89)	314.25 (276.21, 357.35)	291.90 (256.48, 331.83)	269.35 (237, 306.30)	224.46 (197.29, 255,25)	462.82 (406.8, 526.3)	367.07 (322.64, 417.42)	95.74 (84.15, 108.87)
Andhra Pradesh	362.12 (323.31,402.7 )	264.53 (236.18, 294.18)	188.95 (168.70, 210.12)	176.35 (157.45, 196.12)	163.76 (146.21, 182.11)	151.16 (135, 168.10)	125.90 (112.47, 140.08)	259.73 (231.9, 288.84)	206.1 (183.92, 229.08)	53.72 (47.97, 59.73)
Karnataka	353.03 (312.43,397.6 3)	229.04 (202.46, 258.10)	163.60 (144.61, 184.36)	152.70 (133, 172.07)	141.80 (125.33, 159.80)	130.34 (116.10, 147.48)	109.06 (96.41, 122.90)	224.88 (198.79, 253.42)	178.36 (157.66, 200.97)	46.50 (41.21, 52.42)
Goa	3.81 (3.34,4.37)	7.20 (6.30, 8.25)	5.14 (4.50, 5.90)	4.80 (4.20, 5.50)	4.46 (3.90, 5.10)	4.11 (3.60, 4.71)	3.43 (3.01, 3.92)	7.07 (6.19, 8.1)	5.61 (4.90, 6.42)	1.46 (1.28, 1.67)
Kerala	222.98 (192.10,257.6 6)	160.32 (139.11, 185.24)	114.51 (98.64, 132.31)	106.90 (92.07, 123.49)	99.24 (85.49, 114.70)	91.61 (78.91, 105.90)	76.34 (65.76, 88.20)	157.41 (135.60, 181.88)	124.84 (107.55, 144.25)	32.51 (28.05, 37.62)
Tamil Nadu	355.94 (310.30,407.7 8)	327.50 (285.49, 375.20)	233.92 (203.92, 268)	218.33 (190.33, 250.13)	202.73 (176.73, 232.27)	187.14 (163.13, 214.40)	155.95 (135.95, 178.67)	321.56 (280.31, 368.39)	255.03 (222.30, 292.12)	66.51 (58, 76.20)
Telangana	237.10 (209.26,270.0 4)	159 (140.33, 181.91)	113.57 (100.20, 129.35)	106.01 (93.60, 120.72)	98.42 (86.90, 112.10)	90.8 (80.10, 103.48)	75.71 (66.82, 86.23)	156.11 (137.79, 177.8)	123.81 (109.28, 141.02)	32.29 (28.50, 37)

India	4898.62 (4320.61,556 7.40)	4538.78 (4003.22, 5158.41)	3241.96 (2859.42, 3684.56)	3025.84 (2668.81, 3438.42)	2809.70 (2478.17, 3193.32)	2593.56 (2287.53, 2947.64)	2161.31 (1906.29, 2456.38)	4456.33 (3930.51, 5064.72)	3534.70 (3117.42, 4017.01)	921.90 (813.07, 104.71)
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**Supplementary Table 5: Enhanced Cataract Coverage Costs for Meeting Unmet Needs for Cataract Surgery.** All costs are adjusted to millions of USD for the year 2020. NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO -Phacoemulsification, IOL-Intraocular lens, SICS -Small Incision Cataract Surgery.

States	Mean Cost, NSS	PHACO with hydrophobic acrylic IOL + Glaucoma, PMJAY	PHACO with hydrophobic acrylic IOL, PMJAY	PHACO with foldable IOL Unilateral, PMJAY	SICS with non-foldable IOL + Glaucoma, PMJAY	SICS with IOL Unilateral, PMJAY	SICS with non-foldable IOL, PMJAY	Societal cost using mean IOL cost, Aravind Eye Hospital	Medical (direct) cost using mean IOL cost, Aravind Eye Hospital	Patient (indirect), Aravind Eye Hospital
Jammu & Kashmir and Ladakh	33.17 (29.01, 38.01)	36.11 (31.36, 41.47)	25.80 (22.40, 29.62)	24.08 (20.90, 27.64)	22.36 (19.41, 25.67)	24.08 (20.90, 27.64)	22.37 (19.41, 25.67 )	34.47(30.80, 40.71)	28.18 (24.42, 32.29)	7.33 (6.37, 8.42)
Himachal Pradesh	16.08 (13.48, 18.94)	23.28 (19.50, 27.43)	16.62 (13.93, 19.60)	15.52 (13.01, 18.28)	14.41 (12.07, 16.98)	15.52 (13.01, 18.28)	14.41 (12.07, 16.98)	22.85 (19.15, 26.93)	18.12 (15.19, 21.32)	4.72 (3.96, 5.57)
Punjab	101.65 (80.33, 126.12)	67.84 (53.61, 84.16)	48.45 (38.29, 60.11)	45.22 (35.74, 56.11)	41.99 (33.18, 52.10)	45.22 (35.74, 56.11)	42.10 (33.18, 52.10)	66.60 (52.63, 82.63)	52.83 (41.74, 65.54)	13.77 (10.88, 17.09)
Uttarakhand	63.75 (54.09, 75.10)	31.04 (26.33, 36.51)	22.17 (18.81, 26.08)	20.69 (17.55, 24.34)	19.21 (16.30, 22.60)	20.69 (17.55, 24.34)	19.21 (16.30, 22.60)	30.47 (25.86, 35.85)	24.17 (20.05, 28.43)	6.30 (5.34, 7.41)
Haryana	70.57 (59.57, 81.57)	74.35 (62.76, 85.94)	53.18 (44.83, 62.21)	49.56 (41.84, 57.28)	46.02 (38.85, 53.90)	49.56 (41.84, 57.28)	46.02 (38.85, 53.90)	73.10 (61.62, 85.49)	57.90 (48.87, 66.93)	15.10 (12.47, 17.68)

	82.65)	87.07)		58.05)		58.05)			67.81)	
NCT of Delhi	13.13 (11.16, 15.3)	175.80 (148.50,206 .10 )	39.82 (33.83, 46.37)	37.16 (31.5, 43.20)	34.51 (29.32, 40.19)	37.16 (31.50, 43.28)	34.51 (29.23, 40.19)	54.73 (46.51, 63.74)	43.41 (36.90, 50.56)	11.32 (9.62, 13.18)
Rajasthan	302.46 (255.50, 354.11)	557.48 (473.75, 649.03)	125.60 (106.11, 147. 07)	117.24 (99.03, 137.26)	108.87 (91.96, 127.46)	117.24 (99.03, 137.26)	34.90 (29.93, 40.95)	172.67 (145.86, 202.15)	136.95 (115.68, 160.34)	35.72 (30.17, 41.18)
Uttar Pradesh	502.71 (431.03, 589.74)	563.90 (483.50, 661.52)	402.78 (345.35, 47.25)	375.94 (322.33, 441.02)	349.90 (299.30, 409.50)	375.93 (322.22, 441.03)	349.08 (299.30, 409.51)	553.65 (474.17, 649.51)	439.12 (376.51, 515.15)	114.53 (98.20, 134.36)
Bihar	235.93 (200.97, 275.32)	285.50 (243.46, 333.50)	204.14 (173.90, 238.23)	190.50 (162.31, 222.36)	176.92 (150.71, 206.47)	190.53 (162.31, 222.23)	176.92 (150.71, 206.47)	280.61 (239.04, 327.47)	222.56 (189.01, 259.73)	58.04 (49.44, 67.77)
Sikkim	2.16 (1.90, 2.47)	1.85 (1.62, 2.21)	1.32 (1.15, 1.52)	1.23 (1.08, 1.41)	1.15 (1.05, 1.21)	1.23 (1.08, 1.41)	1.15 (1.05, 1.31)	1.82 (1.59, 2.09)	1.44 (1.26, 1.65)	0.37 (0.32, 0.43)
Arunachal Pradesh	3.95 (3.41, 4.57)	2.80 (2.42, 3.24)	2.01 (1.73, 2.31)	1.87 (1.61, 2.16)	1.73 (1.50, 1.31)	1.87 (1.61, 2.16)	1.73 (1.50, 2.09)	2.57 (2.38, 3.18)	2.18 (1.88, 2.52)	0.57 (0.49, 0.65)
Nagaland	3.45 (3.03, 3.92)	4.40 (3.86, 5.01)	3.14 (2.75, 3.57)	2.93 (2.57, 3.33)	2.72 (2.39, 3.09)	2.93 (2.57, 3.33)	2.72 (2.39, 3.09)	4.32 (3.80, 4.91)	3.43 (3.08, 3.89)	0.89 (0.78, 1.01)
Manipur	27.32 (23.85, 31.14)	9.36 (8.17, 10.70)	6.68 (5.83, 7.68)	6.24 (5.44, 7.17)	5.79 (5.06, 6.66)	6.24 (5.44, 7.17)	5.79 (5.06, 6.66)	9.19 (8.02, 1.05)	7.29 (6.36,8.38)	1.90 (1.66, 2.18)

Mizoram	0	2.80 (2.46, 3.35)	2.05 (1.76, 2.39)	1.92 (1.64, 2.23)	1.78 (1.52, 2.07)	1.92 (1.64, 2.23)	1.78 (1.52, 2.07)	2.82 (2.42, 3.29)	2.24 (1.92, 2.61)	0.58 (0.50, 0.68)
Tripura	3.10 (2.68, 3.57)	11.7 (10.19, 13.57)	8.39 (7.27, 9.68)	7.83 (6.79, 9.04)	7.27 (6.30, 8.39)	7.83 (6.79, 9.04)	7.27 (6.30, 8.39)	11.5 (10.10, 13.22)	9.15 (7.92, 10.50)	2.38 (2.06, 2.75)
Meghalaya	32.75 (28.52, 37.57)	6.55 (5.70, 7.51)	4.67 (4.07, 5.36)	4.36 (3.80, 5.01)	4.05 (3.53, 4.65)	4.36 (3.80, 5.02)	4.05 (3.52, 4.65)	6.43 (5.60, 7.37)	5.10 (4.44, 5.85)	1.33 (1/25, 1.52)
Assam	52.51 (46.36, 61.63)	82.51 (71.48, 95.03)	58.93 (51.06, 67.88)	55.08 (47.65, 63.35)	51.07 (44.25, 58.83)	55.08 (47.65, 63.35)	51.07 (44.25, 58.83)	81.01 (70.18, 93.33)	64.25 (55.66, 74.01)	16.74 (14.53, 19.30)
West Bengal	233.80 (198.72, 273.34)	252.02 (214.26, 294.70)	180.01 (153.03, 210.53)	168.01 (142.83, 196.47)	156.07 (132.63, 182.43)	168.01 (142.83, 196.47)	156.01 (132.63, 182.43)	247.45 (210.35, 289.35)	196.26 (166.84, 229.49)	51.18 (43.51, 60.10)
Jharkhand	137.80 (118.83, 159.36)	100.94 (87.05, 116.74)	72.10 (62.18, 83.39)	67.29 (58.03, 77.83)	62.49 (54.10, 72.27)	67.29 (58.03, 77.83)	62.49 (54.10, 72.27)	99.11 (85.47, 114.60)	78.61 (67.79, 90.91)	20.50 (17.68, 23.71)
Odisha	117.60 (99.94, 136.62)	137.70 (117.02, 159.97)	98.36 (83.59, 114.26)	91.83 (78.01, 106.68)	85.24 (72.44, 99.03)	91.83 (78.01, 106.64)	85.24 (72.44, 99.03)	135.20 (114.90, 157.06)	107.23 (91.18, 124.60)	27.96 (23.76, 32.49)
Chhattisgarh	85.24 (73.41, 97.80)	100.86 (86.86, 115.71)	72.04 (62.04, 82.65)	67.24 (57.90, 77.14)	62.43 (54.10, 71.63)	67.24 (57.90, 77.14)	62.43 (53.77, 71.66)	99.03 (85.28, 113.61)	78.54 (67.64, 90.17)	20.48 (17.64, 23.50)
Madhya Pradesh	74.84 (57.25, 88.74)	114.35 (87.47, 140.74)	81.68 (62.48, 102.39)	76.23 (58.31, 88.74)	70.79 (54.15, 88.74)	76.23 (58.31, 88.74)	70.80 (54.15, 88.74)	112.27 (85.88, 140.74)	89.05 (68.12, 112.27)	23.33 (17.67, 29.11)

	93.81)	143.35)		95.56)		95.56)			111.63)	
Gujarat	77.05 (57.43, 93.81)	104.95 (78.22, 13.51)	74.96 (55.87, 96.54)	68.96 (52.14, 90.14)	64.97 (48.42, 83.66)	70.10 (52.14,90.1 0)	64.91 (48.42, 84.10)	103.04 (76.80, 132.70)	81.72 (60.91, 105.25)	21.31 (15.88, 27.45)
Maharashtra	516.22 (435.10, 608.39)	362.48 (305.42, 427.89)	258.91 (218.16, 305.10)	24.16 (20.36, 28.47)	224.3 (189.07, 264.42)	241.65 (203.61, 285.10)	224.39 (189.07, 264.42)	355.90 (299.90, 419.38)	282.27 (237.83, 332.62)	73.62 (62.03, 86.75)
Andhra Pradesh	287.19 (248.38, 327.77)	209.80 (181.45, 239.44)	149.85 (129.60, 171.80)	139.86 (120.96, 159.63)	129.87 (112.32, 142.22)	139.86 (120.96, 159.62)	129.90 (112.32, 148.22)	206.10 (178.15, 235.09)	163.38 (141.30, 186.46)	42.61 (36.85, 48.63)
Karnataka	262.28 (221.89, 307.62)	170.61 (144.03, 199.67)	121.85 (101.89, 142.62)	113.74 (96.02, 133.11)	105.61 (89.16, 123.61)	113.74 (96.22, 133.41)	105.61 (89.63, 123.61)	167.51 (141.41, 196.05)	132.86 (112.16, 155.49)	34.65 (29.25, 40.55)
Goa	2.91 (2.43, 3.46)	5.49 (4.59, 6.53)	3.92 (3.27, 4.67)	3.66 (3.06, 4.35)	3.40 (2.84, 4.04)	3.66 (3.06, 4.35)	3.40 (2.84, 4.04)	5.39 (4.50, 6.41)	4.27 (3.57,5.09)	1.11 (0.93, 1.32)
Kerala	186.62 (155.72, 221.30)	134.16 (111.19, 159.30 )	95.83 (79.96, 113.63)	89.44 (74.63, 106.05)	83.05 (69.30, 98.48)	89.44 (74.63, 106.05)	83.05 (69.30, 98.48)	131.73 (109.92, 156.19)	104.48 (87.18, 123.88)	27.25 (22.73, 32.31)
Tamil Nadu	301.80 (256.12, 353.62)	277.66 (235.65, 326.54)	198.33 (168.32, 232.40)	185.10 (157.10, 216.91)	171.88 (145.90, 201.41)	185.10 (157.10, 216.91)	171.89 (145.62, 210.41)	272.62 (231.37, 319.45)	216.22 (183.51, 253.37)	56.39 (47.86, 66.08)
Telangana	184.39 (156.56, 217.33)	123.65 (104.99, 145.74)	88.32 (75.10, 104.10)	82.4 (69.60, 97.16 )	76.54 (65.10, 90.22)	82.43 (69.99, 97.16)	76.54 (65.10, 90.22)	121.41 (103.08, 143.10)	96.29 (82.10, 113.49)	25.11 (21.32, 29.60)

India	3823.70 (3245.69, 4492.47)	3542.80 (3007.25, 4162.45)	2530.56 (2148.02, 2973.16)	2361.90 (2004.83, 2778.10)	219.31 (186.16, 257.67)	2361.87 (2004.83, 2774.96)	2193.61 (1861.63, 2576.75)	3478.45 (2952.63, 4086.84)	2760.10 (2341.84, 3241.42)	719.56 (610.80, 845.20)
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**Supplementary Table 6: Complication Rate-Adjusted Cataract Surgeries and Unmet Needs.**

NHP - National Health Profile, NSS - National Sample Survey, PHACO -Phacoemulsification, IOL-Intraocular lens, SICS -Small Incision Cataract Surgery.

States	Complication rate-adjusted surgeries achieved total	Complication rate-adjusted surgeries achieved PHACO	Complication rate-adjusted surgeries achieved SICS	Complication rate-adjusted unmet need total	Complication rate-adjusted unmet need PHACO	Complication rate-adjusted unmet need SICS
Jammu & Kashmir and Ladakh	25543.83	25554.16	25580.01	241860.37 (209985.67, 277558.77)	241850.04 (209975.34, 277548.44)	241824.19 (209949.49, 277522.59)
Himachal Pradesh	31720.97	31733.80	31765.89	156008.44 (130801.54, 183769.54)	155995.60 (130788.70, 183756.70)	155963.51 (130756.61, 183724.61)
Punjab	239406.79	239503.67	239745.86	456342.81 (361211.11, 565495.21)	456245.93 (361114.23, 565398.33)	456003.74 (360872.04, 565156.14)
Uttarakhand	50050.72	50070.97	50121.61	208107.18 (176669.68, 244692.78)	208086.93 (176649.43, 244672.53)	208036.29 (176598.79, 244621.89)
Haryana	139532.71	139589.17	139730.32	498705.99 (421239.39, 583788.39)	498649.53 (421182.93, 583731.93)	498508.38 (421041.78, 583590.78)
NCT of Delhi	82217.50	82250.77	82333.94	373665.20 (317687.50, 435037.90)	373631.93 (317654.23, 435004.63)	373548.76 (317571.06, 434921.46)
Rajasthan	271966.99	272077.05	272352.18	1178940.01 (996359.01, 1379710.01)	1178829.95 (996248.95, 1379599.95)	1178554.82 (995973.82, 1379324.82)
Uttar Pradesh	976398.78	976793.89	977781.64	3781344.22 (3243809.22, 4434044.22)	3780949.11 (3243414.11, 4433649.11)	3779961.36 (3242426.36, 4432661.36)

Bihar	393051.32	393210.37	393608.00	1915331.68 (1632284.68, 2234409.68)	1915172.63 (1632125.63, 2234250.63)	1914775.00 (1631728.00, 2233853.00)
Sikkim	596.07	596.31	596.91	12432.30 (10861.57, 14241.76)	12432.06 (10861.33, 14241.52)	12431.46 (10860.73, 14240.92)
Arunachal Pradesh	2315.07	2316.00	2318.35	18801.06 (16247.41, 21728.39)	18800.13 (16246.48, 21727.46)	18797.78 (16244.13, 21725.11)
Nagaland	1298.89	1299.41	1300.73	29484.82 (25841.04, 33471.83)	29484.30 (25840.52, 33471.31)	29482.98 (25839.20, 33469.99)
Manipur	2793.50	2794.63	2797.46	62625.81 (54681.08, 72002.71)	62624.68 (54679.95, 72001.58)	62621.85 (54677.12, 71998.75)
Mizoram	2973.41	2974.61	2977.62	19291.22 (16546.46, 22483.24)	19290.02 (16545.26, 22482.04)	19287.01 (16542.25, 22479.03)
Tripura	9424.36	9428.17	9437.71	78714.68 (68239.23, 90819.64)	78710.87 (68235.42, 90815.83)	78701.33 (68225.88, 90806.29)
Meghalaya	3051.50	3052.73	3055.82	43831.46 (38180.48, 50279.18)	43830.23 (38179.25, 50277.95)	43827.14 (38176.16, 50274.86)
Assam	65628.49	65655.05	65721.44	552401.01 (478690.91, 636123.21)	552374.45 (478664.35, 636096.65)	552308.06 (478597.96, 636030.26)
West Bengal	310086.52	310212.00	310525.69	1688554.48 (1435989.48, 1973881.48)	1688429.00 (1435864.00, 1973756.00)	1688115.31 (1435550.31, 1973442.31)
Jharkhand	90198.65	90235.15	90326.40	675945.95 (583041.85, 781564.65)	675909.45 (583005.35, 781528.15)	675818.20 (582914.10, 781436.90)
Odisha	147268.71	147328.30	147477.28	922345.29 (784112.89, 1071220.29)	922285.70 (784053.30, 1071160.70)	922136.72 (783904.32, 1071011.72)

Chhattisgarh	117241.04	117288.48	117407.09	675681.26 (582095.06, 774966.96)	675633.82 (582047.62, 774919.52)	675515.21 (581929.01, 774800.91)
Madhya Pradesh	611090.70	611337.98	611956.18	771626.30 (591936.30, 965502.30)	771379.02 (591689.02, 965255.02)	770760.82 (591070.82, 964636.82)
Gujarat	793488.72	793809.81	794612.53	710892.28 (532188.28, 912827.28)	710571.19 (531867.19, 912506.19)	709768.47 (531064.47, 911703.47)
Maharashtra	719644.80	719936.01	720664.03	2431778.20 (2050314.20, 2864047.20)	2431486.99 (2050022.99, 2863755.99)	2430758.97 (2049294.97, 2863027.97)
Andhra Pradesh	361725.76	361872.13	362238.07	1406855.24 (1217320.24, 1605035.24)	1406708.87 (1217173.87, 1604888.87)	1406342.93 (1216807.93, 1604522.93)
Karnataka	386137.76	386294.01	386684.64	1145142.25 (967429.25, 1339456.25)	1144985.99 (967272.99, 1339299.99)	1144595.36 (966882.36, 1338909.36)
Goa	11316.35	11320.93	11332.38	36854.44 (30822.20, 43844.22)	36849.86 (30817.62, 43839.64)	36838.41 (30806.17, 43828.19)
Kerala	172838.24	172908.18	173083.03	899006.76 (750503.36, 1065587.76)	898936.82 (750433.42, 1065517.82)	898761.97 (750258.57, 1065342.97)
Tamil Nadu	329371.17	329504.45	329837.65	1860161.83 (1579316.83, 2179089.83)	1860028.55 (1579183.55, 2178956.55)	1859695.35 (1578850.35, 2178623.35)
Telangana	233572.67	233667.18	233903.47	829428.34 (704640.34, 977116.34)	829333.82 (704545.82, 977021.82)	829097.53 (704309.53, 976785.53)
India	6581951.96	6584615.37	6591273.90	23762092.04 (20181664.04, 27904762.04)	23759428.63 (20179000.63, 27902098.63)	23752770.10 (20172342.10, 27895440.10)

**Supplementary Table 7: Complication Rate-Adjusted Enhanced Coverage Costs for Meeting Unmet Needs for Cataract Surgery.** All costs are adjusted to millions of USD for the year 2020. NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO -Phacoemulsification, IOL-Intraocular lens, SICS -Small Incision Cataract Surgery.

