

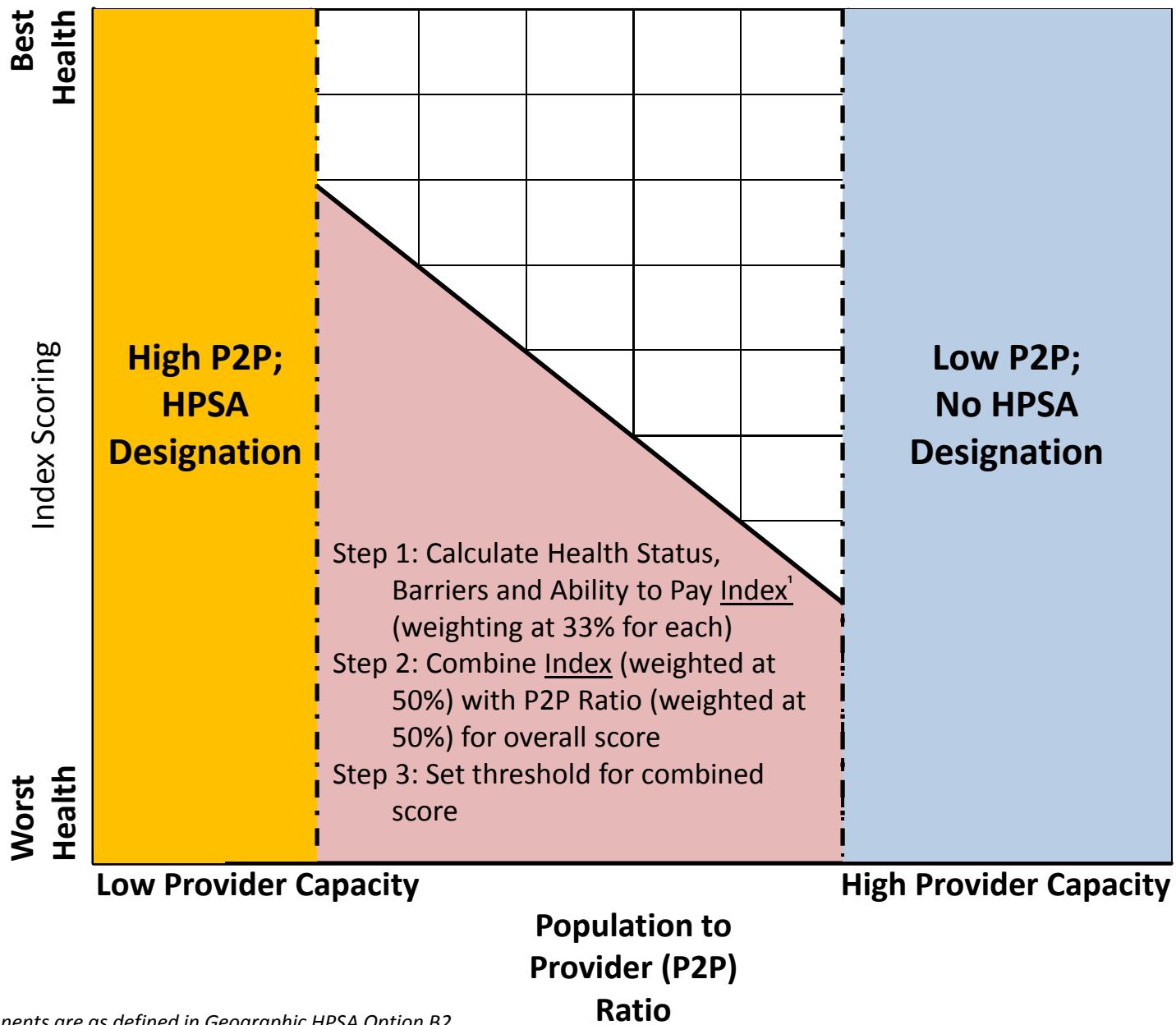
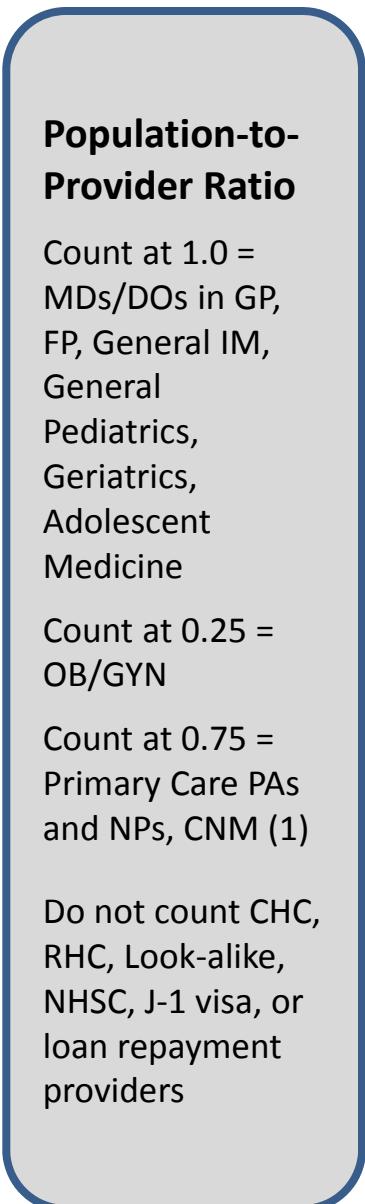
Geographic HPSA Models

