Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable. Characteristics of Counties

Maryland Counties

County Names	Population	Urban/Rural	Minority Population (%)	Median Household Income
Allegany	72,130	Urban	12.8	$ 41,559
Anne Arundel	568,346	Urban	30.9	$ 91,918
Baltimore	831,026	Urban	41.9	$ 68,989
Baltimore City	614,664	Urban	72.3	$ 44,262
Calvert	91,251	Urban	21.3	$ 96,808
Caroline	32,850	Rural	76.1	$ 50,830
Carroll	167,656	Urban	10.4	$ 87,060
Cecil	102,603	Urban	14.6	$ 67,938
Charles	157,705	Urban	58.3	$ 91,373
Dorchester	32,258	Rural	36.6	$ 47,907
Frederick	247,591	Urban	25.6	$ 85,715
Garrett	29,425	Rural	3.6	$ 46,277
Harford	251,032	Urban	23.3	$ 81,052
Howard	317,233	Urban	46.7	$ 113,800
Kent	19,730	Rural	22.2	$ 55,028
Montgomery	1,043,863	Urban	55.3	$ 100,352
Prince George's	908,049	Urban	86.9	$ 75,925
Queen Anne's	48,929	Rural	13.3	$ 85,891
Saint Mary's	112,587	Rural	25.1	$ 86,810
Somerset	25,928	Urban	51.4	$ 35,886
Talbot	37,278	Rural	22	$ 61,395
Washington	150,292	Urban	20.2	$ 56,316
Wicomico	102,577	Urban	36.6	$ 53,508
Worcester	51,444	Urban	19.8	$ 57,227

Michigan Counties

County Names	Population	Urban/Rural	Minority Population (%)	Median Household Income
Alcona	10,352	Rural	4	$ 38,160
Alger	9,219	Rural	16.5	$ 41,270
Allegan	115,548	Rural	11.3	$ 55,630

Alpena	28,704	Rural	4.1	$	39,832
Antrim	23,144	Rural	5	$	48,825
Arenac	15,122	Rural	5.2	$	39,240
Baraga	8,503	Rural	27.2	$	42,810
Barry	59,702	Rural	5.4	$	56,883
Bay	104,747	Urban	9.8	$	45,851
Benzie	17,572	Rural	6.2	$	48,694
Berrien	154,010	Urban	24.7	$	45,980
Branch	43,427	Rural	9.3	$	46,428
Calhoun	134,386	Urban	22	$	44,681
Cass	51,599	Rural	13.6	$	47,991
Charlevoix	26,174	Rural	6.1	$	48,603
Cheboygan	25,401	Rural	7.9	$	41,023
Chippewa	37,724	Rural	30	$	42,287
Clare	30,358	Rural	5.1	$	34,911
Clinton	77,888	Urban	9.9	$	62,646
Crawford	13,744	Rural	5	$	41,034
Delta	36,202	Rural	7	$	42,353
Dickinson	25,535	Rural	4.5	$	43,373
Eaton	109,160	Urban	16.7	$	56,472
Emmet	33,182	Rural	8.6	$	51,096
Genesee	408,615	Urban	27.4	$	43,246
Gladwin	25,122	Rural	4.1	$	39,629
Gogebic	15,243	Rural	10.4	$	35,833
Grand Traverse	92,084	Rural	7.5	$	55,597
Gratiot	41,202	Rural	13.3	$	42,145
Hillsdale	45,774	Rural	5	$	44,458
Houghton	36,555	Rural	7.7	$	39,080
Huron	31,481	Rural	4.6	$	43,082
Ingham	288,051	Urban	29.7	$	46,842
Ionia	64,232	Rural	11.6	$	50,037
Iosco	25,327	Rural	5.8	$	38,900
Iron	11,195	Rural	5.2	$	33,137
Isabella	71,282	Rural	14.5	$	40,706
Jackson	158,460	Urban	15.1	$	47,709
Kalamazoo	261,654	Urban	22.1	$	49,693
Kalkaska	17,263	Rural	5.5	$	42,612
Kent	642,173	Urban	25.7	$	54,673
Keweenaw	2,199	Rural	2.6	$	41,472