States	Mean Cost, NSS	Societal cost using mean IOL cost, Aravind Eye Hospital	Medical (direct) cost using mean IOL cost, Aravind Eye Hospital	Patient (indirect) cost, Aravind Eye Hospital	PHACO with hydrophobic acrylic IOL + Glaucoma, PMJAY	PHACO with hydrophobic acrylic IOL, PMJAY	PHACO with foldable IOL Unilateral, PMJAY	SICS with non-foldable IOL + Glaucoma, PMJAY	SICS with IOL Unilateral, PMJAY	SICS with non-foldable IOL, PMJAY
Jammu & Kashmir and Ladakh	39.00 (33.9,44.8)	35.50 (30.80, 40.80)	28.20 (24.50, 32.30)	7.33 (6.40, 8.42)	36.20 (31.40, 41.50)	25.80 (22.40, 29.70)	24.10 (20.90, 27.70)	22.40 (19.41, 25.70)	20.70 (17.90, 23.70)	17.20 (15.0, 19.80)
Himachal Pradesh	25.20 (21.10, 29.70)	22.90 (19.20, 27.00)	18.20 (15.20, 21.40)	4.72 (4.00, 5.60)	23.30 (19.60, 27.50)	16.70 (14.00, 19.60)	15.60 (13.01, 18.30)	14.41 (12.10, 17.00)	13.30 (11.20, 15.70)	11.10 (9.30, 13.10)
Punjab	73.70 (58.30, 91.30)	67.00 (53.00, 83.00)	53.20 (42.10, 65.90)	13.90 (11.00, 17.20)	68.20 (54.00, 84.60)	48.70 (38.60, 60.40)	45.50 (36.00, 56.40)	42.20 (33.44, 52.30)	39.00 (30.80, 48.30)	32.50 (25.70, 40.30)
Uttarakhand	33.60 (28.50, 39.50)	30.60 (25.90, 35.90)	24.20 (20.60, 28.50)	6.30 (5.40, 7.41)	31.10 (26.40, 36.60)	22.20 (18.90, 26.10)	20.70 (17.60, 24.40)	19.30 (16.40, 22.70)	17.80 (15.1, 20.90)	14.80 (12.60, 17.40)
Haryana	80.50 (68.00, 94.20)	73.20 (61.90, 85.70)	58.10 (49.10, 68.00)	15.20 (12.80, 17.70)	74.60 (63.00, 87.30)	53.30 (45.00, 62.40)	49.70 (42.00, 58.20)	46.20 (39.00, 54.00)	42.60 (36.00, 49.90)	35.50 (30.00, 41.60)

NCT of Delhi	60.30 (51.30, 70.20)	54.90 (46.70, 63.90)	43.50 (37.00, 50.70)	11.40 (9.70, 13.20)	55.90 (47.50, 65.10)	39.90 (33.90, 46.50)	37.30 (31.70, 43.40)	34.60 (29.40, 40.30)	31.90 (27.10, 37.20)	26.60 (22.60, 31.00)
Rajasthan	190.30 (160.80, 222.70)	173.10 (146.30, 202.60)	137.30 (116.10, 160.70)	35.80 (30.30, 41.90)	176.30 (149.00, 206.40)	125.90 (106.40, 147.40)	117.60 (99.30, 137.60)	109.10 (92.20, 127.70)	100.70 (85.10, 117.90)	83.90 (70.90, 98.20)
Uttar Pradesh	610.40 (523.70, 715.80)	555.30 (476.40, 651.20)	440.50 (377.80, 516.50)	114.90 (98.50, 134.70)	565.50 (485.10, 663.20)	404.00 (346.50, 473.70)	377.00 (323.40, 442.10)	350.00 (300.20, 410.40)	323.10 (277.10, 378.90)	269.20 (230.90, 315.70)
Bihar	309.20 (263.50, 360.70)	281.30 (239.70, 328.10)	223.10 (190.10, 260.30)	58.20 (49.60, 67.90)	286.50 (244.10, 334.20)	204.60 (174.40, 238.70)	191.00 (162.80, 222.80)	177.30 (151.10, 206.80)	163.70 (139.50, 190.90)	136.40 (116.20, 159.10)
Sikkim	2.00 (1.80, 2.30)	1.80 (1.60, 2.10)	1.40 (1.30, 1.70)	0.40 (0.32, 0.43)	1.90 (1.62, 2.10)	1.30 (1.20, 1.52)	1.20 (1.10, 1.41)	1.20 (1.05, 1.30)	1.10 (0.90, 1.20)	0.90 (0.80, 1.00)
Arunachal Pradesh	3.00 (2.60, 3.50)	2.80 (2.40, 3.20)	2.20 (1.90, 2.52)	0.60 (0.50, 0.70)	2.80 (2.42, 3.24)	2.00 (1.73, 2.31)	1.90 (1.61, 2.20)	1.70 (1.50, 2.00)	1.60 (1.41, 1.90)	1.30 (1.20, 1.50)
Nagaland	4.80 (4.20, 5.40)	4.32 (3.80, 4.91)	3.43 (3.08, 3.90)	0.90 (0.80, 1.01)	4.40 (3.90, 5.01)	3.20 (2.80, 3.60)	2.93 (2.60, 3.33)	2.72 (2.40, 3.10)	2.50 (2.20, 2.90)	2.10 (1.80, 2.40)
Manipur	10.10 (8.80, 11.60)	9.20 (8.02, 10.60)	7.30 (6.40,8.40)	1.90 (1.70, 2.20)	9.40 (8.20, 10.80)	6.70 (5.83, 7.70)	6.24 (5.50, 7.20)	5.80 (5.10, 6.70)	5.40 (4.70, 6.20)	4.50 (3.90, 5.10)
Mizoram	3.10 (2.70, 3.50)	2.82 (2.42, 3.22)	2.24 (1.92, 2.56)	0.60	2.90 (2.50, 3.30)	2.10 (1.80, 2.40)	1.92 (1.64, 2.20)	1.80 (1.50, 2.10)	1.60 (1.40, 1.80)	1.40 (1.20, 1.60)

	3.60)	3.30)	2.61)	(0.50, 0.70)	3.40)	2.39)	2.20)	2.10)	1.90)	
Tripura	12.70 (11.00, 14.70)	11.60 (10.00, 13.30)	9.20 (7.92, 10.60)	2.40 (2.10, 2.80)	11.80 (10.20, 13.60)	8.40 (7.30, 9.70)	7.83 (6.80, 9.10)	7.30 (6.30, 8.40)	6.70 (5.80, 7.80)	5.60 (4.90, 6.50)
Meghalaya	7.10 (6.20, 8.10)	6.43 (5.60, 7.40)	5.10 (4.44, 5.90)	1.33 (1.25, 1.52)	6.60 (5.70, 7.51)	4.70 (4.10, 5.40)	4.40 (3.80, 5.01)	4.10 (3.53, 4.70)	3.70 (3.30, 4.30)	3.10 (2.70, 3.60)
Assam	89.20 (77.30, 102.70)	81.10 (70.30, 93.40)	64.30 (55.80, 74.10)	16.80 (14.53, 19.30)	82.60 (71.60, 95.10)	59.00 (51.10, 68.00)	55.10 (47.70, 63.40)	51.10 (44.30, 58.90)	47.20 (40.90, 54.40)	39.30 (34.10, 45.30)
West Bengal	272.60 (231.80, 318.70)	248.00 (210.90, 289.90)	196.70 (167.30, 229.90)	51.30 (43.60, 60.00)	252.60 (214.80, 295.20)	180.40 (153.40, 210.90)	168.40 (143.20, 196.80)	156.30 (132.90, 182.70)	144.30 (122.70, 168.70)	120.20 (102.20, 140.60)
Jharkhand	109.10 (94.10, 126.20)	99.30 (85.60, 114.80)	78.70 (67.90, 91.00)	20.50 (17.70, 23.71)	101.00 (87.20, 116.90)	72.20 (62.30, 83.50)	67.40 (58.10, 77.90)	62.60 (54.00, 72.40)	57.80 (49.80, 66.80)	48.10 (41.50, 55.70)
Odisha	148.90 (126.60, 172.90)	135.50 (115.20, 157.30)	107.40 (91.30, 124.80)	28.00 (23.80, 32.50)	138.00 (117.30, 160.20)	98.50 (83.80, 114.40)	92.00 (78.20, 106.80)	85.40 (72.60, 99.20)	78.80 (67.00, 91.50)	65.70 (55.80, 76.30)
Chhattisgarh	109.10 (94.00, 125.10)	99.20 (85.50, 113.80)	78.70 (67.80, 90.30)	20.50 (17.70, 23.50)	101.10 (87.10, 115.90)	72.20 (62.20, 82.80)	67.40 (58.00, 77.30)	62.50 (53.90, 71.70)	57.70 (49.70, 66.20)	48.10 (41.40, 55.20)
Madhya Pradesh	124.60 (95.60,	113.30 (86.90,	89.90 (68.90,	23.40 (18.00,	115.40 (88.50,	82.40 (63.20,	76.90 (59.00,	71.40 (54.70,	65.90 (50.50,	54.90 (42.10, 68.74)

	155.90)	141.80)	112.50)	29.30)	144.40)	103.10)	96.30)	89.30)	82.40)	
Gujarat	114.80 (85.90, 147.40)	104.40 (78.20, 134.10)	82.80 (62.00, 106.30)	21.60 (16.20, 27.70)	106.30 (79.60, 136.50)	75.90 (56.80, 97.50)	70.90 (53.00, 91.00)	65.70 (49.20, 84.40)	60.70 (45.40, 77.90)	50.60 (37.80, 64.90)
Maharashtra	392.60 (331.00, 462.40)	357.10 (301.10, 420.60)	283.30 (238.80, 333.60)	73.90 (62.30, 87.00)	363.70 (306.60, 428.40)	259.80 (219.00, 306.00)	242.50 (204.40, 285.60)	225.10 (189.90, 265.10)	207.80 (175.20, 244.70)	173.10 (146.00, 203.90)
Andhra Pradesh	227.10 (196.50, 259.10)	206.60 (178.80, 235.70)	163.90 (141.80, 187.00)	42.70 (37.00, 48.80)	210.40 (182.10, 240.10)	150.30 (130.00, 171.50)	140.30 (121.40, 160.00)	130.20 (112.70, 148.60)	120.20 (104.00, 137.10)	100.20 (86.70, 114.30)
Karnataka	184.90 (156.20, 216.20)	168.20 (142.10, 196.70)	133.40 (112.70, 156.00)	34.80 (29.40, 40.70)	171.30 (144.70, 200.30)	122.30 (103.30, 143.10)	114.20 (96.50, 133.60)	106.00 (89.50, 124.00)	97.80 (82.60, 114.40)	81.50 (68.90, 95.40)
Goa	5.90 (5.00, 7.10)	5.40 (4.50, 6.41)	4.30 (3.60,5.10)	1.11 (0.93, 1.32)	5.50 (4.60, 6.60)	3.92 (3.30, 4.70)	3.70 (3.10, 4.40)	3.40 (2.90, 4.10)	3.10 (2.60, 3.70)	2.60 (2.20, 3.10)
Kerala	145.20 (121.30, 172.10)	132.10 (110.30, 156.60)	104.80 (87.50, 124.20)	27.30 (22.80, 32.40)	134.50 (111.20, 159.40)	96.00 (80.20, 113.80)	89.60 (74.80, 106.30)	83.20 (69.50, 98.60)	76.80 (64.10, 91.10)	64.00 (53.40, 75.90)
Tamil Nadu	300.30 (255.00, 351.80)	273.20 (231.90, 320.00)	216.70 (184.00, 253.80)	56.50 (48.00, 66.20)	278.20 (236.20, 325.90)	198.70 (168.70, 232.80)	185.50 (157.50, 217.30)	172.20 (146.20, 201.70)	159.00 (134.90, 186.20)	132.50 (112.50, 155.20)
Telangana	133.90 (113.80, 157.70)	121.80 (103.50, 143.50)	96.60 (82.10, 113.80)	25.20 (21.40, 29.70)	124.00 (105.40, 146.10)	88.60 (75.30, 104.4)	82.70 (70.30, 97.40)	76.80 (65.20, 90.40)	70.90 (60.20, 83.50)	59.10 (50.20, 69.60)

India	3823.30 (3230.30, 4493.50)	3478.10 (2938.60, 4087.80)	2758.60 (2330.70, 3242.20)	719.56 (607.90, 845.60)	3541.90 (2992.50, 4162.90)	2529.90 (2137.50, 2973.50)	2361.30 (1995.00, 2775.30)	2192.00 (1851.90, 2576.40)	2023.40 (1709.40, 2378.20)	1686.10 (1424.50, 1981.90)
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**Supplementary Table 8: Complication Rate-Adjusted Economic Benefits for Meeting Unmet Needs for Cataract Surgery.** All costs are adjusted to USD for the year 2020. NSS - National Sample Survey, PHACO -Phacoemulsification, SICS -Small Incision Cataract Surgery, DALY -Disability Adjusted Life-Years.

States	Complication rate-adjusted mean DALY count unmet need total	Complication rate-adjusted PHACO DALY count unmet need	Complication rate-adjusted SICS DALY count unmet need	Complication rate-adjusted value of life-year total	Complication rate-adjusted value of life-year PHACO	Complication rate-adjusted value of life-year SICS
Jammu & Kashmir and Ladakh	16926.97	16926.24	16924.43	79296412.25	79293023.35	79284551.11
Himachal Pradesh	10830.94	10830.05	10827.82	94844365.07	94836561.5	94817052.59
Punjab	31664.67	31657.95	31641.15	225939211.2	225891246.6	225771335.3
Uttarakhand	14424.82	14423.41	14419.90	130528083	130515379.9	130483622.1
Haryana	34850.99	34847.04	34837.18	361838755.8	361797789.2	361695372.7
NCT of Delhi	28316.49	28313.97	28307.66	456335736.4	456295106.2	456193530.5
Rajasthan	82343.80	82336.11	82316.89	402389475.6	402351913.1	402258006.9
Uttar Pradesh	270552.71	270524.44	270453.76	791702337.5	791619614.5	791412807
Bihar	132535.14	132524.14	132496.62	241845758.2	241825675.2	241775467.9
Sikkim	863.39	863.37	863.33	8953260.018	8953086.315	8952652.058
Arunachal Pradesh	1346.17	1346.11	1345.94	13024932.64	13024283.65	13022661.16
Nagaland	2090.84	2090.80	2090.71	11240081.82	11239881.45	11239380.54

Manipur	4394.54	4394.46	4394.27	15324798.55	15324521.94	15323830.41
Mizoram	1350.61	1350.52	1350.31	10983637.19	10982952.14	10981239.51
Tripura	5626.97	5626.70	5626.02	27505625.31	27504292.71	27500961.2
Meghalaya	3139.97	3139.88	3139.66	13812605.02	13812215.89	13811243.09
Assam	39636.55	39634.65	39629.88	149063112.5	149055946.3	149038030.7
West Bengal	126675.82	126666.41	126642.88	587731737.8	587688063.1	587578876.2
Jharkhand	49169.84	49167.18	49160.54	163531927.4	163523097.2	163501021.5
Odisha	67422.68	67418.32	67407.43	296328241.4	296309095.6	296261231.1
Chhattisgarh	49926.52	49923.02	49914.25	224776718.4	224760936	224721480
Madhya Pradesh	56410.73	56392.65	56347.46	224785368	224713331.9	224533241.8
Gujarat	48483.71	48461.81	48407.07	429473883.1	429279903.1	428794953
Maharashtra	165564.97	165545.14	165495.58	1475782250	1475605524	1475163710
Andhra Pradesh	98379.90	98369.66	98344.07	669617873.2	669548204	669374031.2
Karnataka	88806.26	88794.14	88763.85	829304602.9	829191446.2	828908554.5
Goa	2445.50	2445.20	2444.44	38279429.08	38274672.82	38262782.18
Kerala	62384.72	62379.86	62367.73	556715986.4	556672675.8	556564399.4
Tamil Nadu	123367.01	123358.17	123336.08	1073766297	1073689361	1073497022
Telangana	62540.62	62533.49	62515.67	568446186.2	568381409.9	568219469.3
India	1687356.68	1687167.55	1686694.72	27252663522	27249608866	27241972226

**Supplementary Table 9: Complication Rate-Adjusted Net Benefits for Meeting Unmet Needs for Cataract Surgery.** All costs are adjusted to millions of USD for the year 2020. NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO -Phacoemulsification, IOL-Intraocular lens, SICS -Small Incision Cataract Surgery.

