# ISSUES FACING RURAL GENERAL SURGEONS

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# DISCLOSURES:

- No financial disclosures

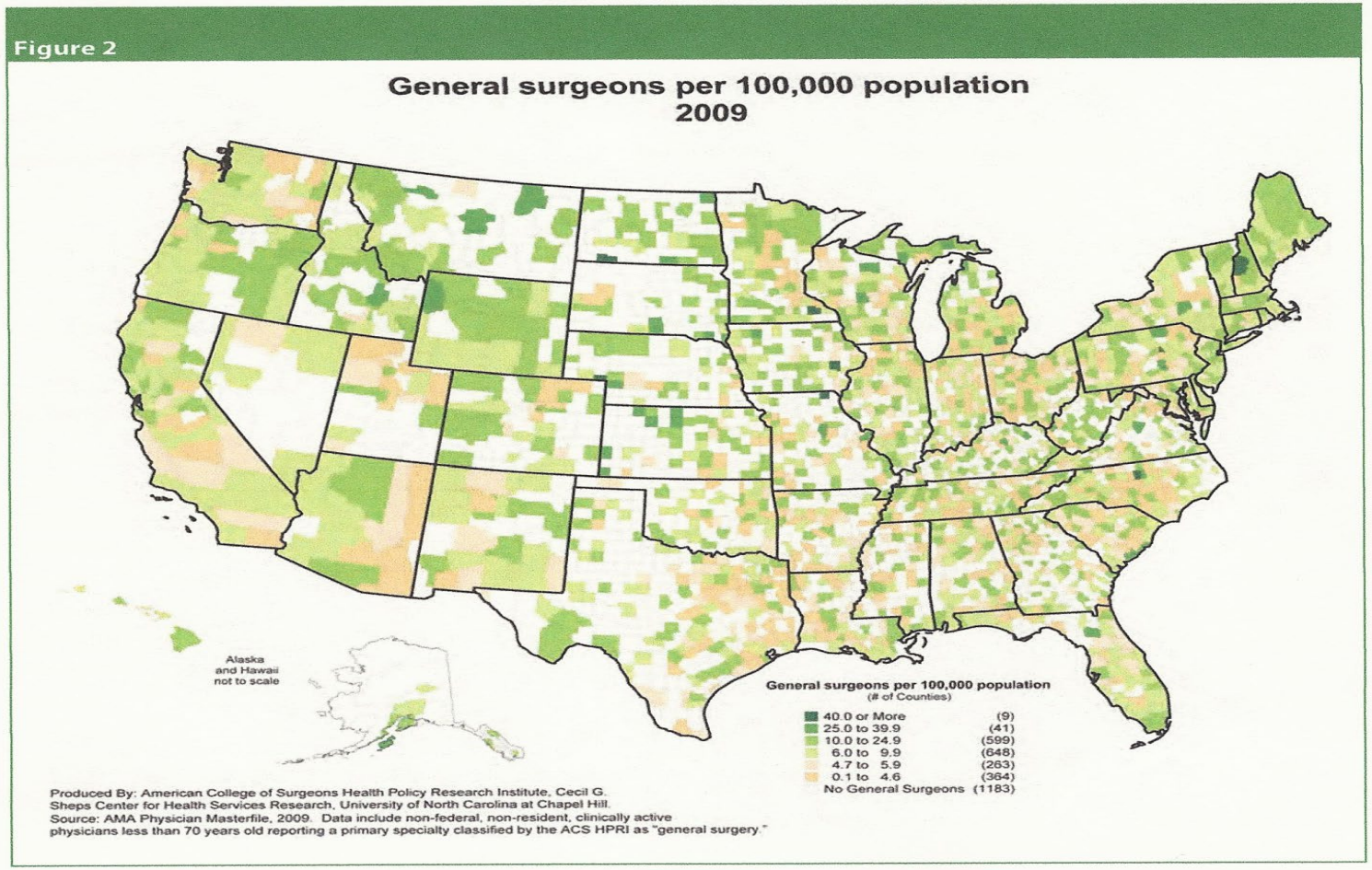
# DEMOGRAPHICS

- Over 20% (60 million) of American citizens live in rural or frontier locations with less than 10% of healthcare workforce in the same regions (even fewer general surgeons)
- Optimal access to surgical care: generally accepted 7.5 general surgeons needed for every 100,000 patients
- In 2000, Urban ratio was 6.53 general surgeons for 100,000 and Rural ratio was 4.67 for 100,000
- In 2019, Urban ratio down to 5.44 to 100,000 and Rural ratio down to 3.15 for 100,000
- In 2019, 60.1% of non-metropolitan counties have NO active general surgeons
- 48% of Urban general surgeons are older than 50 years compared to 55-60% in Rural regions.