	Model A1: <i>Tiered P2P, Continuous Threshold</i>	Model A2: <i>Tiered P2P, Threshold Trigger</i>	Model A3: <i>Tiered P2P, Factor Analysis</i>	Model B1: <i>Index with Barrier Measure Choice</i>	Model B2: <i>Index with Defined Barrier Measures</i>	Model B3: <i>Same as B2 w/ alternate Expert wgt</i>
Weighting	Expert Opinion	Expert Opinion	Statistical Weighting	Expert Opinion	Expert, Alt. on Barriers	Expert, Alt. on Barriers

Unit of analysis: Currently Primary Care Service Areas (PCSA's)
Future Analysis will combine Counties, PCSA's, and Selected State RSAs

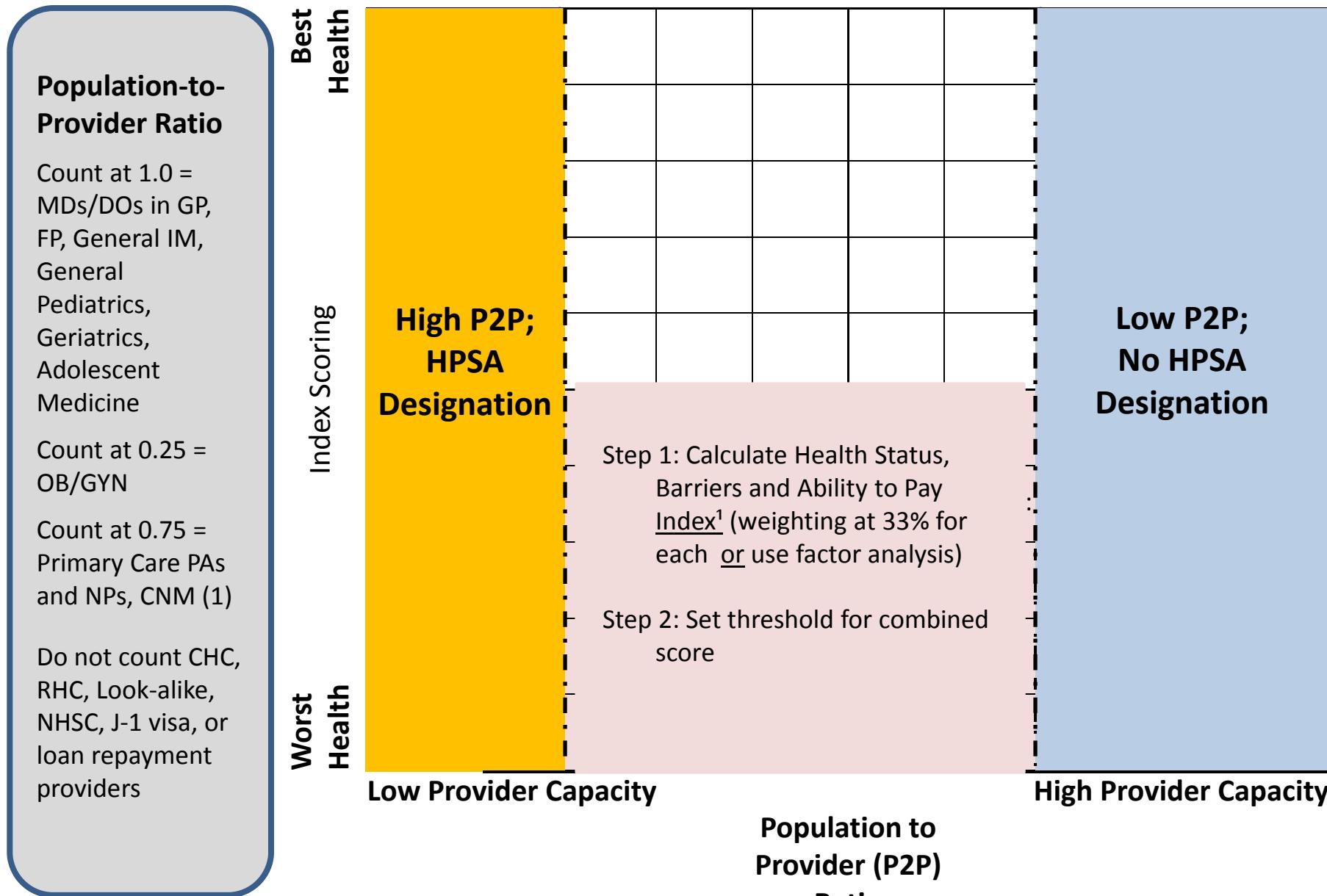
Initial Models for July 2011 Meeting

GEOGRAPHIC HPSA OPTION A1: TIERED P2P MODEL WITH CONTINUOUS THRESHOLD



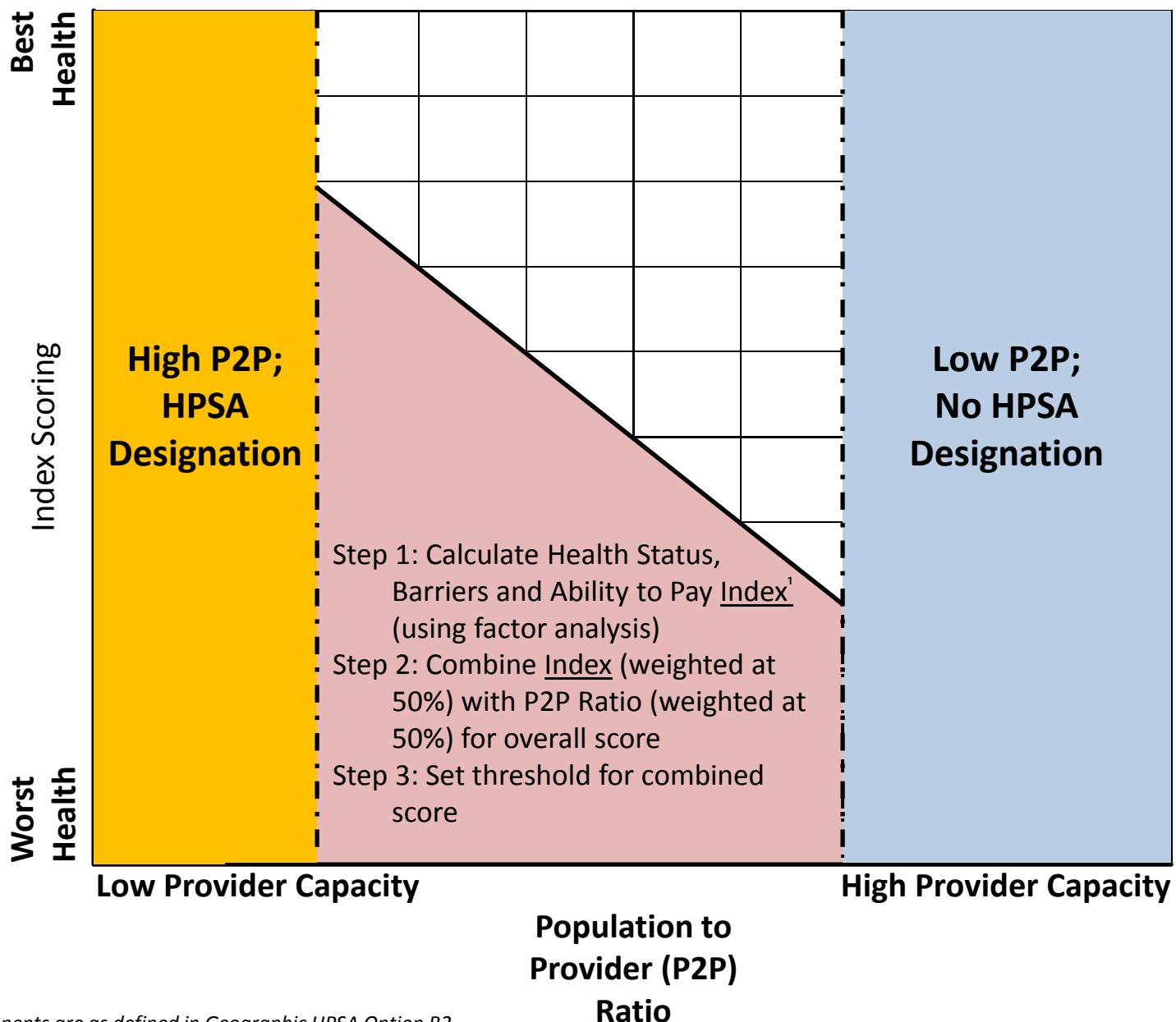
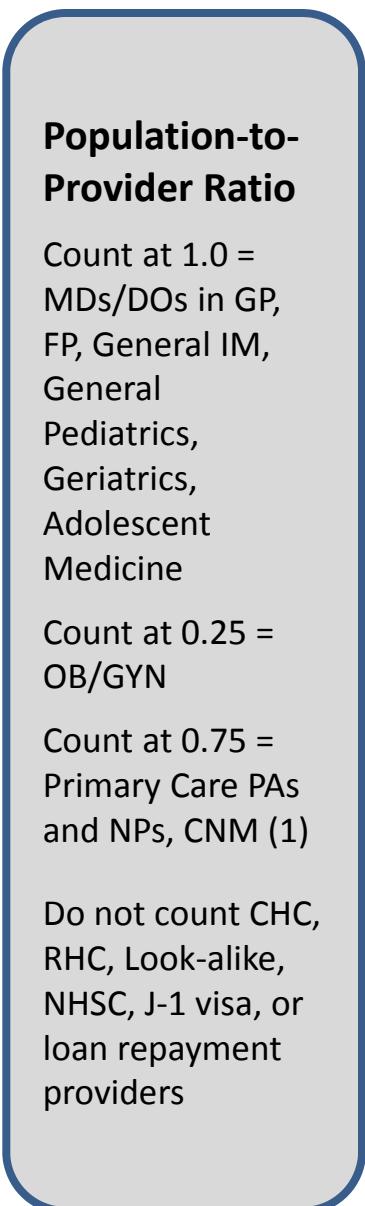
¹ Factors included in these components are as defined in Geographic HPSA Option B2.