States	Mean Cost, NSS	Societal cost using mean IOL cost, Aravind Eye Hospital	Medical (direct) cost using mean IOL cost, Aravind Eye Hospital	Patient (indirect) cost, Aravind Eye Hospital	PHACO with hydrophobic acrylic IOL + Glaucoma, PMJAY	PHACO with hydrophobic acrylic IOL, PMJAY	PHACO with foldable IOL Unilateral, PMJAY	SICS with non-foldable IOL + Glaucoma, PMJAY	SICS with IOL Unilateral, PMJAY	SICS with non-foldable IOL, PMJAY
Jammu & Kashmir and Ladakh	40.3	43.8	51.1	71.9	43.1	53.5	55.2	56.9	58.6	62.1
Himachal Pradesh	69.7	71.9	76.7	90.1	71.5	78.2	79.3	80.4	81.5	83.7
Punjab	152.3	158.9	172.8	212.1	157.6	177.1	180.4	183.5	186.8	193.3
Uttarakhand	96.9	100.0	106.3	124.2	99.4	108.3	109.8	111.2	112.7	115.7
Haryana	281.3	288.6	303.7	346.7	287.2	308.5	312.1	315.5	319.1	326.2
NCT of Delhi	396.0	401.5	412.8	445.0	400.4	416.4	419.0	421.6	424.3	429.6
Rajasthan	212.1	229.3	265.1	366.6	226.0	276.4	284.8	293.1	301.5	318.3
Uttar Pradesh	181.3	236.4	351.3	676.8	226.1	387.7	414.6	441.4	468.3	522.2
Bihar	-67.4	-39.4	18.7	183.7	-44.6	37.2	50.8	64.5	78.1	105.4

Sikkim	6.9	7.1	7.5	8.6	7.1	7.6	7.7	7.8	7.9	8.1
Arunachal Pradesh	10.0	10.3	10.8	12.5	10.2	11.0	11.1	11.3	11.4	11.7
Nagaland	6.5	6.9	7.8	10.3	6.8	8.1	8.3	8.5	8.7	9.1
Manipur	5.2	6.1	8.0	13.4	6.0	8.6	9.1	9.5	10.0	10.9
Mizoram	7.9	8.2	8.7	10.4	8.1	8.9	9.1	9.2	9.3	9.6
Tripura	14.8	15.9	18.3	25.1	15.7	19.1	19.7	20.2	20.8	21.9
Meghalaya	6.7	7.4	8.7	12.5	7.3	9.1	9.4	9.8	10.1	10.7
Assam	59.9	67.9	84.7	132.3	66.4	90.0	94.0	97.9	101.8	109.7
West Bengal	315.1	339.8	391.0	536.4	335.1	407.3	419.3	431.3	443.3	467.3
Jharkhand	54.4	64.3	84.8	143.0	62.4	91.3	96.1	100.9	105.7	115.4
Odisha	147.4	160.9	188.9	268.3	158.4	197.8	204.3	210.9	217.4	230.6
Chhattisgarh	115.7	125.5	146.1	204.2	123.7	152.6	157.4	162.2	167.0	176.6
Madhya Pradesh	100.2	111.5	134.9	201.3	109.3	142.3	147.8	153.2	158.7	169.6
Gujarat	314.7	325.1	346.7	407.9	323.0	353.4	358.4	363.1	368.1	378.2
Maharashtra	1083.2	1118.7	1192.5	1401.9	1111.9	1215.8	1233.1	1250.1	1267.4	1302.0
Andhra Pradesh	442.5	463.0	505.7	626.9	459.1	519.3	529.3	539.2	549.2	569.2
Karnataka	644.4	661.1	695.9	794.5	657.9	706.9	715.0	722.9	731.1	747.4
Goa	32.3	32.9	34.0	37.2	32.8	34.3	34.6	34.9	35.1	35.6
Kerala	411.6	424.7	452.0	529.4	422.2	460.6	467.0	473.3	479.7	492.5

Tamil Nadu	773.5	800.6	857.1	1017.3	795.5	875.0	888.2	901.3	914.5	941.0
Telangana	434.5	446.6	471.8	543.2	444.3	479.8	485.7	491.4	497.4	509.2
India	23429.5	23774.7	24494.2	26533.2	23707.7	24719.7	24888.3	25050.0	25218.6	25555.8

**Supplementary Table 10: Percentage Change in Net Benefits for Meeting Unmet Needs for Cataract Surgery After Adjusting for Complication Rate.** All values are represented in percentages. NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO -Phacoemulsification, IOL-Intraocular lens, SICS -Small Incision Cataract Surgery.

States	Mean Cost, NSS	Societal cost using mean IOL cost, Aravind Eye Hospital	Medical (direct) cost using mean IOL cost, Aravind Eye Hospital	Patient (indirect) cost, Aravind Eye Hospital	PHACO with hydrophobic acrylic IOL + Glaucoma, PMJAY	PHACO with hydrophobic acrylic IOL, PMJAY	PHACO with foldable IOL Unilateral, PMJAY	SICS with non-foldable IOL + Glaucoma, PMJAY	SICS with IOL Unilateral, PMJAY	SICS with non-foldable IOL, PMJAY
Jammu & Kashmir and Ladakh	-12.65	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11
Himachal Pradesh	-11.30	0.24	0.24	0.24	0.23	0.23	0.23	0.21	0.21	0.21
Punjab	23.89	0.61	0.61	0.61	0.59	0.59	0.59	0.54	0.54	0.54
Uttarakhand	45.97	0.28	0.28	0.28	0.27	0.27	0.27	0.25	0.25	0.25
Haryana	-3.02	0.33	0.33	0.33	0.32	0.32	0.32	0.29	0.29	0.29
NCT of Delhi	-10.41	0.26	0.26	0.26	0.25	0.25	0.25	0.23	0.23	0.23
Rajasthan	114.55	0.27	0.27	0.27	0.26	0.26	0.26	0.24	0.24	0.24
Uttar	-36.76	0.30	0.30	0.30	0.29	0.29	0.29	0.26	0.26	0.26

Pradesh										
Bihar	-1,360.87	0.24	0.24	0.24	0.23	0.23	0.23	0.21	0.21	0.21
Sikkim	2.36	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
Arunachal Pradesh	10.39	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.13
Nagaland	-16.66	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Manipur	-143.42	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mizoram	-28.23	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16
Tripura	-39.27	0.14	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12
Meghalaya	-135.55	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07
Assam	-37.19	0.14	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12
West Bengal	-10.65	0.21	0.21	0.21	0.21	0.21	0.21	0.19	0.19	0.19
Jharkhand	113.56	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14
Odisha	-17.26	0.19	0.19	0.19	0.18	0.18	0.18	0.16	0.16	0.16
Chhattisgarh	-16.81	0.20	0.20	0.20	0.20	0.20	0.20	0.18	0.18	0.18
Madhya Pradesh	-32.23	0.93	0.93	0.93	0.90	0.90	0.90	0.82	0.82	0.82
Gujarat	-9.26	1.32	1.32	1.32	1.27	1.27	1.27	1.16	1.16	1.16
Maharashtra	13.49	0.35	0.35	0.35	0.33	0.33	0.33	0.30	0.30	0.30

Andhra Pradesh	16.32	0.30	0.30	0.30	0.29	0.29	0.29	0.26	0.26	0.26
Karnataka	14.42	0.39	0.39	0.39	0.38	0.38	0.38	0.35	0.35	0.35
Goa	-8.24	0.36	0.36	0.36	0.35	0.35	0.35	0.31	0.31	0.31
Kerala	11.59	0.22	0.22	0.22	0.22	0.22	0.22	0.20	0.20	0.20
Tamil Nadu	0.48	0.21	0.21	0.21	0.20	0.20	0.20	0.18	0.18	0.18
Telangana	13.70	0.33	0.33	0.33	0.32	0.32	0.32	0.29	0.29	0.29
India	0.08	0.08	0.07	5.24	7.57	6.51	6.37	6.20	6.06	5.81

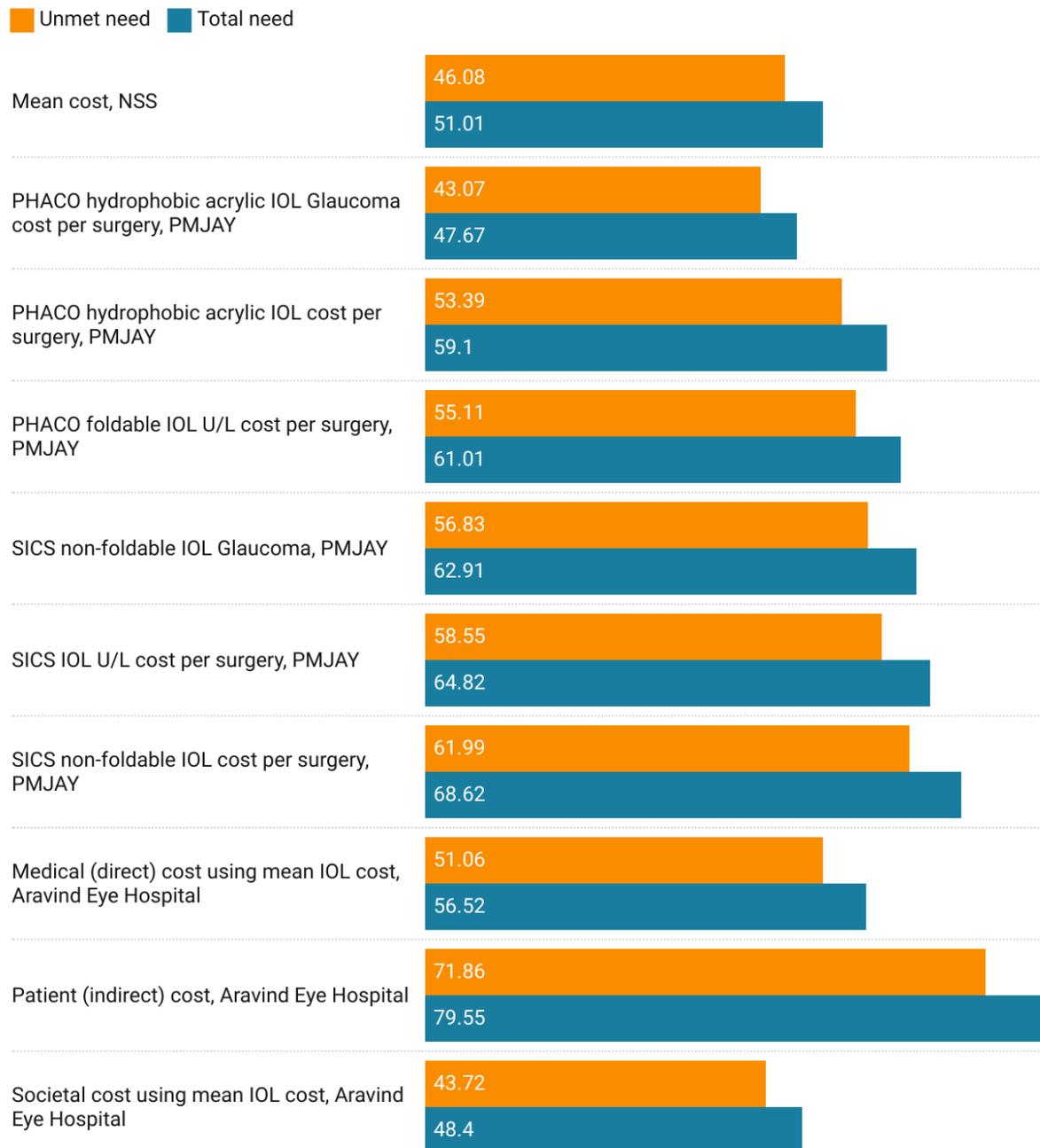
**Supplementary Table 11: Percentage Change in Enhanced Coverage Costs for Meeting Unmet Needs for Cataract Surgery After Adjusting for Complication Rate.** All values are represented in percentages. NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO -Phacoemulsification, IOL-Intraocular lens, SICS -Small Incision Cataract Surgery.

States	Mean Cost, NSS	Societal cost using mean IOL cost, Aravind Eye Hospital	Medical (direct) cost using mean IOL cost, Aravind Eye Hospital	Patient (indirect) cost, Aravind Eye Hospital	PHACO with hydrophobic acrylic IOL + Glaucoma, PMJAY	PHACO with hydrophobic acrylic IOL, PMJAY	PHACO with foldable IOL Unilateral, PMJAY	SICS with non-foldable IOL + Glaucoma, PMJAY	SICS with IOL Unilateral, PMJAY	SICS with non-foldable IOL, PMJAY
Jammu & Kashmir and Ladakh	17.90	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11
Himachal Pradesh	56.53	0.24	0.24	0.24	0.23	0.23	0.23	0.21	0.21	0.21
Punjab	-27.53	0.61	0.61	0.61	0.59	0.59	0.59	0.54	0.54	0.54
Uttarakhand	-47.31	0.28	0.28	0.28	0.27	0.27	0.27	0.25	0.25	0.25
Haryana	14.08	0.33	0.33	0.33	0.32	0.32	0.32	0.29	0.29	0.29
NCT of Delhi	359.15	0.26	0.26	0.26	0.25	0.25	0.25	0.23	0.23	0.23
Rajasthan	-37.08	0.27	0.27	0.27	0.26	0.26	0.26	0.24	0.24	0.24
Uttar	21.43	0.30	0.30	0.30	0.29	0.29	0.29	0.26	0.26	0.26

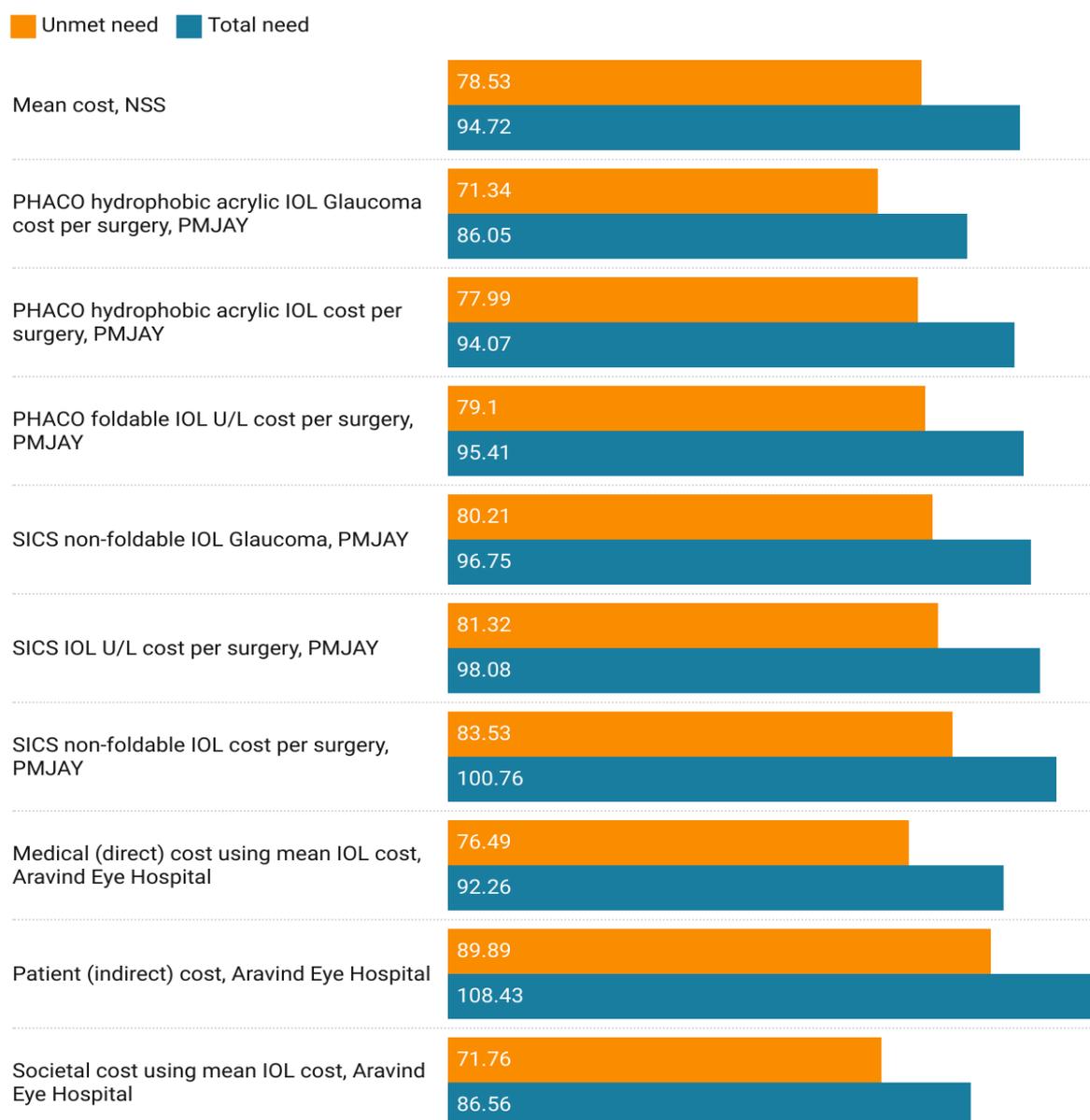
Pradesh										
Bihar	31.06	0.24	0.24	0.24	0.23	0.23	0.23	0.21	0.21	0.21
Sikkim	-7.19	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
Arunachal Pradesh	-23.29	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.13
Nagaland	37.63	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Manipur	-63.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mizoram	0	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16
Tripura	309.90	0.14	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12
Meghalaya	-78.39	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07
Assam	66.65	0.14	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12
West Bengal	16.61	0.21	0.21	0.21	0.21	0.21	0.21	0.19	0.19	0.19
Jharkhand	-20.81	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14
Odisha	26.61	0.19	0.19	0.19	0.18	0.18	0.18	0.16	0.16	0.16
Chhattisgarh	27.95	0.20	0.20	0.20	0.20	0.20	0.20	0.18	0.18	0.18
Madhya Pradesh	66.45	0.93	0.93	0.93	0.90	0.90	0.90	0.82	0.82	0.82
Gujarat	48.93	1.32	1.32	1.32	1.27	1.27	1.27	1.16	1.16	1.16
Maharashtra	-23.95	0.35	0.35	0.35	0.33	0.33	0.33	0.30	0.30	0.30

Andhra Pradesh	-20.92	0.30	0.30	0.30	0.29	0.29	0.29	0.26	0.26	0.26
Karnataka	-29.67	0.39	0.39	0.39	0.38	0.38	0.38	0.35	0.35	0.35
Goa	104.39	0.36	0.36	0.36	0.35	0.35	0.35	0.31	0.31	0.31
Kerala	-22.23	0.22	0.22	0.22	0.22	0.22	0.22	0.20	0.20	0.20
Tamil Nadu	-0.49	0.21	0.21	0.21	0.20	0.20	0.20	0.18	0.18	0.18
Telangana	-27.39	0.33	0.33	0.33	0.32	0.32	0.32	0.29	0.29	0.29
India	1.00	-0.01	-0.01	-0.01	-0.03	-0.03	-0.03	-0.05	-0.05	-0.05