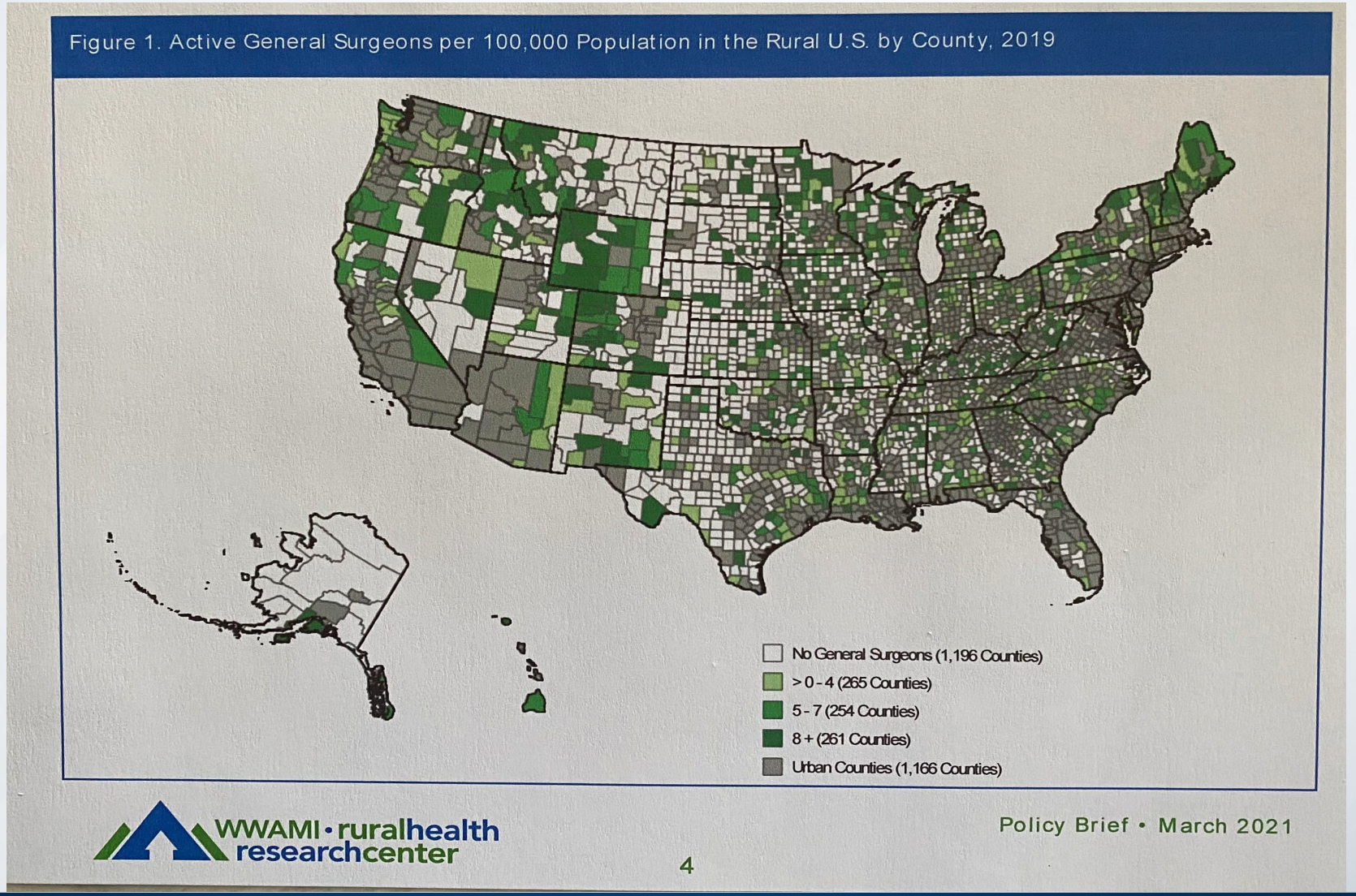
The Distribution of the General Surgery Workforce in Rural and Urban America in 2019; Policy Brief-March 2021

https://familymedicine.uw.edu/rhrc/wp-content/uploads/sites/4/2021/03/RHRC_PBMAR2021_LARSON.pdf