Lake	11,496	Rural	15.1	$ 30,824
Lapeer	88,340	Urban	8	$ 54,174
Leelanau	21,765	Rural	9.5	$ 59,018
Lenawee	98,504	Rural	13.2	$ 49,300
Livingston	188,624	Urban	50	$ 76,764
Luce	6,358	Rural	21.3	$ 38,167
Mackinac	10,820	Rural	26.3	$ 40,747
Macomb	867,730	Urban	20.3	$ 55,951
Manistee	24,373	Rural	10.8	$ 42,530
Marquette	66,435	Rural	7.7	$ 46,822
Mason	28,876	Rural	8.6	$ 43,497
Mecosta	43,221	Rural	8.7	$ 41,827
Menominee	23,281	Rural	6.8	$ 41,235
Midland	83,462	Urban	8.5	$ 54,852
Missaukee	15,102	Rural	5.9	$ 42,077
Monroe	149,208	Urban	8.3	$ 56,968
Montcalm	62,974	Rural	8	$ 43,126
Montmorency	9,173	Rural	4	$ 37,145
Muskegon	173,408	Urban	23.6	$ 43,920
Newaygo	47,938	Rural	9.3	$ 44,049
Oakland	1,243,970	Urban	27.4	$ 69,850
Oceana	26,027	Rural	17.9	$ 41,952
Ogemaw	20,904	Rural	5.2	$ 36,941
Ontonagon	5,911	Rural	4.8	$ 35,038
Osceola	23,110	Rural	5.3	$ 39,247
Oscoda	8,264	Rural	4.2	$ 35,175
Otsego	24,470	Rural	5.6	$ 50,793
Ottawa	282,250	Urban	15.8	$ 61,367
Presque Isle	12,762	Rural	4	$ 41,570
Roscommon	23,700	Rural	5.1	$ 35,959
Saginaw	192,326	Urban	30.4	$ 43,712
Sanilac	41,409	Rural	5.9	$ 42,037
Schoolcraft	8,001	Rural	14	$ 36,649
Shiawassee	68,554	Rural	5.7	$ 48,470
St. Clair	159,587	Urban	8.8	$ 50,930
St. Joseph	60,853	Rural	13.4	$ 45,410
Tuscola	53,338	Rural	6.4	$ 44,193
Van Buren	75,223	Rural	18.6	$ 47,141
Washtenaw	364,709	Urban	29.4	$ 62,484

| Wayne | 1,749,366 | Urban | 50.3 | $ 42,043 |
| Wexford | 33,163 | Rural | 5.3 | $ 40,417 |

eMethods 1. Telephone Call Script

<u>Adult script</u>

"Hi, my name is ___ I have Medicaid/BCBS insurance and need to see an eye doctor. Can I get an appointment to see Dr. ___ for a diabetic eye exam?

if question the reason for appointment: "I'm diabetic and was told by my primary doctor that I need to have my eyes checked"

if questioned about what type of coverage: "I'm really not sure. I will have to check, but so that I know, what types do you accept?"

if asked about specific plan #: "I don't have the insurance card with me. Can I bring it to the appointment?"

if offer to make an appointment: "when is the soonest that I could see Dr. ____?" *wait for response* …"I am actually going to check my calendar just to make sure that date works, can I call you back and let you know before you book the appointment?"

if offered appointment with another doctor in practice than the one you called about, at this point say: "in case that date doesn't work for me, are there other doctors in the practice besides Dr. ___ who will see new patients with Medicaid/BCBS?" *wait for response* "Okay thank you for your help. I will let you know if that date will work."

If not offered an appointment: "Can I ask the reason for why Dr.___ is not able to see me?"

Record NPI (or first and last name + phone); date of phone call; if phone number wrong or disconnected; responses for parent & child (0/1); date of soonest appointment offered and type of Medicaid accepted (will code for FFS vs managed care). If offered appointment with another doctor but not the one you called about, data should be entered for both doctors (first doctor coded as 'no appointment given'). Also, record the total number of attempts made to reach a provider.