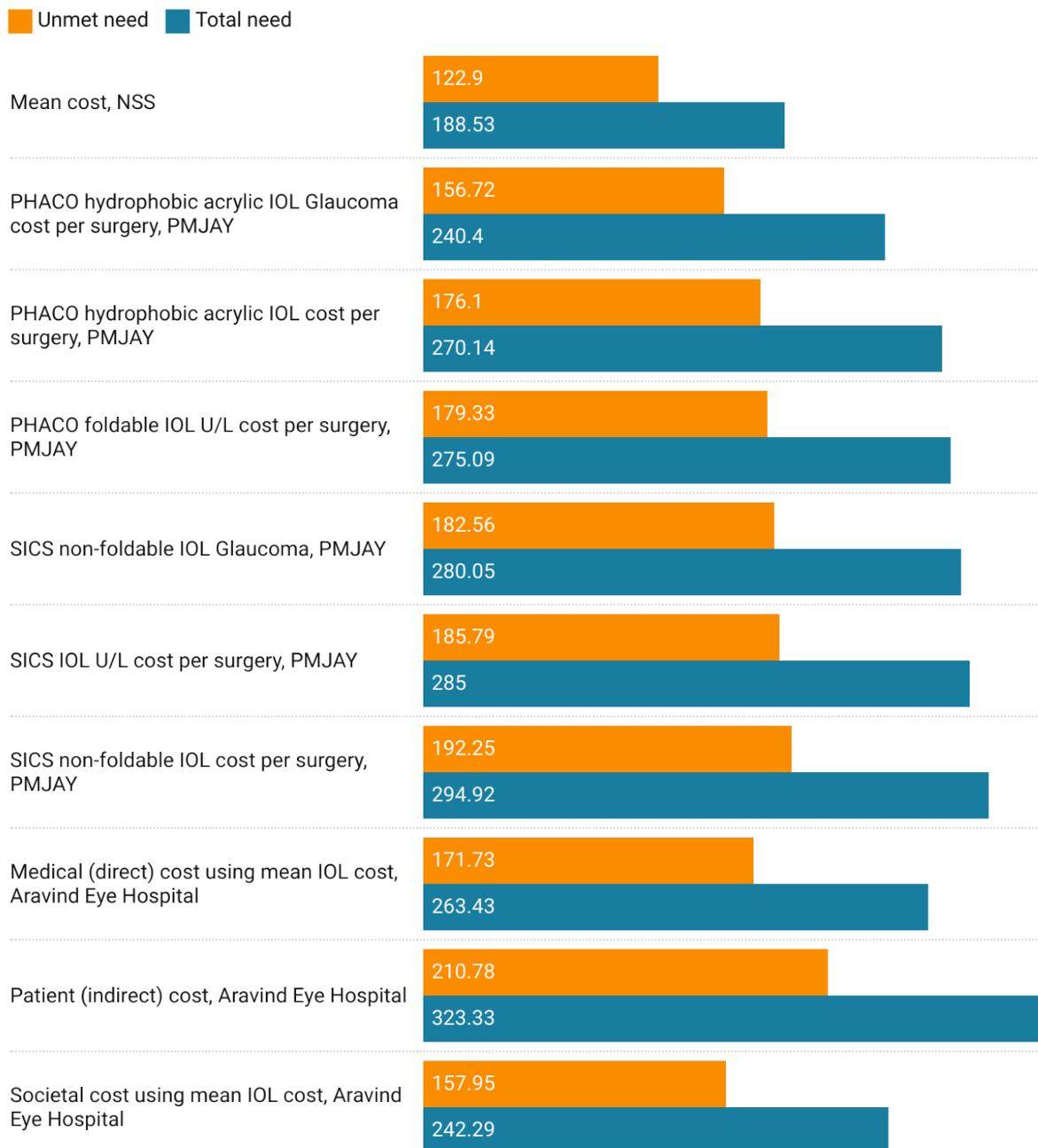
## Supplementary Figures



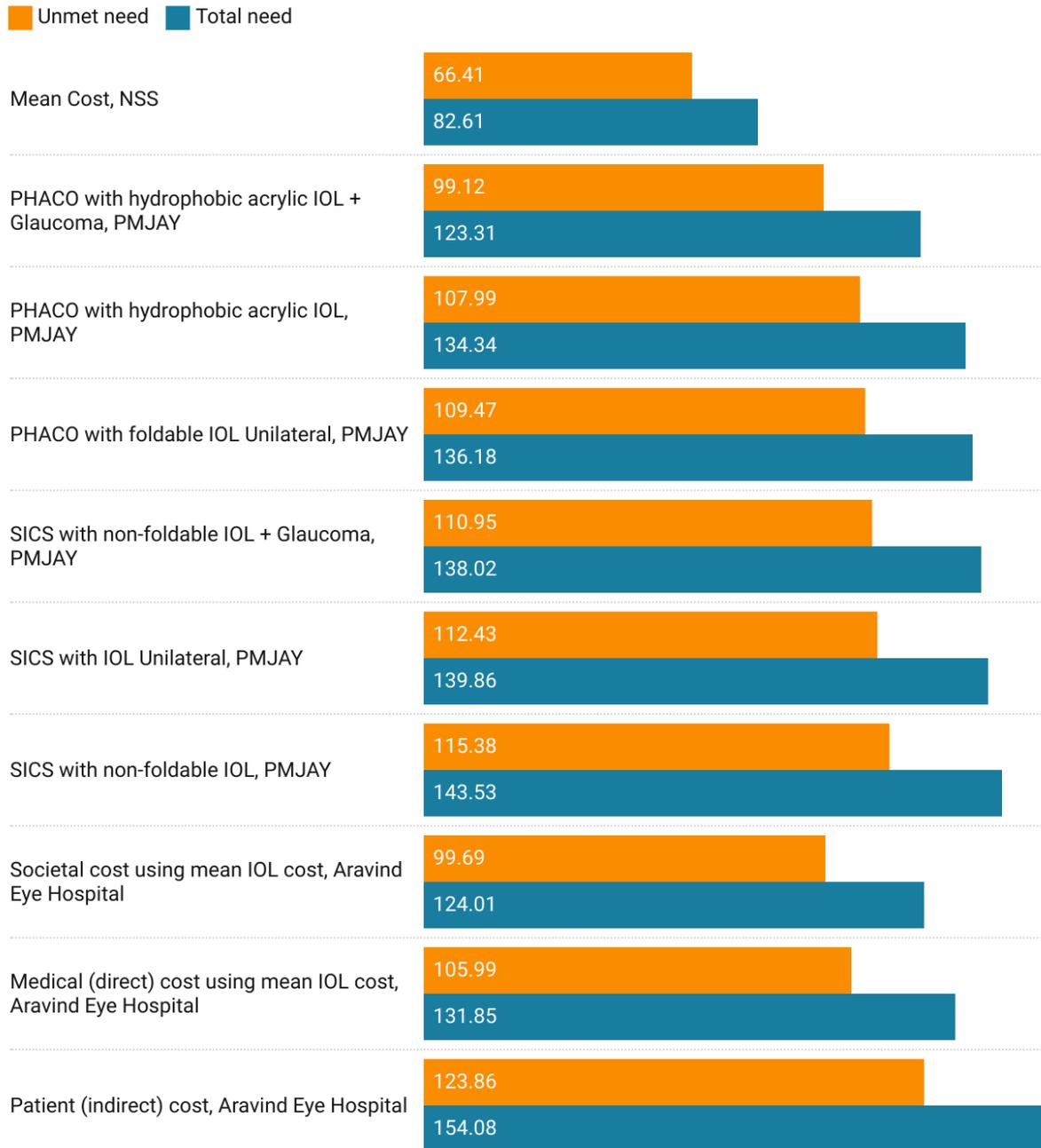
**Supplementary Figure 1: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Jammu & Kashmir and Ladakh.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



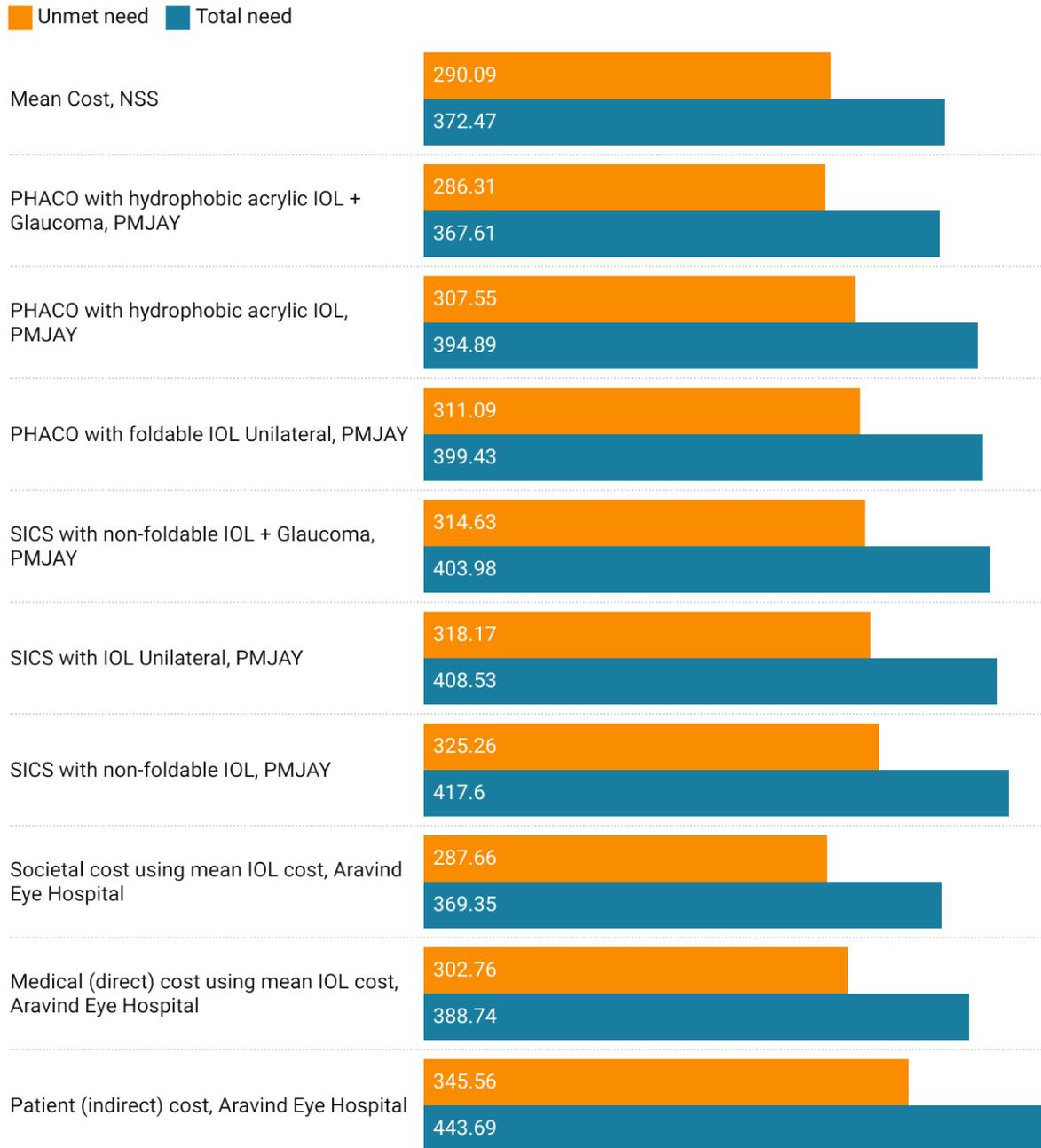
**Supplementary Figure 2: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Himachal Pradesh.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



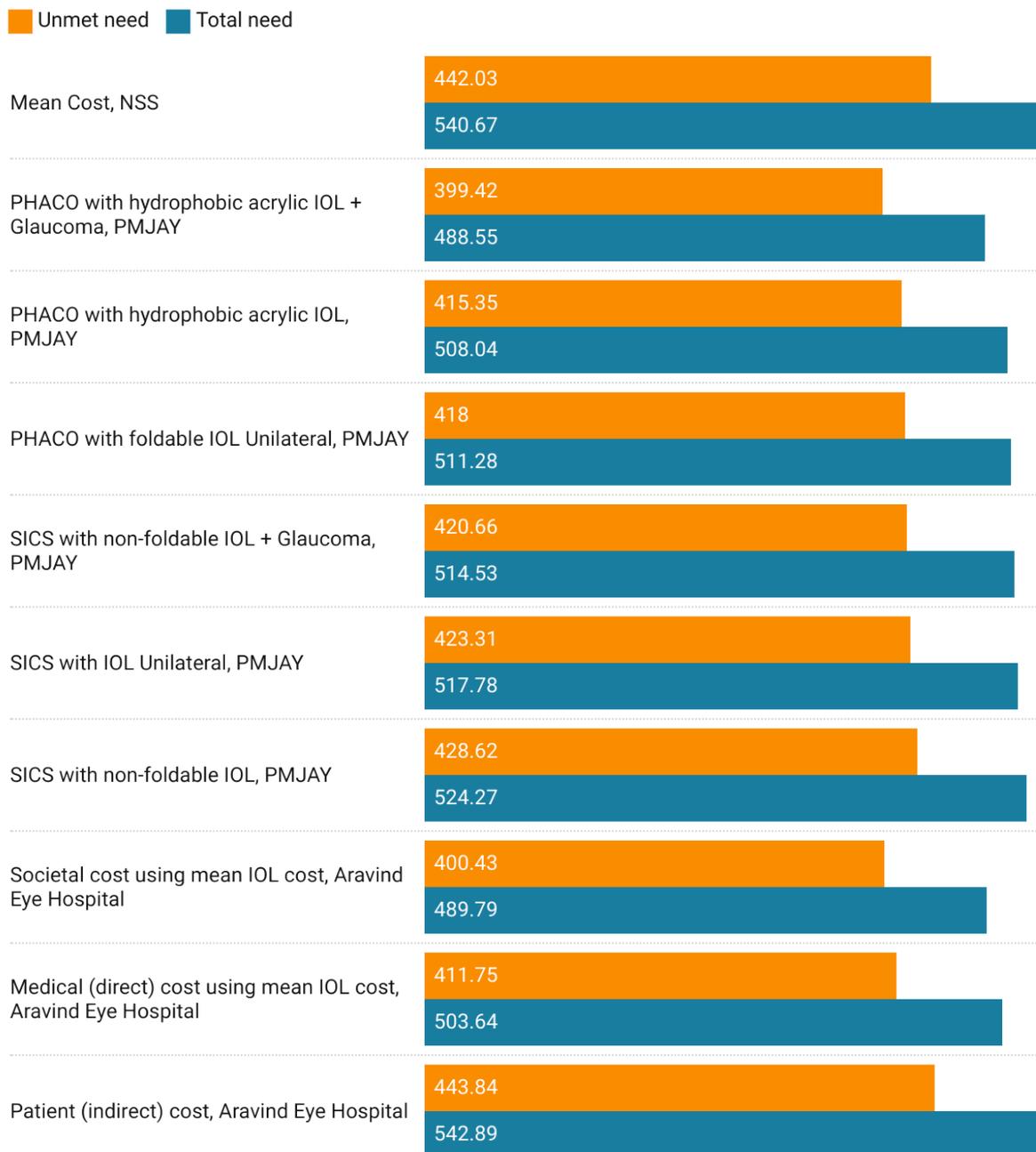
**Supplementary Figure 3: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Punjab.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



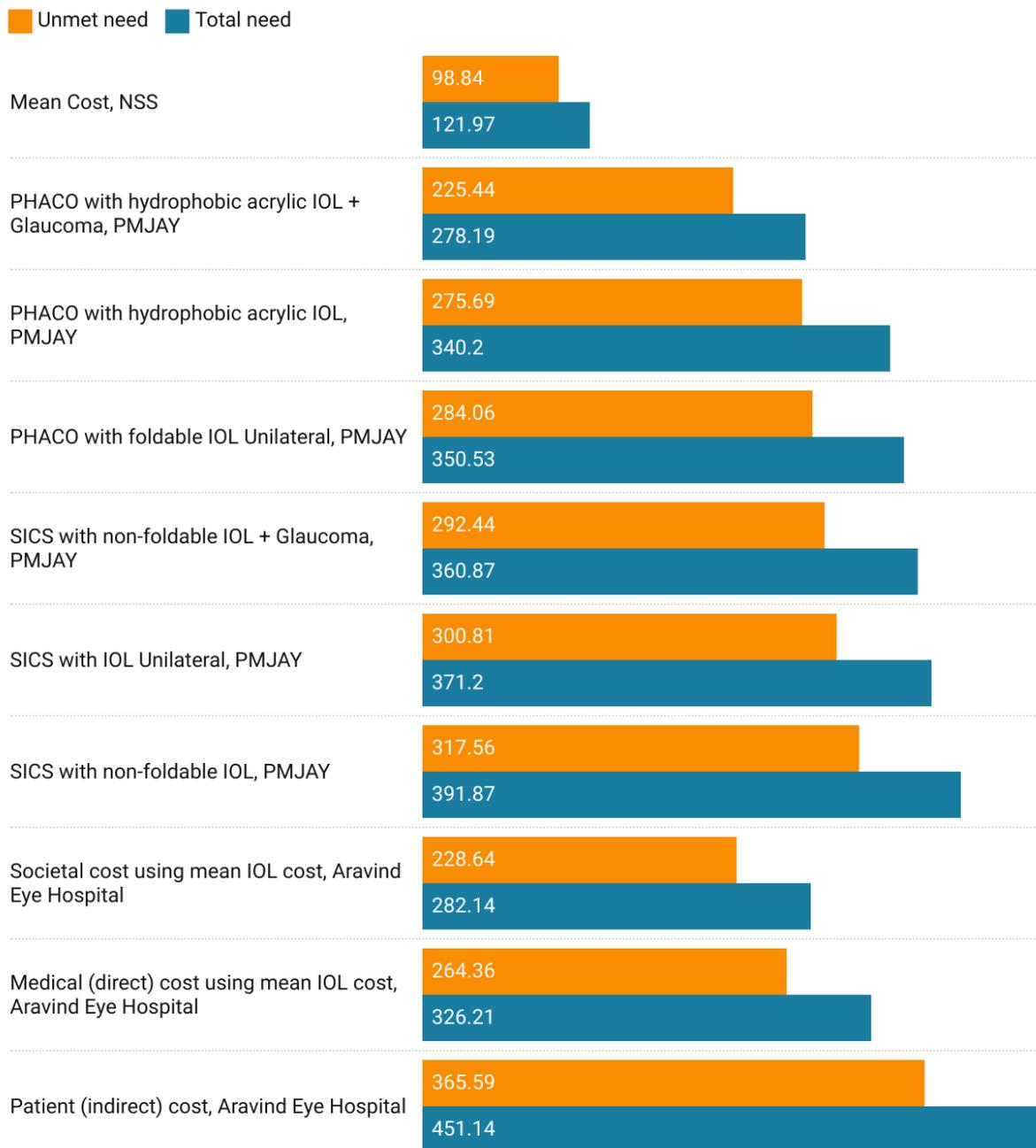
**Supplementary Figure 4: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Uttarakhand.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



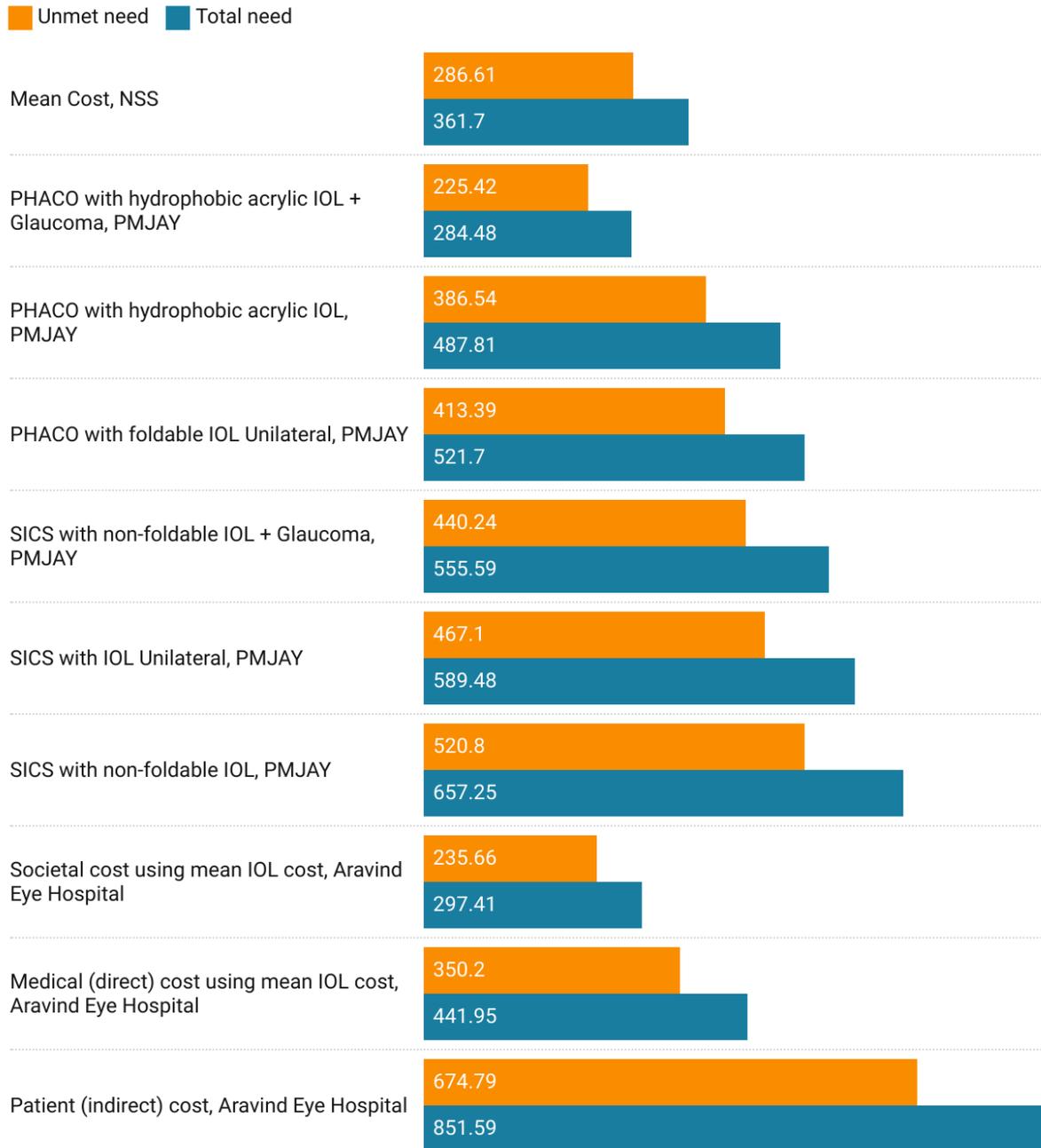
**Supplementary Figure 5: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Haryana.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