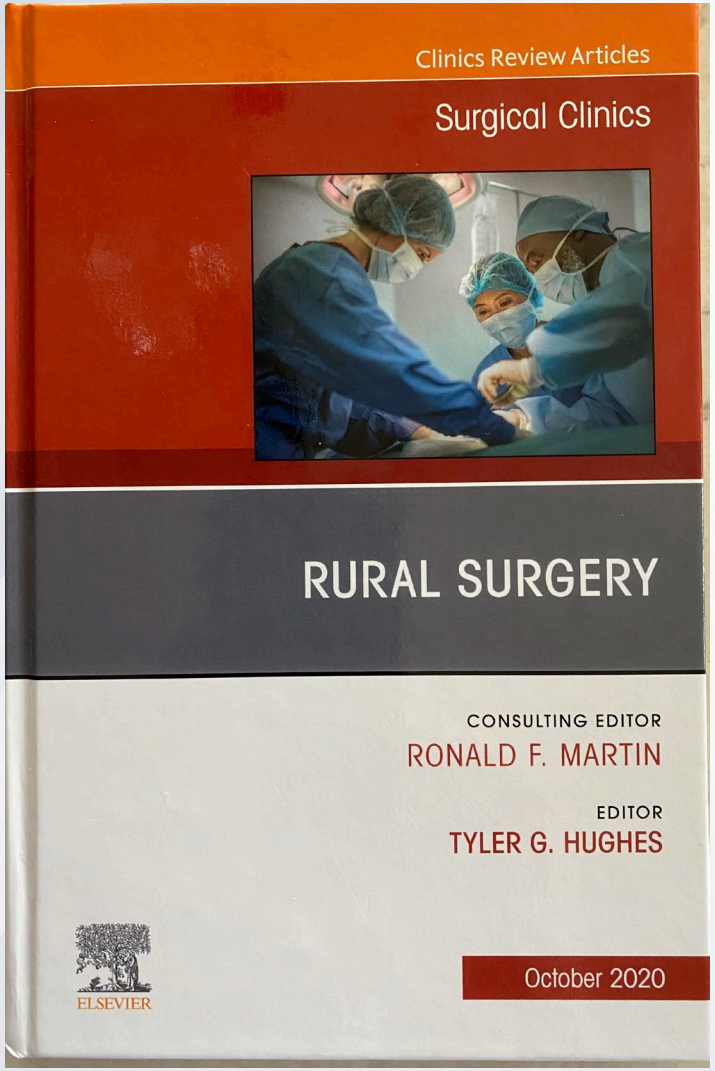
# 2009: DISPARITY MAP OF GENERAL SURGEONS ACROSS USA



# 2021: DISPARITY MAP OF GENERAL SURGEONS ACROSS USA



# BEST REFERENCE SOURCE TO DATE : AUTHORS ARE RURAL SURGEONS ACROSS USA




Topics include:

- Demographics
- Status of Rural Surgeon Workplace
- Training of Rural Surgeons
- Status of Rural Surgical Workforce
- Rural Hospital Standards
- Rural Surgical Quality
- Advanced Technology and Rural Surgery
- Perioperative Support and Transfer

Surgical Clinics of North America. 2020; 100(5) PMID: 32882167

# HISTORICAL CAVEAT– AN ORIGINAL SOUTH DAKOTA RURAL RESIDENCY PROGRAM WAS DISCONTINUED IN 1985 DUE TO :

- Not enough outreach opportunities
- Program lacked adequate volume of trauma, pediatric surgery and major esophageal and pancreas surgery
- 1980, GME National Advisory Committee (? Former COGME?) predicted that the number of board-certified surgeons in active practice would increase from 64,000 in 1980 to an abundance of 113,000 by 2000. This report would lead to closure of surgical residencies nation-wide, including the SD general surgery residency. ('low hanging fruit')
- However, by 2000, only 66,076 surgeons were in practice (2% increase), yet the US population increased by 27%!