GEOGRAPHIC HPSA OPTION A2: TIERED P2P MODEL WITH TRIGGERED THRESHOLD



¹ Factors included in these components are as defined in Geographic HPSA Option B2.

GEOGRAPHIC HPSA OPTION A3: TIERED P2P MODEL WITH STATISTICAL WEIGHTING



¹ Factors included in these components are as defined in Geographic HPSA Option B2.

GEOGRAPHIC HPSA TIERED P2P MODELS WITH CONTINUOUS THRESHOLD

JSI SCORING APPROACH

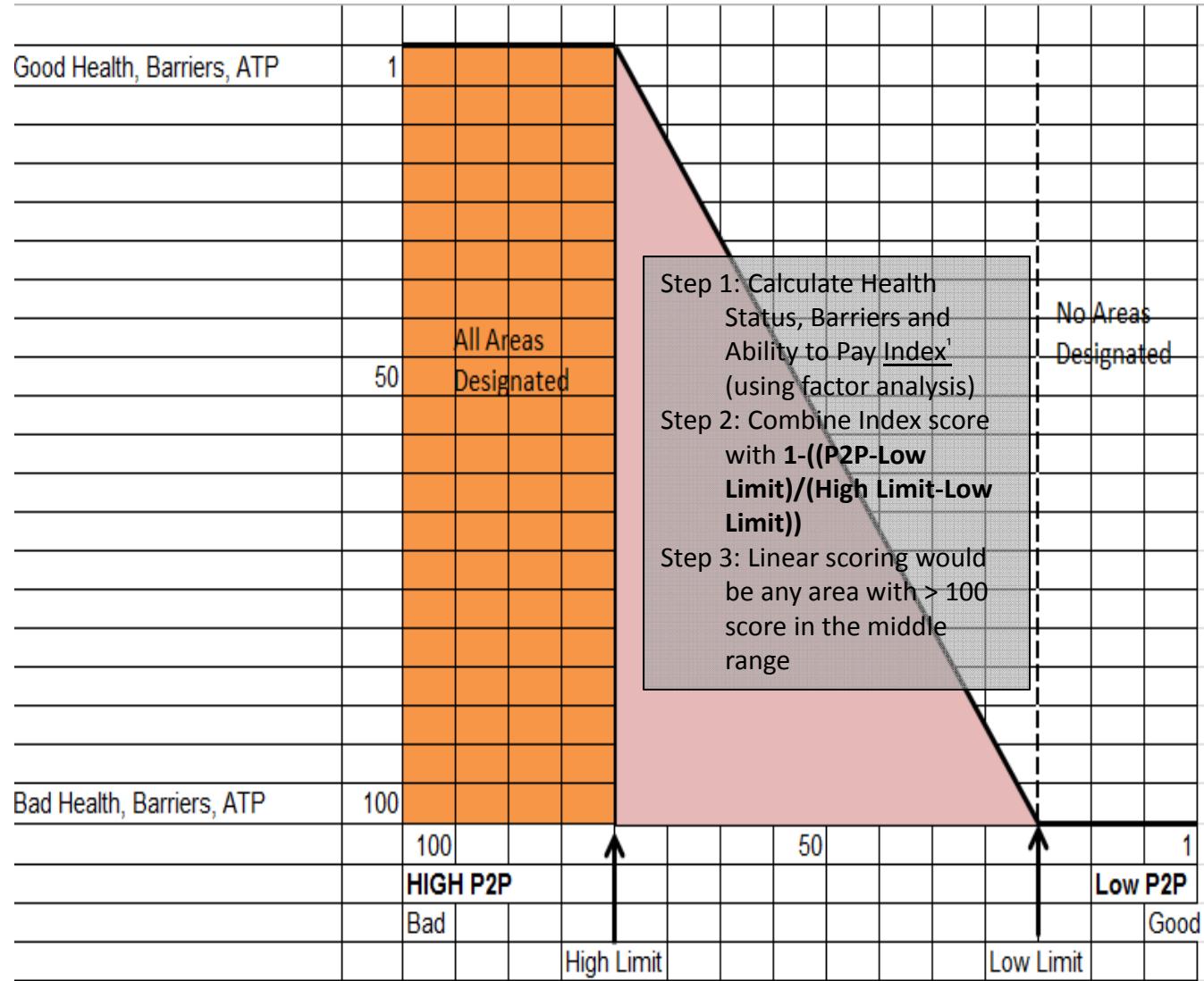
Population-to-Provider Ratio

Count at 1.0 =
MDs/DOs in GP,
FP, General IM,
General
Pediatrics,
Geriatrics,
Adolescent
Medicine

Count at 0.25 =
OB/GYN

Count at 0.75 =
Primary Care PAs
and NPs, CNM (1)

Do not count CHC,
RHC, Look-alike,
NHSC, J-1 visa, or
loan repayment
providers



¹ Factors included in these components are as defined in Geographic HPSA Option B2.

GEOGRAPHIC HPSA OPTION B1: INDEX MODEL WITH BARRIER CHOICE

Component	Factor ¹	Weight
Population-to-Provider Ratio	<p>Count at 1.0 = MDs/DOs in GP, FP, General IM, General Pediatrics, Geriatrics, Adolescent Medicine</p> <p>Count at 0.25 = OB/GYN</p> <p>Count at 0.75* = Primary Care PAs and NPs, CNM (2)</p> <p>Do not count CHC, RHC, Look-alike, NHSC, J-1 visa, or loan repayment providers</p>	=90%
Health Status (weighted at 38%)	<p>50% calculated based on*:</p> <ul style="list-style-type: none"> SMR (weighted at 70%) LBW Rate or Diabetes Prevalence (weighted at 30%) (3) <p>50% calculated based on (SDI):</p> <ul style="list-style-type: none"> Percent of Population Below Poverty (weighted at 50%) Percent of Population Non-employed (weighted at 30%) Percent of Population that is Single Parent Households (weighted at 10%) Percent of Population with Less than a High School Education (weighted at 10%) 	
Barriers to Care (weighted at 31%)	<p>Calculated based on highest two factors (weighted at 50% each) from the following:</p> <ul style="list-style-type: none"> Percent of the Population with LEP or Hispanic Ethnicity Percent of the Population that is of a Racial Minority Population Density (Urban/Rural) Percent of the Population with a Disability Ambulatory Care Sensitive Condition Hospital Discharges for Medicare Population Percent of the Population without a Usual Source of Care 	= 10% combined
Ability to Pay (weighted at 31%)	Calculated based on Percent of the Population that is Uninsured and under 400% of the Federal Poverty Level	