<u>Child script</u>

"Hi, my name is ___ my eight year-old child failed a school vision screening, so I was told to make an appointment with an eye doctor for him. Do you see kids with Medicaid/BCBS?"

if questioned about what type of coverage: "I'm really not sure. I will have to check, but so that I know, what types do you accept?"

if asked about specific plan #: "I don't have the insurance card with me. Can I bring it to the appointment?"

if offer to make an appointment: "when is the soonest that my child could see Dr. ____?" *wait for response* …"I am actually going to check my calendar just to make sure that date works, can I call you back and let you know before you book the appointment?"

if offered appointment with another doctor in practice than the one you called about, at this point say: "in case that date doesn't work for me, are there other doctors in the practice besides Dr. ___ who will see new patients with Medicaid?" *wait for response* "Okay thank you for your help. I will let you know if that date will work."

If not offered an appointment: "Can I ask the reason for why Dr.___ is not able to see my child?"

eMethods 2. Qualtrics Survey

Q1 NPI

Q2 Provider Name (Last, First)

Q3Provider Type

☐ M.D. (1)
☐ O.D. (2)

Q4 Phone number listed on directory (xxx-xxx-xxxx)

Q5 State

☐ Maryland (1)
☐ Michigan (2)

Display This Question:

If State Maryland Is Selected

Q6 MD County

- ☐ Allegany (1)
- ☐ Anne Arundel (2)
- ☐ Baltimore (3)
- ☐ Baltimore City (4)
- ☐ Calvert (5)
- ☐ Caroline (6)
- ☐ Carroll (7)
- ☐ Cecil (8)
- ☐ Charles (9)
- ☐ Dorchester (10)
- ☐ Frederick (11)
- ☐ Garrett (12)
- ☐ Harford (13)
- ☐ Howard (14)
- ☐ Kent (15)
- ☐ Montgomery (16)
- ☐ Prince George's (17)
- ☐ Queen Anne's (18)
- ☐ St. Mary's (19)
- ☐ Somerset (20)
- ☐ Talbot (21)
- ☐ Washington (22)
- ☐ Wicomico (23)
- ☐ Worcester (24)

Display This Question:

If State Michigan Is Selected

Q7 MI County

☐ Alcona (1)
☐ Alger (2)
☐ Allegan (3)
☐ Alpena (4)
☐ Antrim (5)
☐ Arenac (6)
☐ Baraga (7)
☐ Barry (8)
☐ Bay (9)
☐ Benzie (10)
☐ Berrien (11)
☐ Branch (12)
☐ Calhoun (13)
☐ Cass (14)
☐ Charlevoix (15)
☐ Cheboygan (16)
☐ Chippewa (17)
☐ Clare (18)
☐ Clinton (19)
☐ Crawford (20)
☐ Delta (21)
☐ Dickinson (22)
☐ Eaton (23)
☐ Emmet (24)
☐ Genesee (25)
☐ Gladwin (26)
☐ Gogebic (27)
☐ Grand Traverse (28)
☐ Gratiot (29)
☐ Hillsdale (30)
☐ Houghton (31)
☐ Huron (32)
☐ Ingham (33)
☐ Ionia (34)
☐ Iosco (35)
☐ Iron (36)

- ☐ Isabella (37)
- ☐ Jackson (38)
- ☐ Kalamazoo (39)
- ☐ Kalkaska (40)
- ☐ Kent (41)
- ☐ Keweenaw (42)
- ☐ Lake (43)
- ☐ Lapeer (44)
- ☐ Leelanau (45)
- ☐ Lenawee (46)
- ☐ Livingston (47)
- ☐ Luce (48)
- ☐ Mackinac (49)
- ☐ Macomb (50)
- ☐ Manistee (51)
- ☐ Marquette (52)
- ☐ Mason (53)
- ☐ Mecosta (54)
- ☐ Menominee (55)
- ☐ Midland (56)
- ☐ Missaukee (57)
- ☐ Monroe (58)
- ☐ Montcalm (59)
- ☐ Montmorency (60)
- ☐ Muskegon (61)
- ☐ Newaygo (62)
- ☐ Oakland (63)
- ☐ Oceana (64)
- ☐ Ogemaw (65)
- ☐ Ontonagon (66)
- ☐ Osceola (67)
- ☐ Oscoda (68)
- ☐ Otsego (69)
- ☐ Ottawa (70)
- ☐ Presque Isle (71)
- ☐ Roscommon (72)
- ☐ Saginaw (73)
- ☐ St. Clair (74)
- ☐ St. Joseph (75)
- ☐ Sanilac (76)

- ☐ Schoolcraft (77)
- ☐ Shiawassee (78)
- ☐ Tuscola (79)
- ☐ Van Buren (80)
- ☐ Washtenaw (81)
- ☐ Wayne (82)
- ☐ Wexford (83)

Q8 Urban or Rural

- ☐ Urban (1)
- ☐ Rural (2)

Q9 Patient type

- ☐ Medicaid (1)
- ☐ BlueCross Blue Shield (2)
- ☐ Other: (3) _____

Q10 Today's Date (MM/DD/YY)

Q11 Answer phone call?