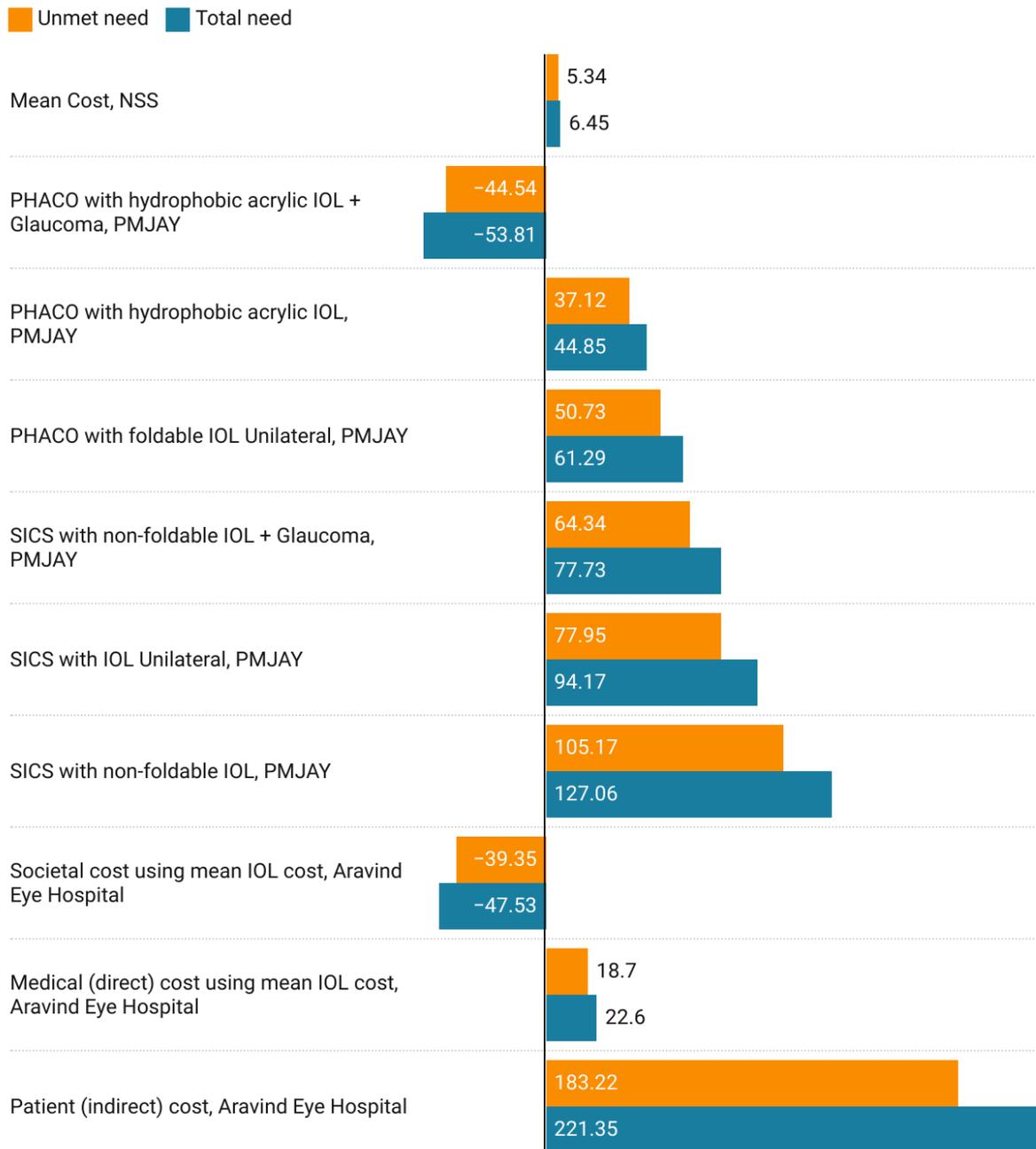
**Supplementary Figure 6: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Delhi.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



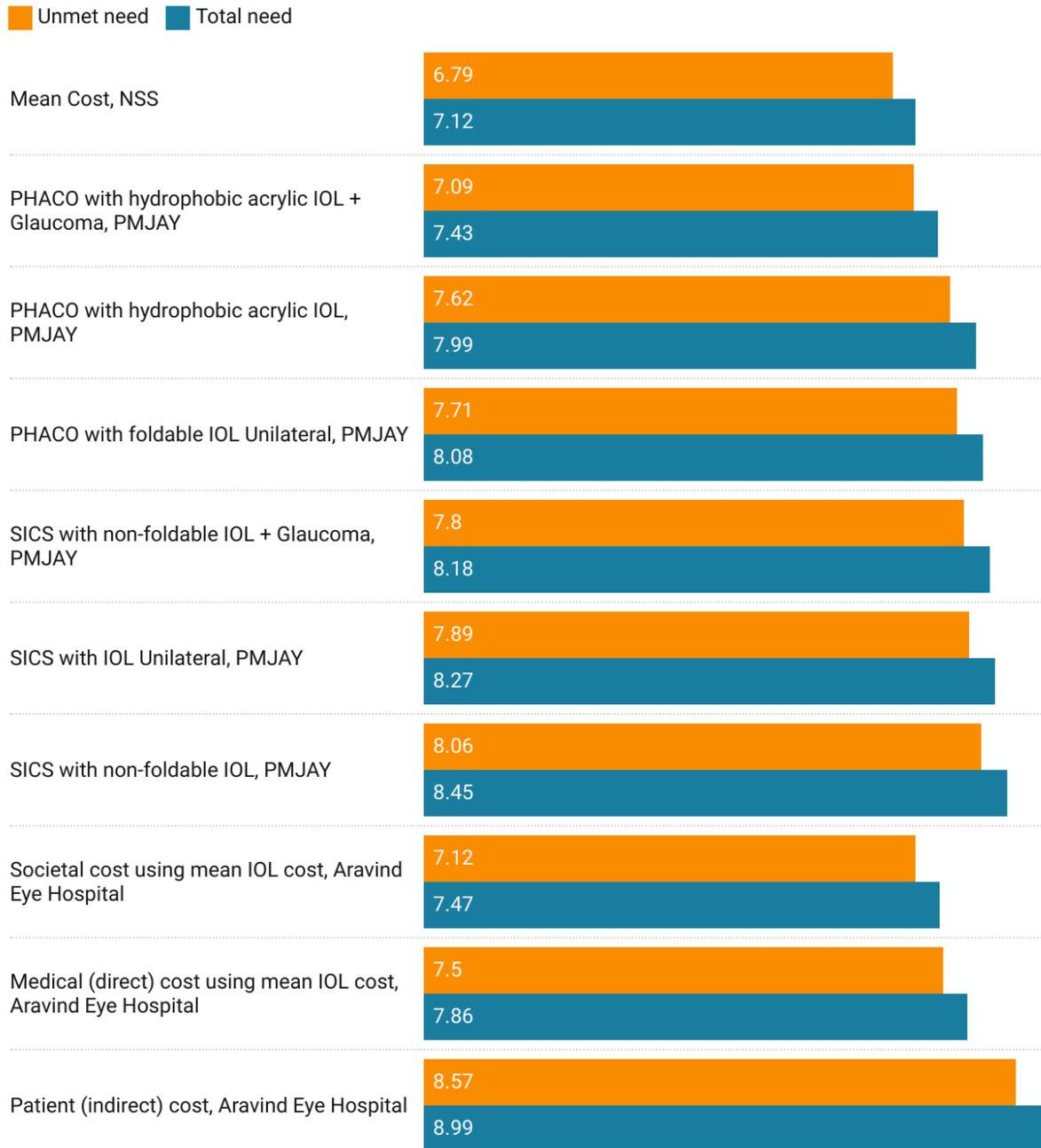
**Supplementary Figure 7: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Rajasthan.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



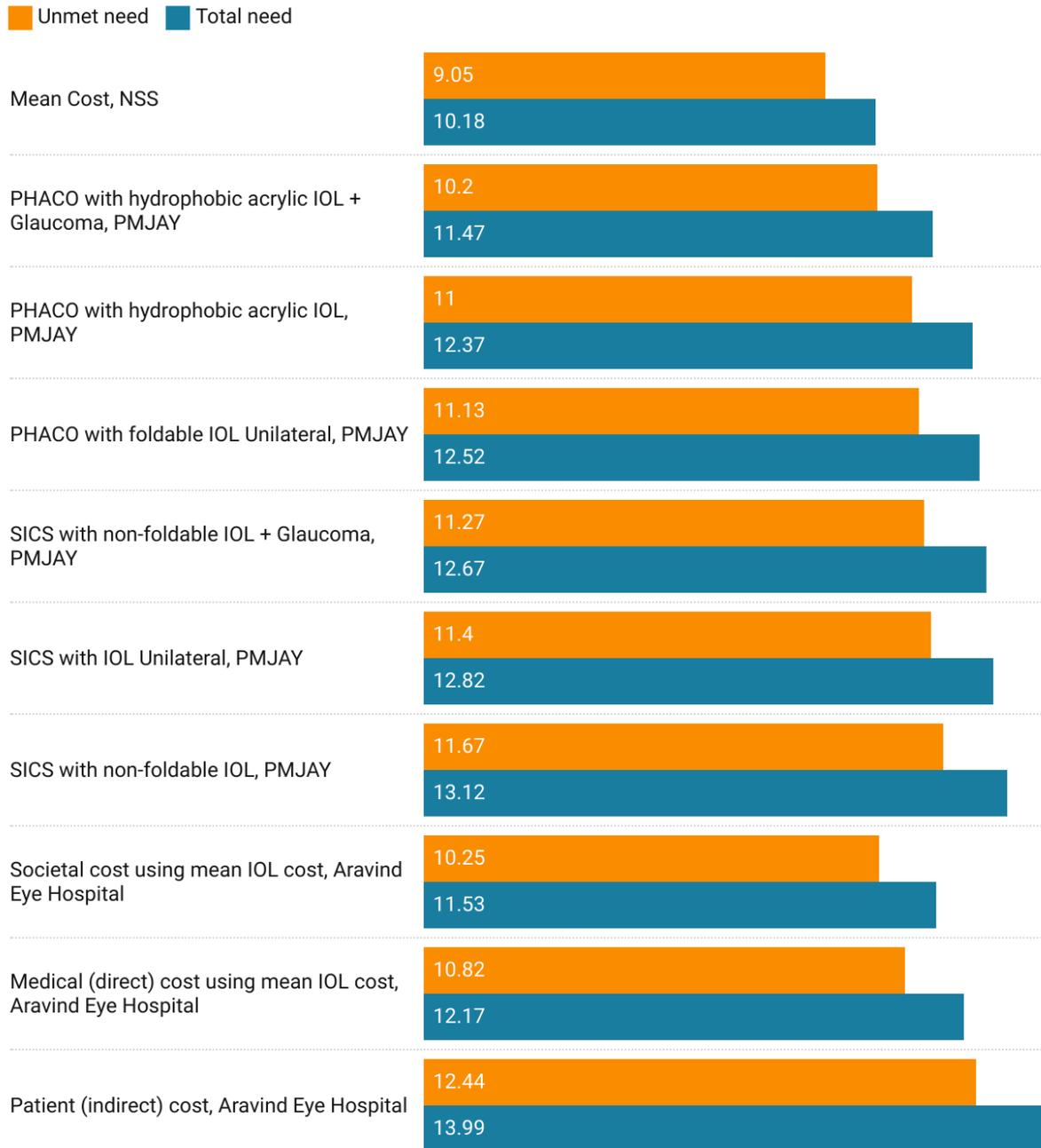
**Supplementary Figure 8: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Uttar Pradesh.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



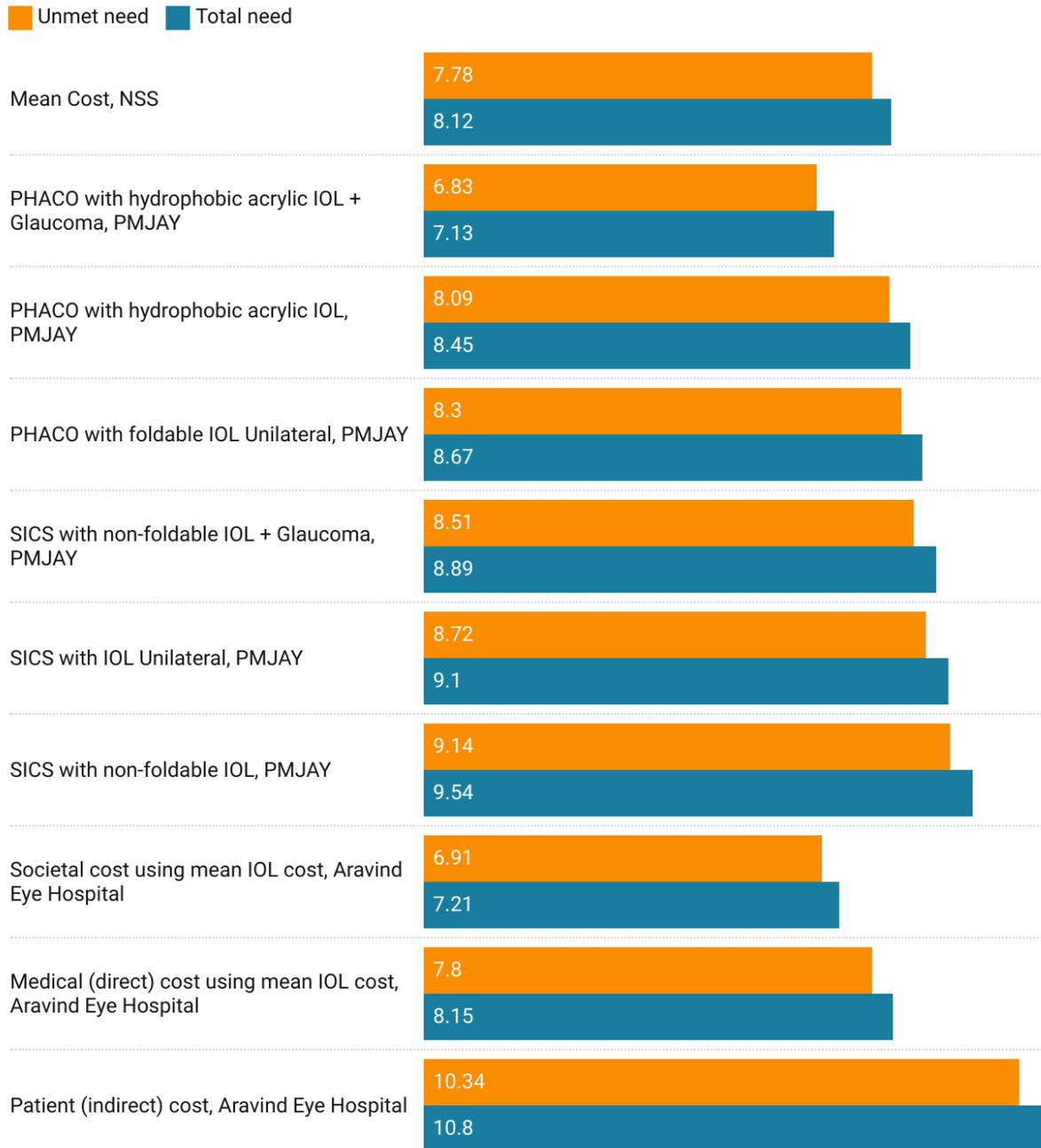
**Supplementary Figure 9: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Bihar.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



**Supplementary Figure 10: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Sikkim.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



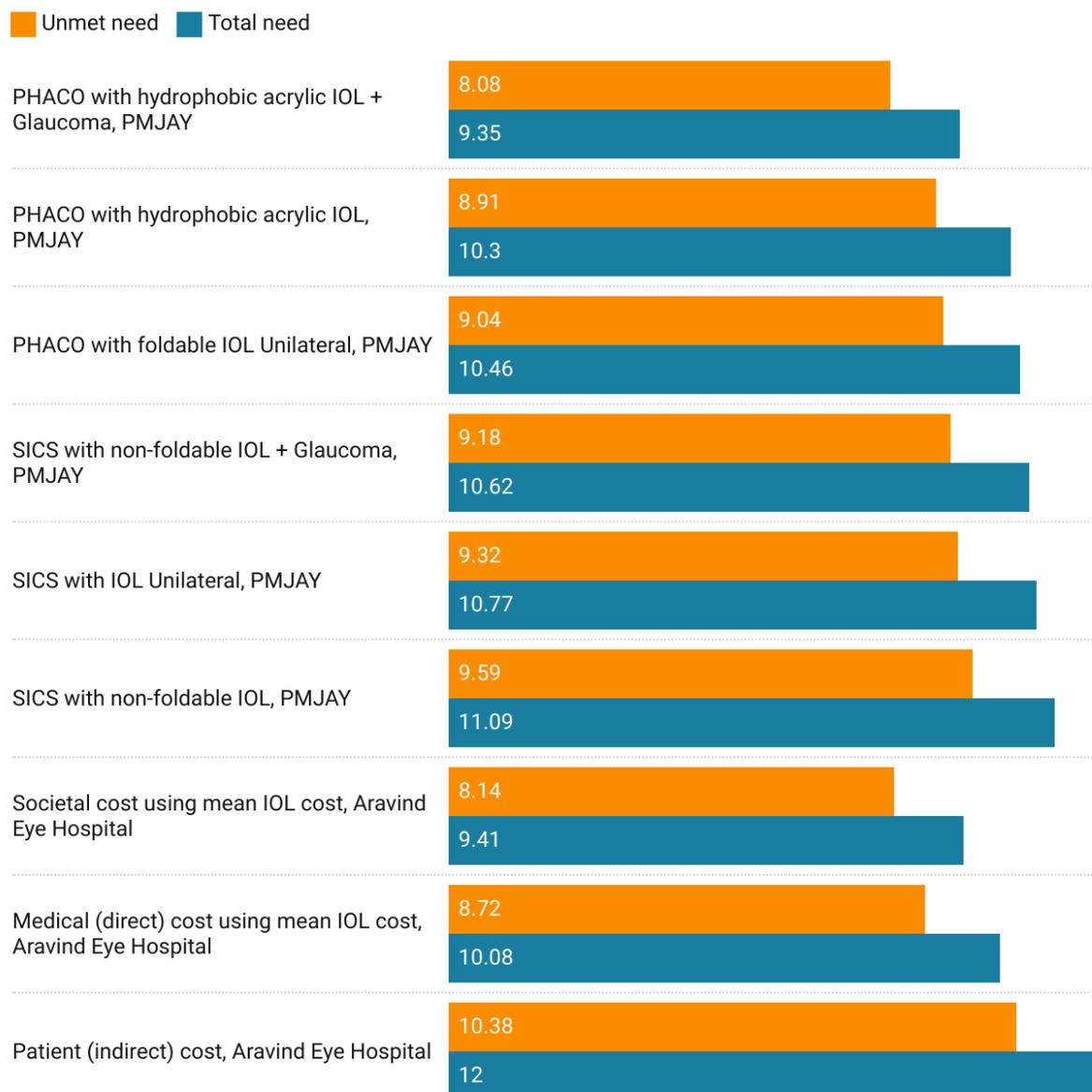
**Supplementary Figure 11: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Arunachal Pradesh.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