# TOPICS REQUESTED FOR DISCUSSION

1) Challenges facing today's rural general surgeons:
   A) Training surgeons for rural practice: Curriculum modifications
   B) Recruitment issues
   C) Retentions issues
2) Current Priorities of the ACS/Advisory Councils for Rural Surgery
3) Personal Input on Rural General Surgery Support Letter and Letter to Congress
4) Personal Input on Rural Health Care Teams

# 1) CHALLENGES FACING TODAY'S RURAL GENERAL SURGEONS

## A) TRAINING SURGEONS FOR RURAL GENERAL SURGERY PRACTICE

# TRAINING A RURAL GENERAL SURGEON: HISTORIC

- Historically, any resident completing a general surgery residency was expected to be knowledgeable in nearly all fields of surgery and surgery specialties
- Trauma, Orthopedics, Vascular, Urology, Ob/Gyn, Pediatrics, ENT, GI endoscopy were all included in the expectations of a rural surgeon
- No issues of resident work hours or call frequency: Resident!
- Fewer specialties available (no Breast, Endocrine, Critical Care, Bariatric/Advanced Laparoscopic Surgery training)

# WHAT CHANGED??

- External pressures- Advances in technology and pharmaceutical such as advanced laparoscopy, therapeutic endoscopy (ERCP, EUS, submucosal resections) and Robotic surgery called for more specialized training. Further, patients possess greater ability to travel from rural areas in order to obtain these advanced services elsewhere.
- Internal pressures- subspecialty training within the practice of general surgery (breast, endocrine, critical care) offer opportunities for different lifestyles AND, also, surgical education requirements (resident work hours). As hours for training were reduced, exposure to specialties (ortho, OB/Gyn) were also reduced and General Surgery residencies evolved away from broadly trained surgeons.

# ATTENTION OF THE PLIGHT OF THE RURAL GENERAL SURGEON BROUGHT TO THE ACS BOARD OF REGENTS A DECADE AGO

- In 2012, two impassioned rural surgeons stood before the American College of Surgeons Board of Regents in Chicago, lamenting their concern for the evaporating "rural general surgeon" workforce and the present inadequacies of the current general surgery training programs.
- ACS created the Advisory Council for Rural Surgery
- Introspective review of the entire practice and potential future of the rural general surgeon explored including training curriculum, recruitment and retaining efforts and overall well-being considerations
- Efforts also include advocacy and greater representation, within the ACS, as well as local and federal sponsored legislative efforts

ACS RECOGNIZED THE ABILITY TO BROADLY PREPARE A FUTURE GENERAL SURGEON FOR SOCIETY'S PREVIOUS EXPECTATIONS WITHIN OUR CURRENT TRAINING CURRICULUM IS FELT TO BE IMPROBABLE AND UNOBTAINABLE

# PRESENT ABS REQUIREMENTS FOR GENERAL SURGERY TRAINING

- A broad-based curriculum still expected
- Focuses on 10 core areas: such as abdominal surgery, breast, endocrine, trauma, critical care, surgical oncology, vascular, pediatric, organ transplant and emergency surgery
- Additionally, ACGME requirements include 6 core competencies in addition to minimum operative procedures in each surgical category
- Notable is the absence of specialty surgery training contributing to the concern of resident preparedness to directly enter rural/community general surgery practice (OB/Gyn, Urology, Ortho)
- Therefore, no surprise 80-85% graduating chiefs go on to specialty training. That leaves only 200-300 graduating surgical chiefs/year to meet the entire US general surgery workforce needs, including rural

# ALTERNATIVE OPTIONS TO TRAIN RURAL/COMMUNITY BASED GENERAL SURGEONS

A) A curriculum based on Rural Surgeon's personal and locational needs assessment