- ☐ Yes (1)
- ☐ No answer (2)
- ☐ Wrong number (3)

If Yes Is Selected, Then Skip To Appointment offered?

If No answer Is Selected, Then Skip To PAUSE SURVEY Today's Date (MM/DD/YY)

If Wrong number Is Selected, Then Skip To Alternate phone number where the prov...

Q12 PAUSE SURVEY Trial 2 Today's Date (MM/DD/YY)

Q13 Answer phone call?

- ☐ Yes (1)
- ☐ No answer (2)

If Yes Is Selected, Then Skip To Appointment offered? If No answer Is Selected, Then Skip To Today's Date (MM/DD/YY)

Q14 PAUSE SURVEY Trial 3 Today's Date (MM/DD/YY)

Q15 Answer phone call?

- ☐ Yes (1)
- ☐ No answer (2)

If Yes Is Selected, Then Skip To Appointment offered?

If No answer Is Selected, Then Skip To How many calls were made until a succ...

Display This Question:

If Answer phone call? Wrong number Is Selected

Q16 Another available phone number?

- ☐ Yes (1)
- ☐ No (2)

If No Is Selected, Then Skip To End of Block

Display This Question:

If Another available phone number? Yes Is Selected

Q17 Alternate phone number where the provider was reachable (xxx-xxx-xxxx)

Q18 Appointment offered?

- ☐ Yes (1)
- ☐ No (2)

Display This Question:

If Appointment offered? Yes Is Selected

Q19 Appointment Date (MM/DD/YY)

Display This Question:

If Appointment offered? No Is Selected

Q20 Reason for not offering an appointment:

- ☐ Insurance not accepted (1)
- ☐ Listed provider not at practice (3)
- ☐ Referral needed (2)
- ☐ Unreachable with 3 attempts (4)
- ☐ Other (5) _____

Display This Question:

If Appointment offered? No Is Selected

Q21 If said insurance is not covered, what insurance is covered?

a) EyeMed (1)
b) BCBS (2)
c) VSP Vision Care (3)
d) Aetna (4)
e) United Healthcare (5)
f) Medicare (8)
g) BSP (10)
h) Did not specify (7)
i) Other (9) _____

Q22 Appointment offered with another provider?

- ☐ N/A (1)
- ☐ Name (Last, First) (2) _____

Display This Question:

If Appointment offered with another provider? Name (Last, First) Is Selected

Q23 Reason for appointment with another provider?

    ☐ Listed provider not at practice (1)
    ☐ Listed provider not accepting new patients (4)
    ☐ Insurance not accepted (3)
    ☐ Another provider available sooner (2)
    ☐ Other (5) _____

Q24 Appointment offered for child?

    ☐ Yes (1)
    ☐ No (2)

Display This Question:

If Appointment offered for child? Yes Is Selected

Q25 Appointment Date (MM/DD/YYYY)

Display This Question:

If Appointment offered for child? No Is Selected

Q26 Reason for not offering an appointment:

    ☐ Insurance not accepted (2)
    ☐ Listed provider not at practice (4)
    ☐ Needs to be seen by general ophthalmologist first (1)
    ☐ Listed provider does not see pediatric patients (3)
    ☐ Unreachable with 3 attempts (5)
    ☐ Other (6) _____

Q27 Appointment offered with another provider?

    ☐ Yes (1)
    ☐ No (2)

Display This Question:

If Appointment offered with another provider? Yes Is Selected

Q28 Reason for appointment with another provider:

☐ Listed provider not at practice (1)
☐ Insurance not accepted (3)
☐ Another provider available sooner (4)
☐ Listed provider does not see pediatric patients (6)
☐ Other (5) _____

Q29 How many calls were made until a successful connection was made?

☐ 1 (1)
☐ 2 (2)
☐ 3 (3)
☐ unreachable with 3 attempts (4)