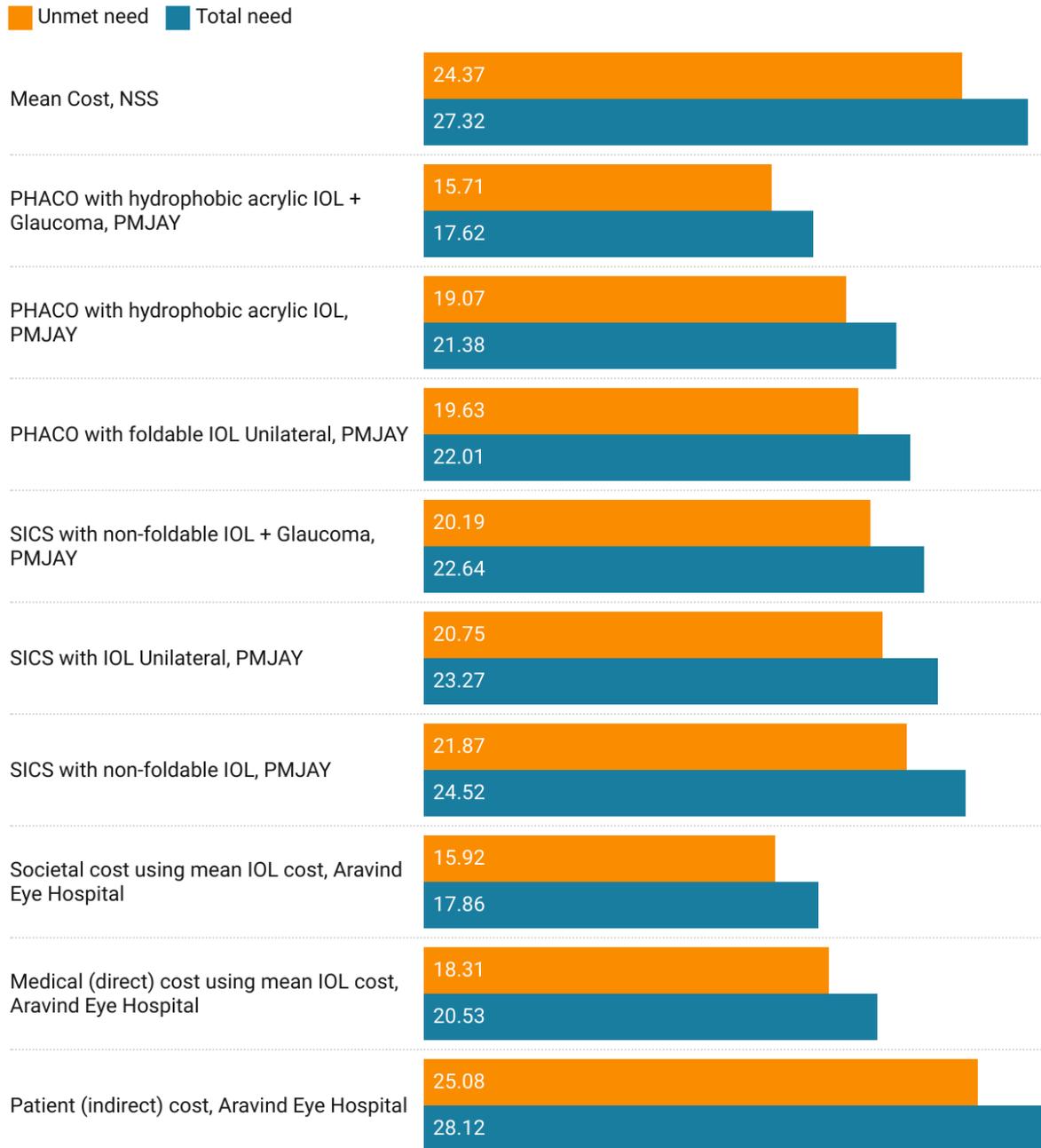
**Supplementary Figure 12: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Nagaland.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



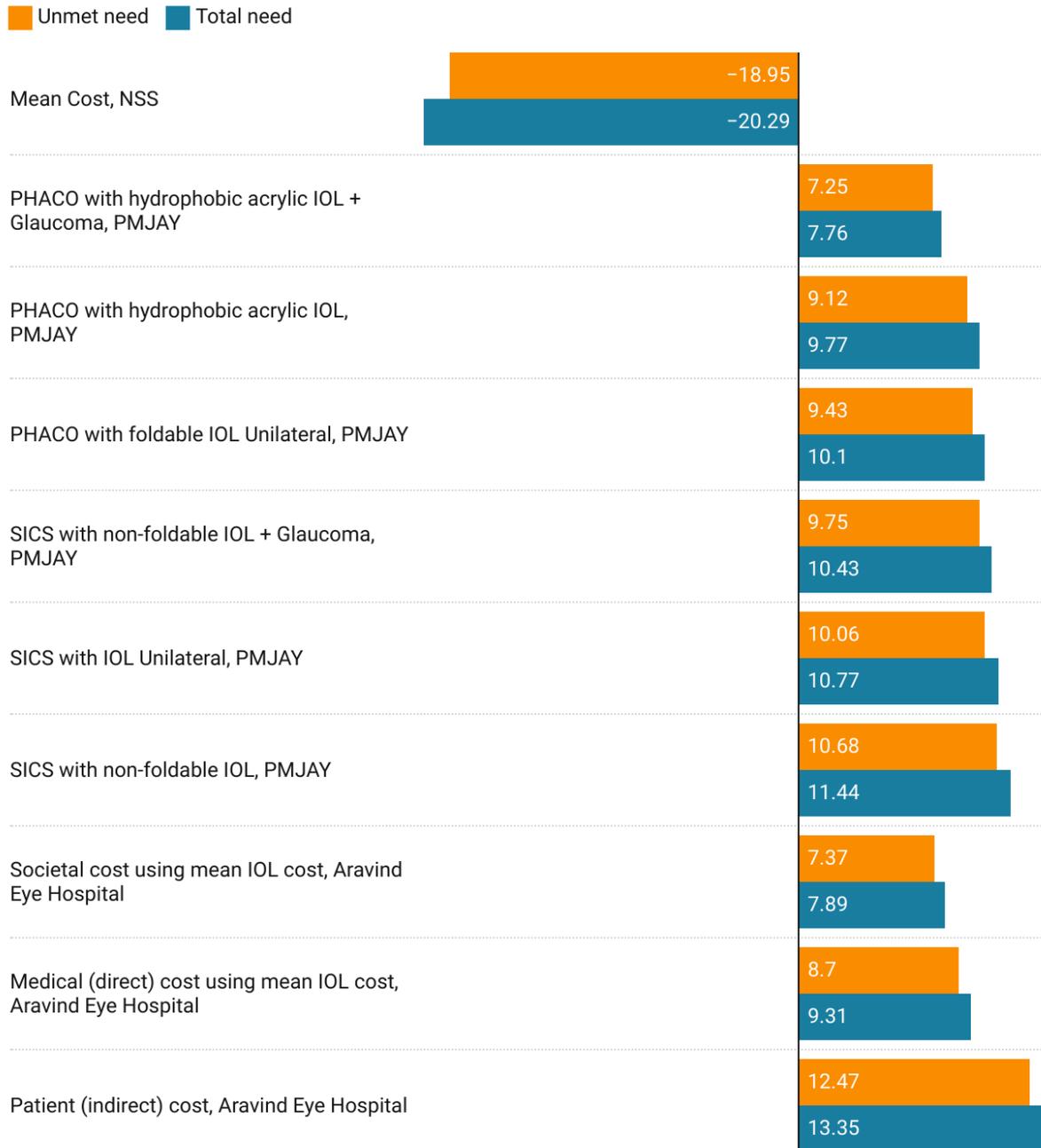
**Supplementary Figure 13: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Manipur.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



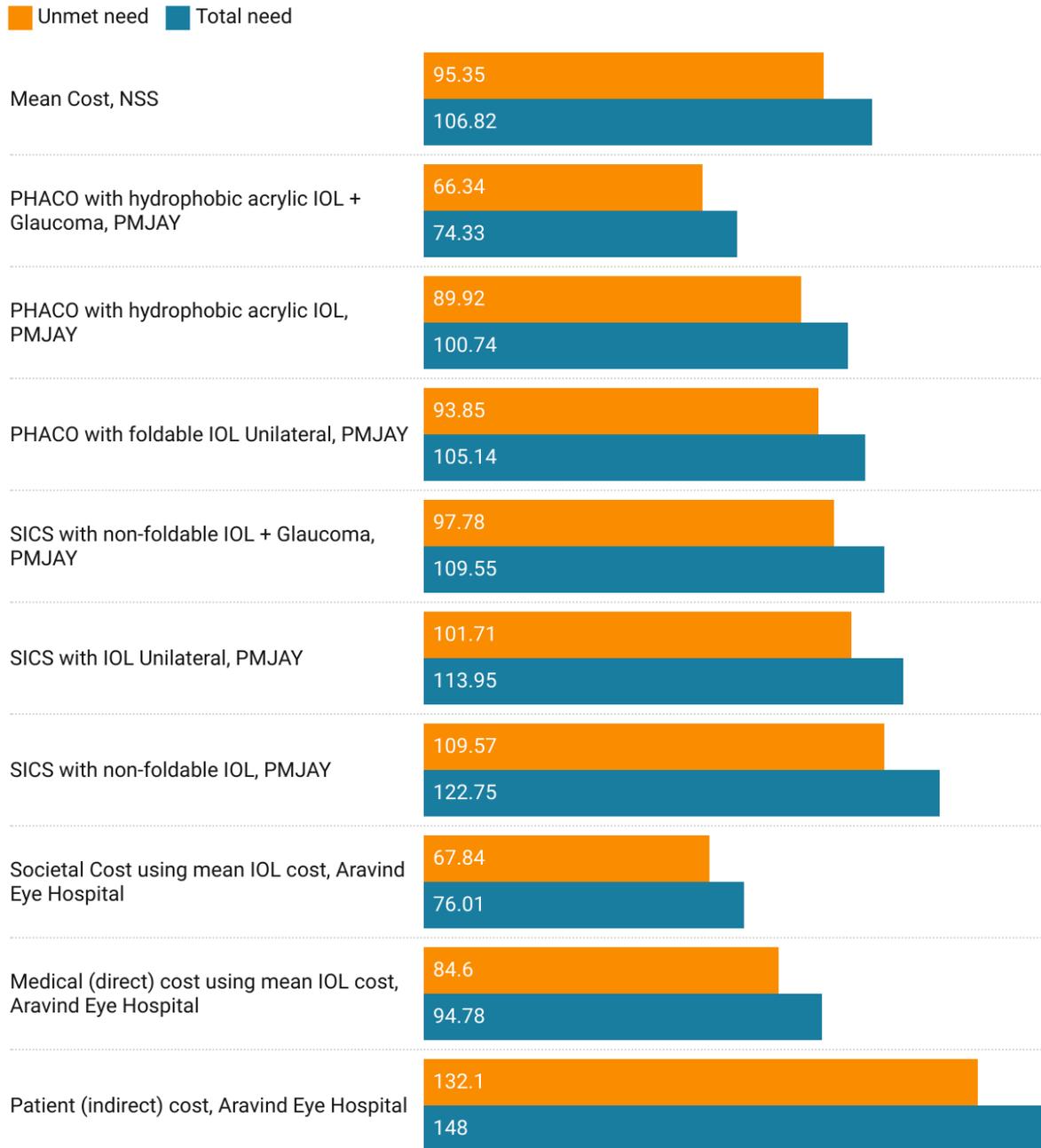
**Supplementary Figure 14: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Mizoram.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



**Supplementary Figure 15: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Tripura.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.

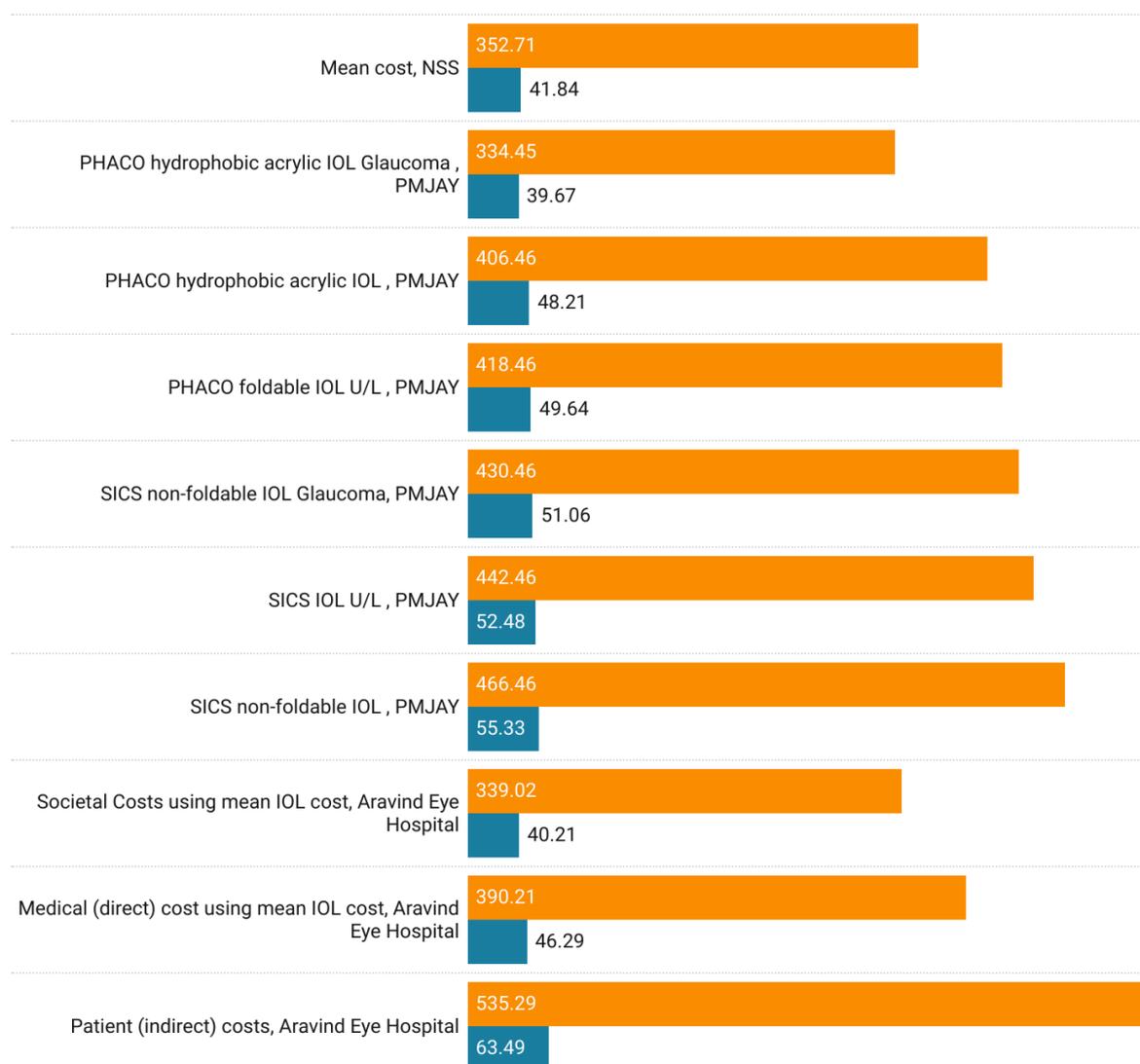


**Supplementary Figure 16: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Meghalaya.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.

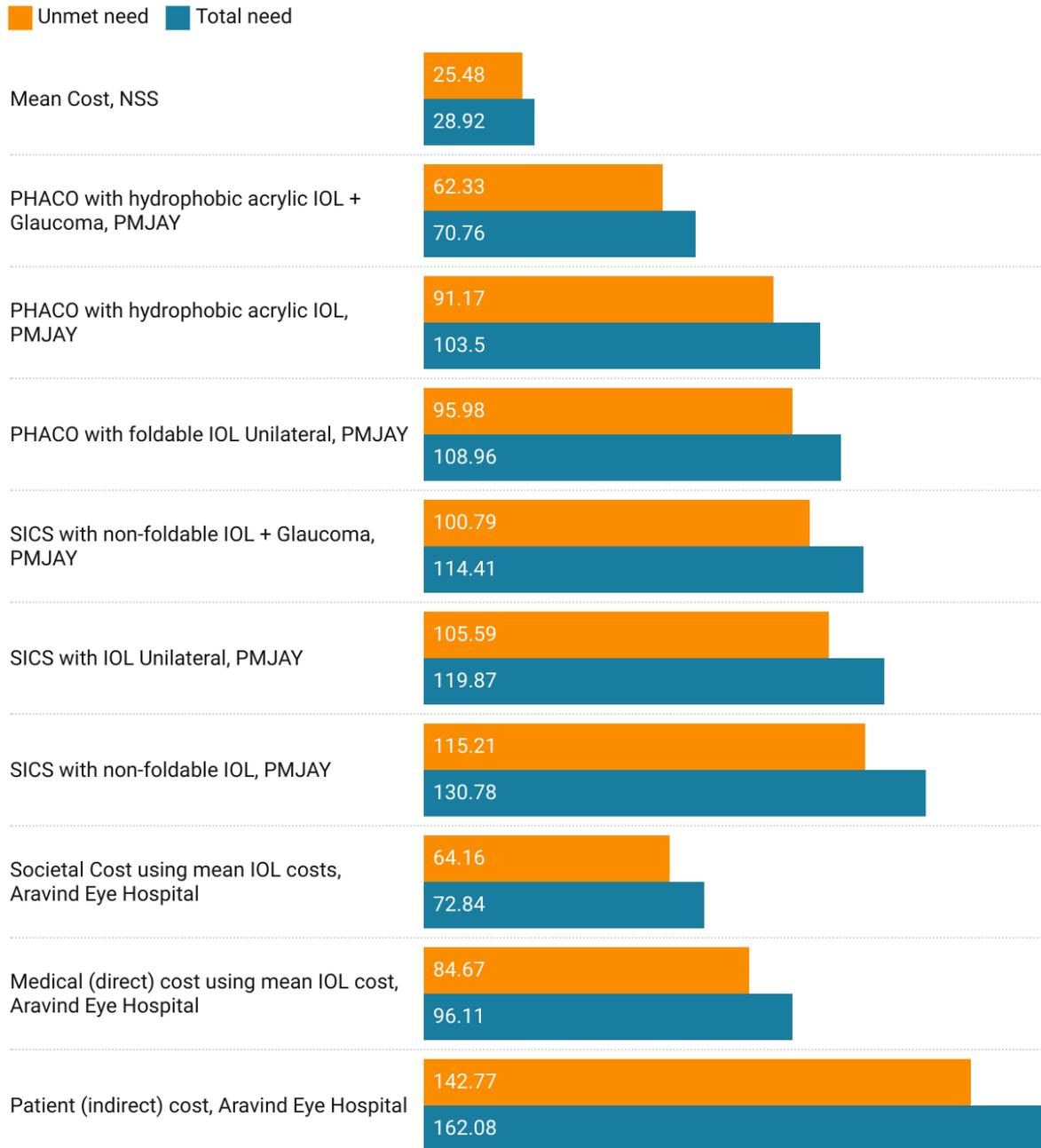


**Supplementary Figure 17: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Assam.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.