B) A curriculum based on Rural Surgeon's procedural case logs

C) A curriculum based on alternative rural surgery residency training models

D) Other concepts

# A) CURRICULUM BASED ON RURAL SURGEON'S NEEDS IN RURAL PRACTICE

- Needs assessment to determine necessary skills set
- 230 Rural surgeons solicited for their opinions of the necessary surgical skills required to succeed in their rural practice
- 60% in practice greater than 20 years
- Most valued skills: endoscopy, advanced laparoscopy, basic non-general surgery specialty procedures (ob/gyn, ortho, urology and ENT)
- Surgeons agreed high volume residencies and programs without competing fellows in specialties were preferred

Deal SB, J Surg Educ 2018

# B) CURRICULUM BASED ON CASE LOG EVALUATIONS OF RURAL PRACTICES

- Evaluation of established practicing rural surgeon's case logs to define expectations
- A 2006 study reviewed rural surgeons case logs from North and South Dakota
- Endoscopy (39%); general surgery (26%); minor surgery (18%) and subspecialty cases (12%)
- General Surgery cases: cholecystectomy (6.3%), hernia (6.2%), breast (4.9%) and appendectomy (2.2%)
- More recent 2019 study from Minnesota and South Dakota- Endoscopy (62%); cholecystectomy (6.3%), hernia (6.3%) and appendectomy (3.7%)- these four categories accounted for 80% of rural surgeon's case log. Also found decreasing subspecialty cases performed.

Sticca, et al. Am J Surg 2012

Stinson W, et al. American Surgeon 2020

# C) CURRICULUMS BASED ON ALTERNATIVE TRAINING MODELS IN CURRENT PROGRAMS

- Introspective review by traditional general surgery training programs to reconstruct or modify their curriculum to better train those entering community or rural surgery
- Three opportunities offered by ACS leadership:
  1) "Fix-the-five"
  2) Create new surgical residencies with primary focus for rural surgery
  3) Create "Transitions to Practice" fellowships

# 1) "FIX-THE-FIVE"

- Add rural surgery opportunities as electives within the 5-7 year training program
- Often 1-3 month 'away' rotations to rural communities
- Often opportunity extended to global countries with surgical health care intentions or even "missionary" care opportunities.
- Other programs have intentional rural surgery track with up to 6-9 months of rural training. These opportunities even listed with the NRMP (resident match program) as distinct and separate entity from the "mother" program
- Finally, immersion approach, where in place of 1-2 years of "research", residents are sent to train at accredited rural communities

# 2) CREATE NEW PRIMARY RURAL SURGERY PROGRAMS

- USD/Sanford Surgical Residency in South Dakota 2013
- Sanford Health recognized need for community/rural surgeons for upper mid-west and their own enterprise
- With no opportunity for federally funded GME resident cap slots, Sanford sponsors the entire program, graduating now 4 residents per year
- Thus far, all have or plan to return to rural/community practices when completed their training, including those who went on to specialize (C/R, Vascular, Critical Care, Endocrine).

# 3) TRANSITION-TO-PRACTICE

- Adds a one-two year “fellowship” to the completion of five years of general surgery training
- Fellows receive additional training (OB/Gyn or other areas of focused need or skills) while still able to bill and not under primary direction of the ACGME requirements
- Believed to sharpen skills and build additional confidence for participating surgeon

# D) OTHER OPPORTUNITIES: THINKING OUTSIDE THE BOX

- Many believe the "die is cast" once the medical student enters surgical residency (most already have decided where they wish to practice even before starting residency)
- Many medical schools have created an "immersion" rural clinical training experience for 3rd year med students. The student's 9-12 month clinical year is spent in a rural community.
- University of Minnesota and Oregon (and now USD and UND) have used this method to address shortages in primary care
- U of Minn. and USD have witnessed 40% recruitment to family medicine from that pool of students
- This may offer an opportunity for rural surgery as well.