¹Factors are the same as MUA Option A1

GEOGRAPHIC HPSA OPTION B2: INDEX MODEL WITH DEFINED BARRIER MEASURES

(The change from Option B1 is highlighted in yellow)

Component	Factor ¹	Weight
Population-to-Provider Ratio	Count at 1.0 = MDs/DOs in GP, FP, General IM, General Pediatrics, Geriatrics, Adolescent Medicine Count at 0.25 = OB/GYN Count at 0.75* = Primary Care PAs and NPs, CNM (2) Do not count CHC, RHC, Look-alike, NHSC, J-1 visa, or loan repayment providers	=90%
Health Status (weighted at 38%)	50% calculated based on*: <ul style="list-style-type: none">SMR (weighted at 70%)LBW Rate or Diabetes Prevalence (weighted at 30%) (3) 50% calculated based on (SDI): <ul style="list-style-type: none">Percent of Population Below Poverty (weighted at 50%)Percent of Population Non-employed (weighted at 30%)Percent of Population that is Single Parent Households (weighted at 10%)Percent of Population with Less than a High School Education (weighted at 10%)	
Barriers to Care (weighted at 31%)	50% calculated based on highest of risk factor measures listed below (3): <ul style="list-style-type: none">Percent of the Population with LEP or Hispanic EthnicityPercent of the Population that is of a Racial MinorityPopulation Density (Urban/Rural)Percent of the Population with a Disability 50% calculated based on highest of direct access measures listed below: <ul style="list-style-type: none">Ambulatory Care Sensitive Condition Hospital Discharges for Medicare PopulationPercent of the Population without a Usual Source of Care	= 10% combined
Ability to Pay (weighted at 31%)	Calculated based on Percent of the Population that is Uninsured and under 400% of the Federal Poverty Level	

¹Factors are the same as MUA Option A2

GEOGRAPHIC HPSA OPTION B3: INDEX MODEL WITH EXPERT JUDGMENT

(The change from Option B1 is highlighted in yellow)

Component	Factor ¹	Weight
Population-to-Provider Ratio	Count at 1.0 = MDs/DOs in GP, FP, General IM, General Pediatrics, Geriatrics, Adolescent Medicine Count at 0.25 = OB/GYN Count at 0.75* = Primary Care PAs and NPs, CNM (2) Do not count CHC, RHC, Look-alike, NHSC, J-1 visa, or loan repayment providers	=50%
Health Status (weighted at 40%)	50% calculated based on*: <ul style="list-style-type: none">SMR (weighted at 70%)LBW Rate or Diabetes Prevalence (weighted at 30%) (3) 50% calculated based on (SDI): <ul style="list-style-type: none">Percent of Population Below Poverty (weighted at 50%)Percent of Population Non-employed (weighted at 30%)Percent of Population that is Single Parent Households (weighted at 10%)Percent of Population with Less than a High School Education (weighted at 10%)	
Barriers to Care (weighted at 30%)	50% calculated based on highest of risk factor measures listed below (3): <ul style="list-style-type: none">Percent of the Population with LEP or Hispanic EthnicityPercent of the Population that is of a Racial MinorityPopulation Density (Urban/Rural)Percent of the Population with a Disability 50% calculated based on highest of direct access measures listed below: <ul style="list-style-type: none">Ambulatory Care Sensitive Condition Hospital Discharges for Medicare PopulationPercent of the Population without a Usual Source of Care	= 50% combined
Ability to Pay (weighted at 30%)	Calculated based on Percent of the Population that is Uninsured and under 400% of the Federal Poverty Level	

¹Factors are the same as MUA Option A2

Additional Analyses

1. Model A1 and A2: Alternative weights for combining health status, barriers and ability to pay; also explore use of statistical model for weights
2. Counting NPs, PAs and CNMs at 1.0 and .75
3. Health Status weighting of diabetes and LBW at 15% each vs. choosing one at 30% weight for B1 and B2
4. Models B2 & B3: impact of including all barriers vs. choosing