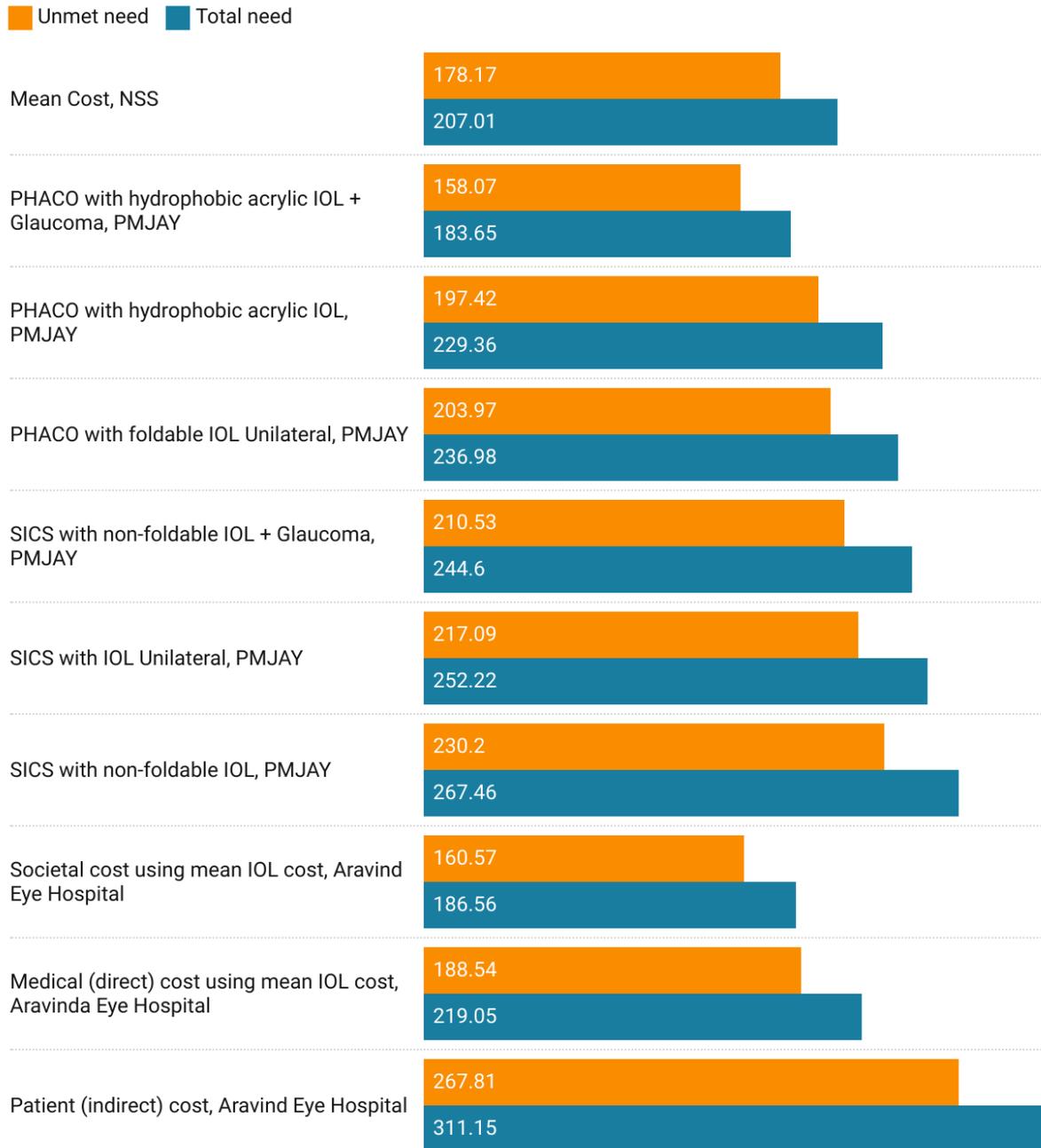
Unmet Need Total Need



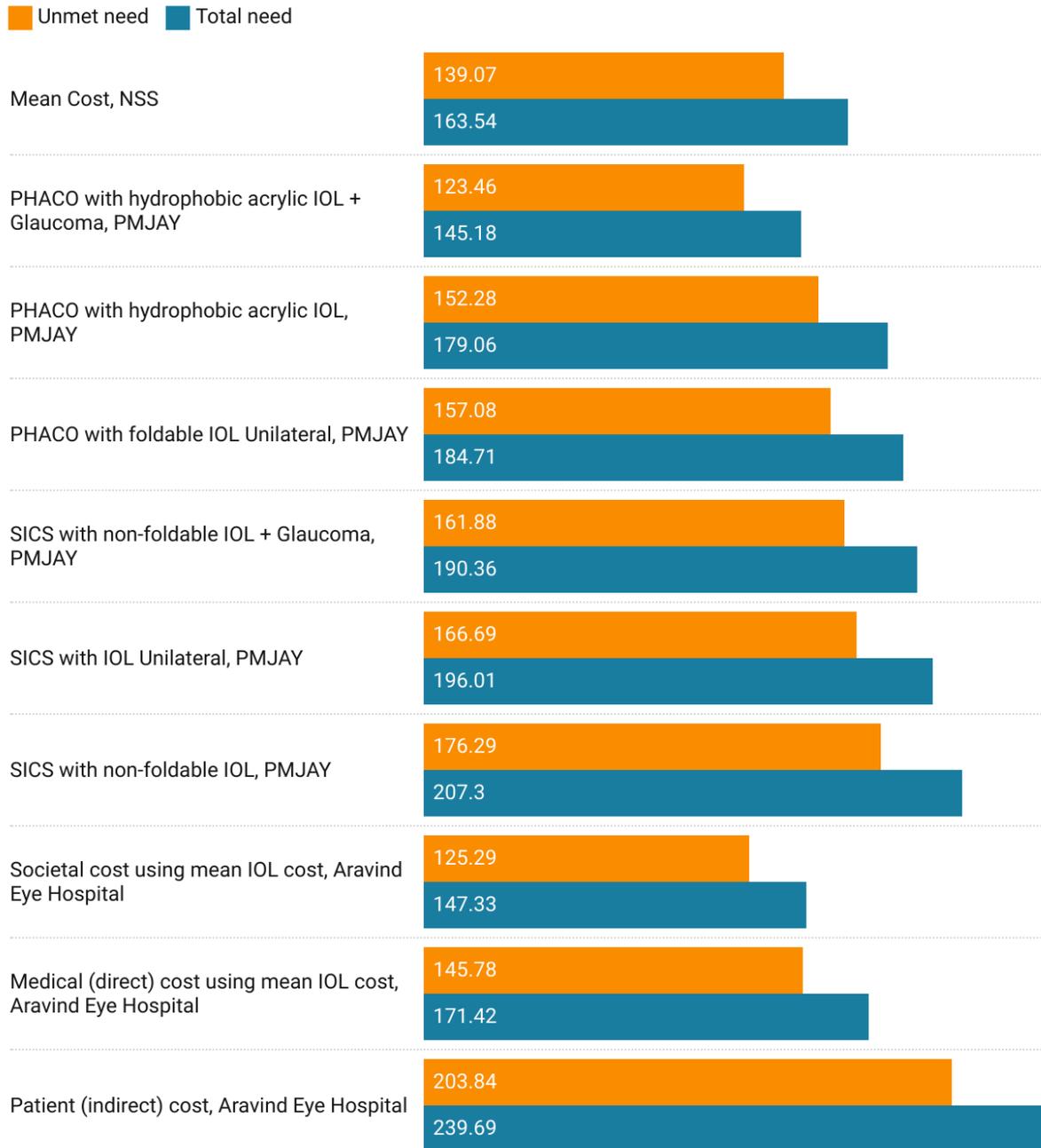
**Supplementary Figure 18: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in West Bengal.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



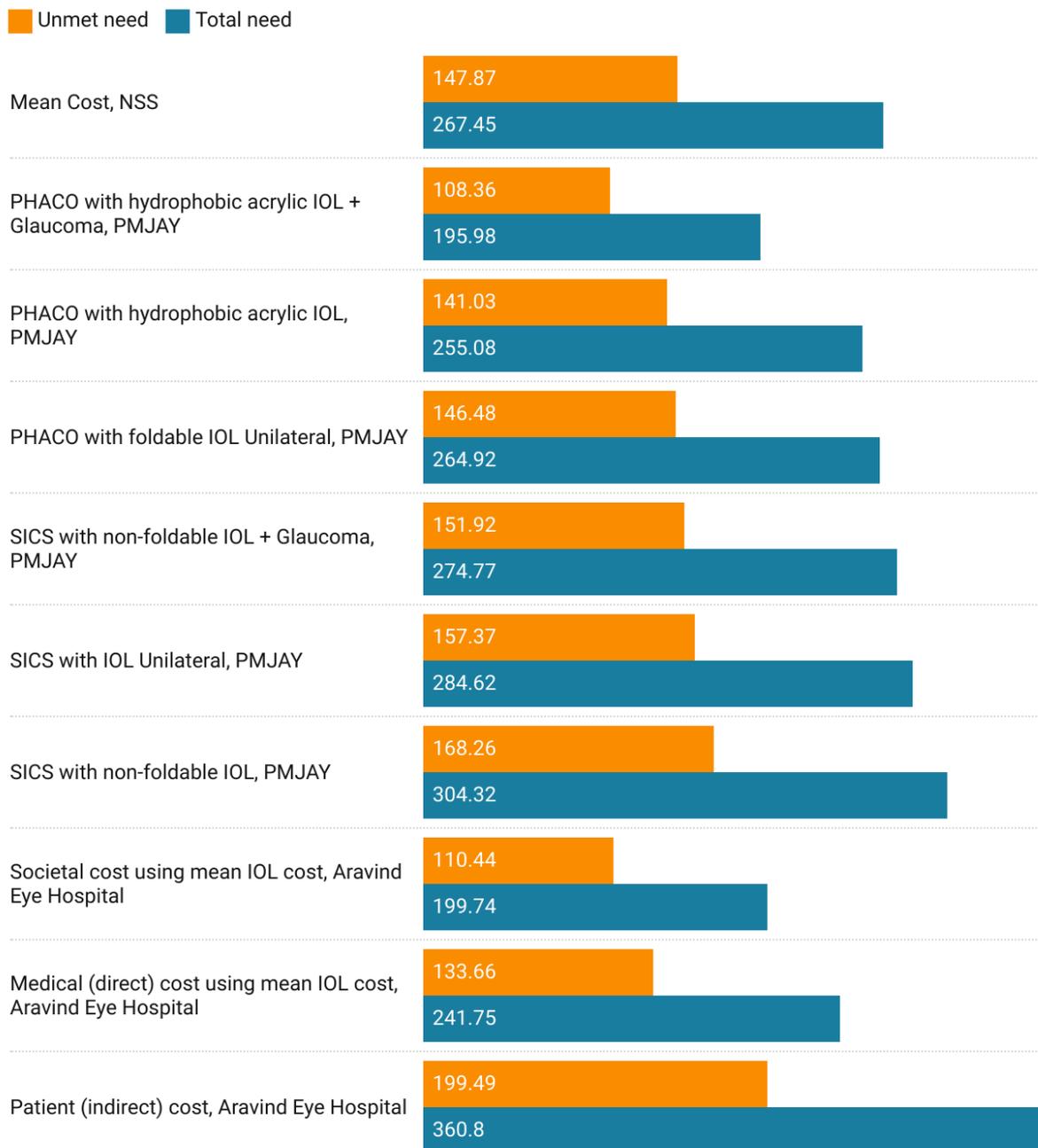
**Supplementary Figure 19: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Jharkhand.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



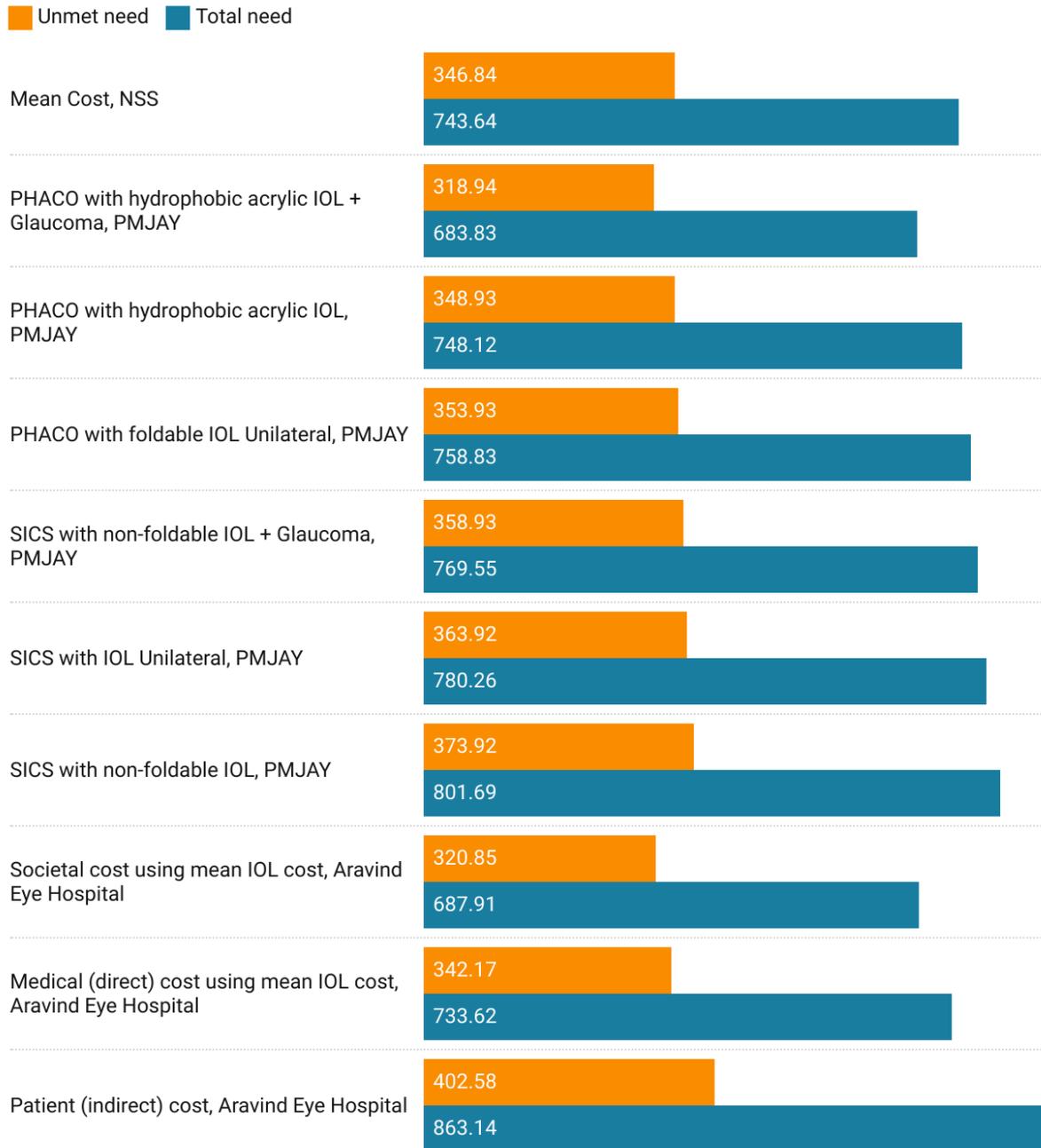
**Supplementary Figure 20: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Odisha.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



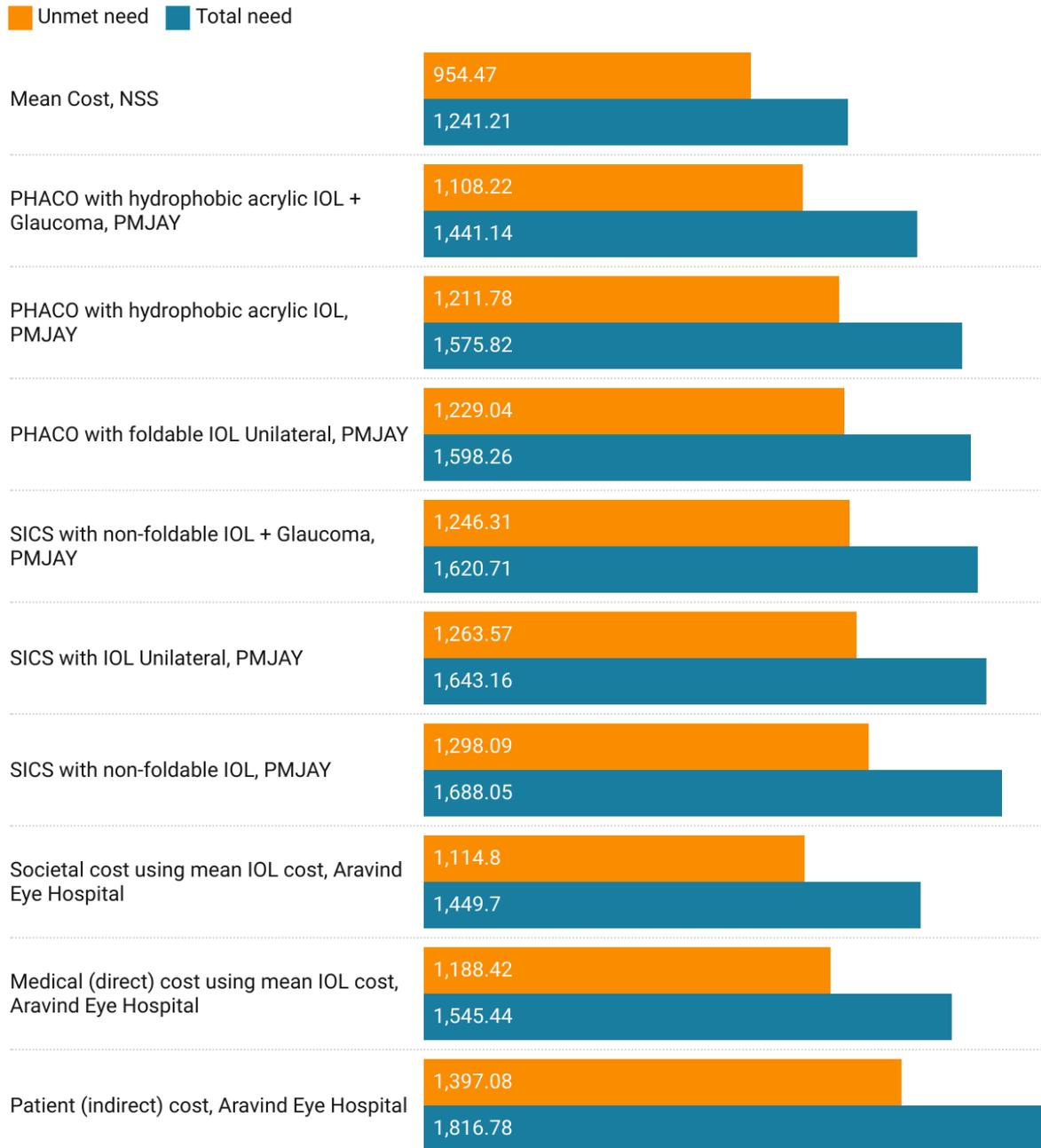
**Supplementary Figure 21: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Chhattisgarh.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



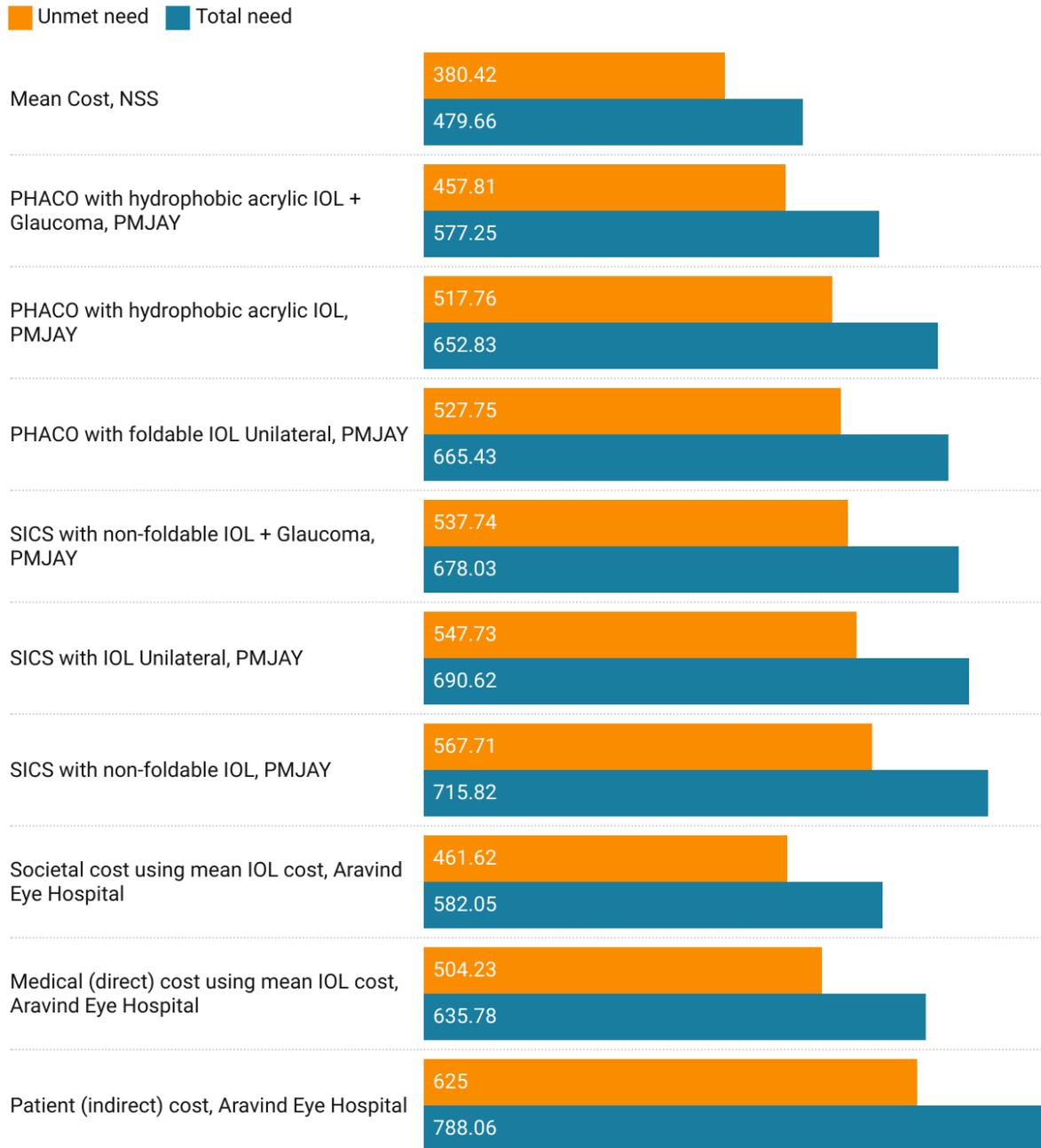
**Supplementary Figure 22: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Madhya Pradesh.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



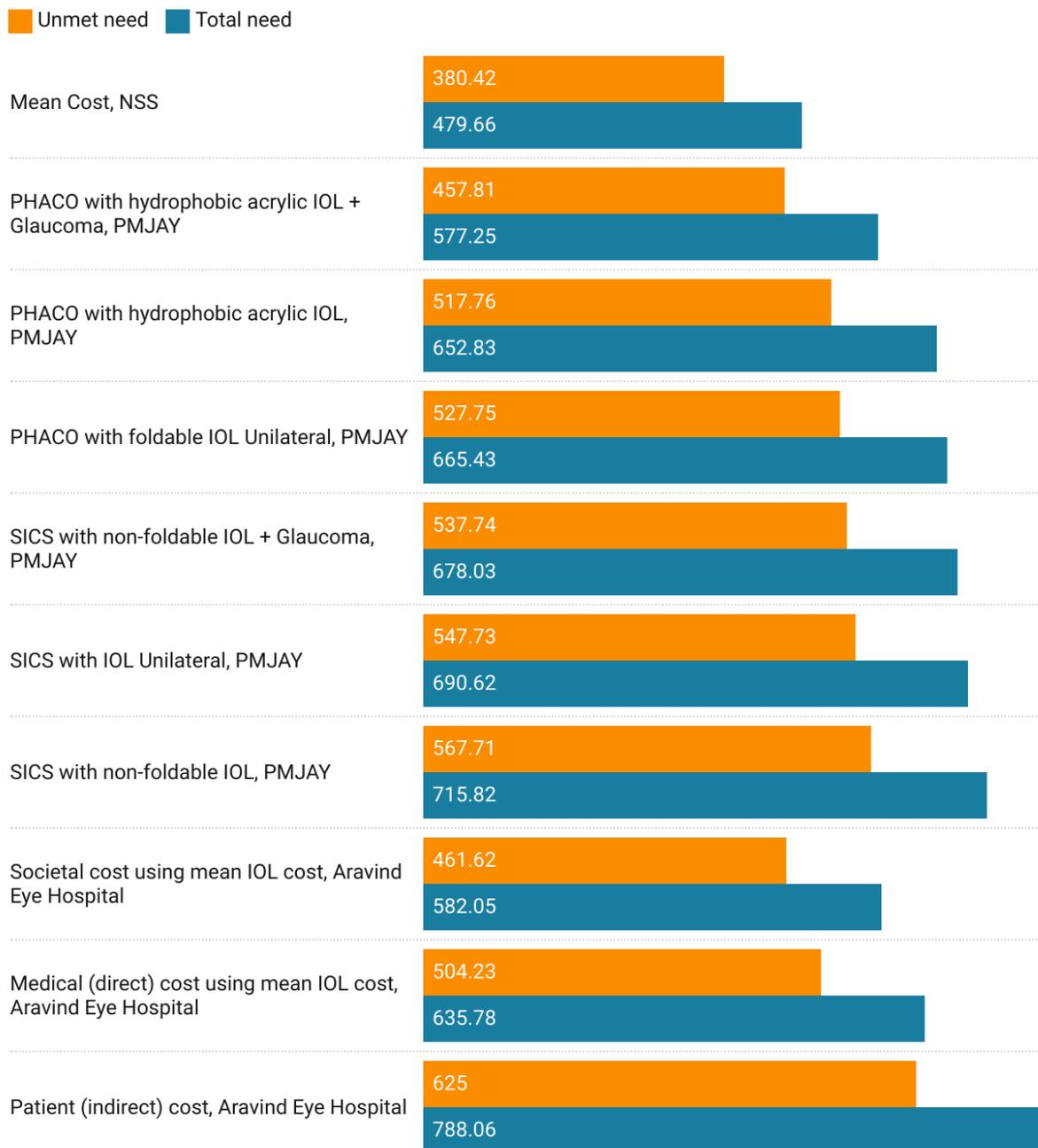
**Supplementary Figure 23: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Gujarat.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



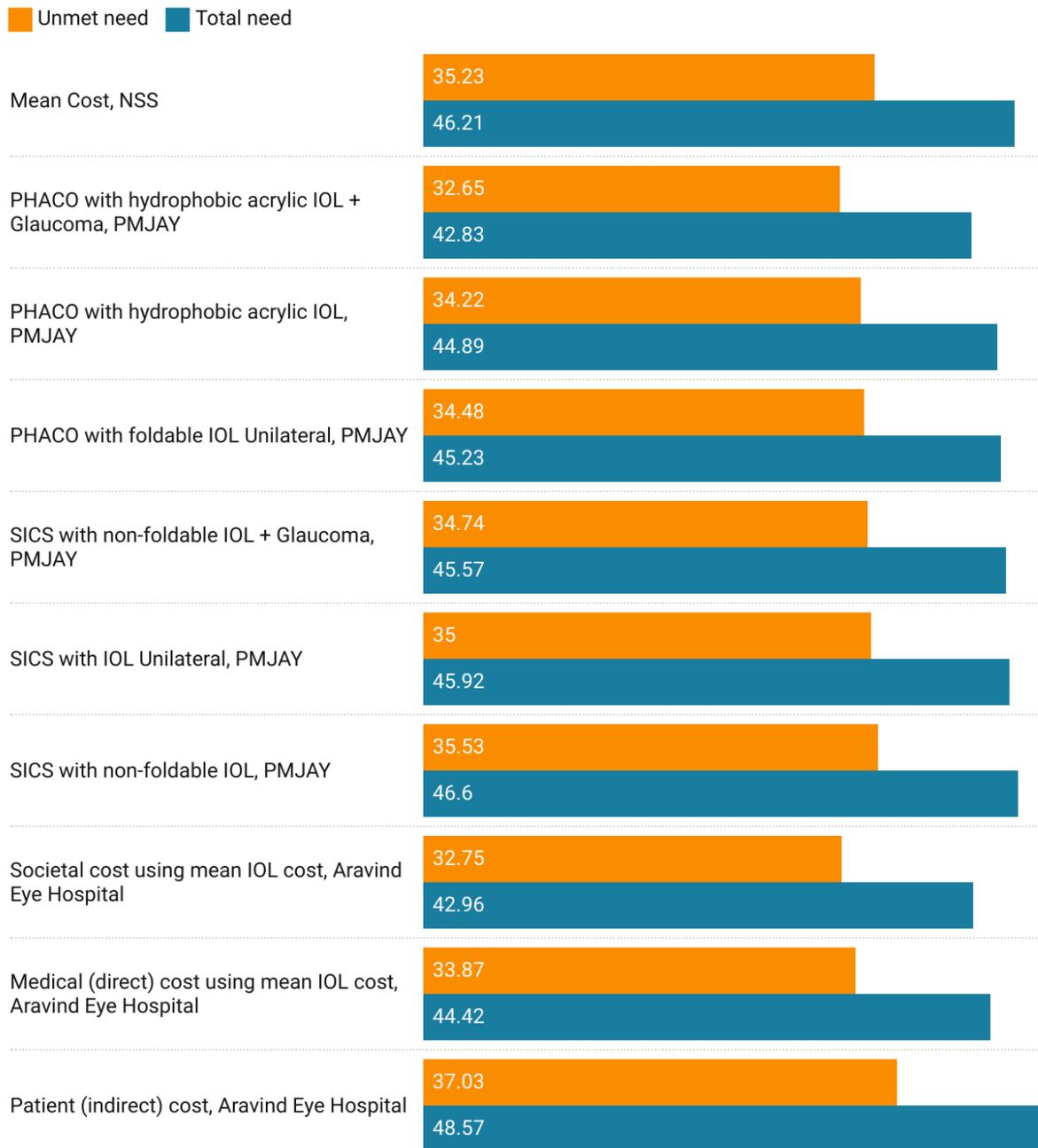
**Supplementary Figure 24: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Maharashtra.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



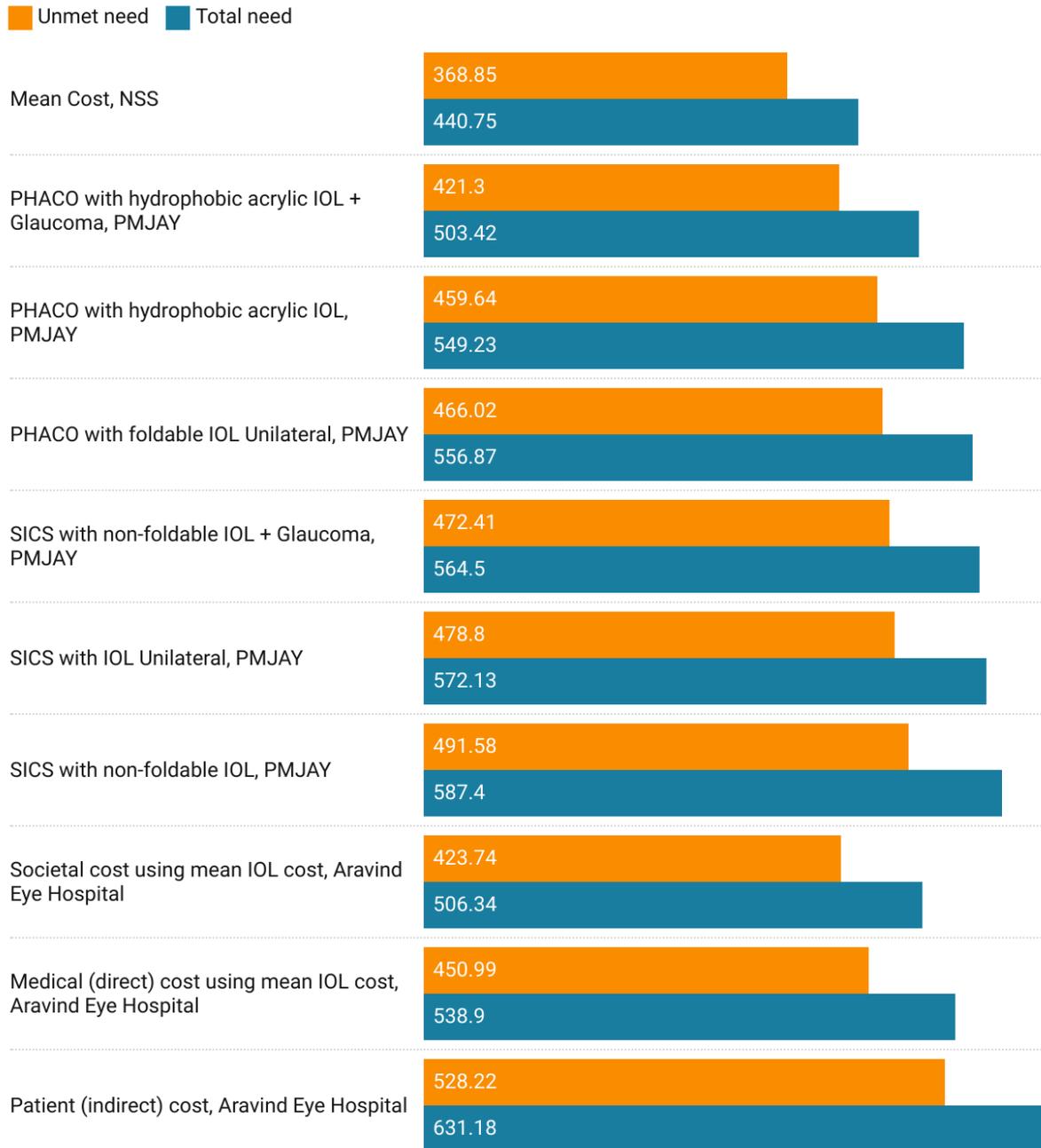
**Supplementary Figure 25: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Andhra Pradesh.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



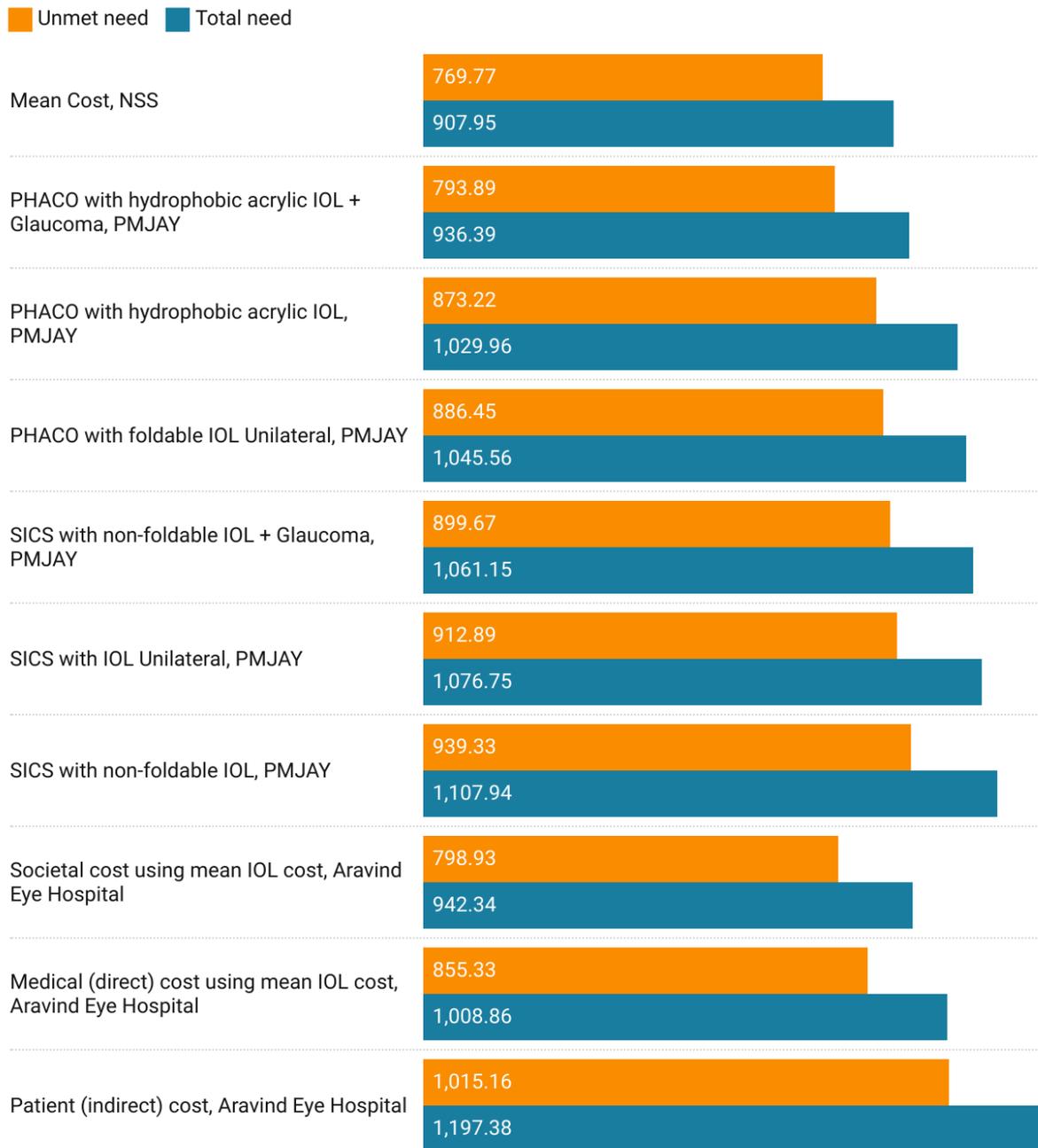
**Supplementary Figure 26: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Karnataka.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



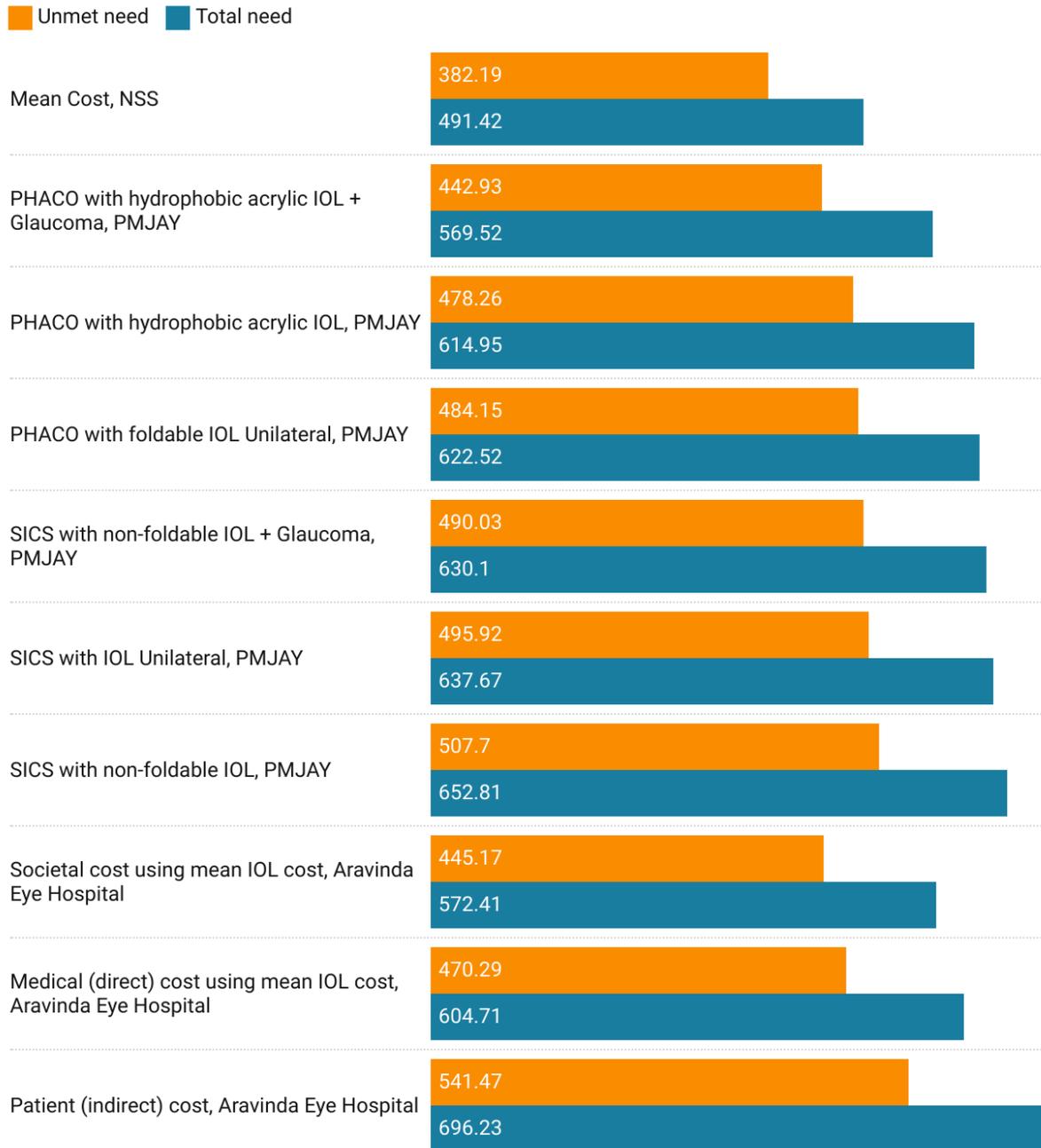
**Supplementary Figure 27: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Goa.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



**Supplementary Figure 28: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Kerala.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



**Supplementary Figure 29: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Tamil Nadu.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.



**Supplementary Figure 30: Net Benefits for Meeting Total and Unmet Needs for Universal Cataract Surgical Coverage in Telangana.** All costs are adjusted to millions of USD for the year 2020. Positive values depict net benefit while negative values depict net loss. Abbreviations: NSS - National Sample Survey, PMJAY - Pradhan Mantri Jan Arogya Yojana, PHACO - Phacoemulsification, IOL - Intraocular lens, SICS - Small Incision Cataract Surgery.