# B &C) RECRUITMENT AND RETAINMENT ISSUES FOR RURAL SURGEONS

- Concerns for school debt relief knowing economic income is lower in rural regions. This includes lower net income due to lower total RVU production, lower GPSI values for rural Medicare reimbursement, higher proportion of Medicaid/Medicare and uninsured patient population
- Geographic disparities favoring patient urban migration: younger move for better jobs, adequate day-care, shopping, travel (airports)
- Volume-related surgical outcomes: often limits rural surgical practice such as colon, breast, GI, endocrine in favor to "high-volume" centers in urban areas
- New or replacement surgical equipment expense- at the mercy of the smaller hospital's limited budget
- Specialty support limited: Advanced GI for ERCP, Radiation Therapy, Interventional Radiology

# OTHER CONCERNS PERTINENT TO RURAL SURGEON

- Maintaining Competence- difficult to obtain CME and new technology
- Retaining Life-Long Learning for Rural Surgeons
- Spending time away from a rural practice is extremely difficult, particularly if you're the only surgeon in town
- Call coverage- commonly every other or every night call (every weekend and holiday)
- Away time equals loss of revenue, loss of surgeon to the community, greater burden on those who cover
- Learning new skills or updates often requires trips to larger communities or centers of excellence.
- Surgical Professional Isolation: Only surgeon in town. Depression and burnout serious concern
- Social isolation for spouse, partner, significant other

# GOOD NEWS ?? OPPORTUNITIES FOR LIFE AS A RURAL GENERAL SURGERY

- Covid taught us the benefits of telemedicine and information flows much more easily electronically today
- Surgical telementoring is on the horizon to assist surgeons with not only questions, but potentially, even intra-operative consultation or assistance.
- More and more surgeons rely on health care networks with opportunity for call coverage and potential financial security
- Proper incentives: including evidence that exposure or immersion in a rural surgery practice even before residency markedly increases the likelihood of returning to practice there
- Encourage community investment- socially and economically. Cost of living less, available and reasonable housing, community atmosphere all substantial
- Doctors/surgeons greatly appreciated and revered as community leaders

# 2) PRIORITIES OF THE ACS/ACRS FOR RURAL GENERAL SURGERY

# DEFINITION OF RURAL

- Rural based on population:

1) Urban > 50,000 2) Large Rural: 10,000 to 50,000 3) Small Rural: 2,500 to 5,000 and 4) Isolated or frontier < 2,500

- Rural based on Zip Code
- Rural based on local to nearest urban or tertiary care center
- Rural based on volume of surgery
- Rural based on geographic isolation
- ACS will look to apply the new definition to all aspects of provided care including trauma, cancer, quality outcomes, advocacy issues

# ADDRESSING NO COMPETITION CLAUSES

- Many health care systems and hospitals possess contractual NO Competition language in their contracts that would limit or prevent general surgeons from relocating to another community or location (including rural) due to proximity or exclusion clauses
- ACS continues to look to ban No Compete clauses for surgeons

# CRITICAL ACCESS HOSPITALS TO RURAL EMERGENCY HOSPITALS

- Significant concern as to the viability of the rural surgeon's practice should rural hospitals convert from Critical Access Hospital to a Rural Emergency Hospital
- No opportunity to admit a patient to the hospital for post-op care: example- ruptured appendicitis or gangrenous cholecystitis
- Will lead to surgeons (or even family medicine) leaving those communities that choose this option
- Understand and can be appropriate for small CAH in financial troubles with no surgical coverage.

# 3) INPUT ON COGME LETTER AND LETTER TO CONGRESS

# DRAFT LETTER

- The ACS absolutely supports efforts to restructure the NHSC Scholarship and Loan repayment program to support surgeons who chose to practice in rural or underserved areas
- Also, concur with the creation and federally funded FTE residency 'spots' to create and maintain rural and community-based general surgery training programs through community based rural hospitals. Currently, no new GME spots exist in our regional areas. Regrettably, nearly all of South and North Dakota were ineligible for the Consolidated Appropriations Act of 2021 which provided for 1,000 new FTE residency slots over 5 years for rural-based programs. The three communities that could fulfill the ACGME/ABS and RRC requirements to train residents in all rural specialties (Fargo, Bismarck and Sioux Falls) did not meet the inclusion (HPSA) requirements. Good intention, disappointing outcome

# COGME LETTER TO CONGRESS

- H.R. 5149 (S.1519) was a bill ACS helped draft and sponsored from last year's 117th Congress and heavily ACS supported in Washington. It has not yet been reintroduced to the new Congress but ACS will again support.
- Likewise, S. 4330 (SPARC Act) is also an ACS endorsed and supported bill last Congress and ACS will support again. A companion House bill is still pending but ACS will likely support.
- ACS stands ready to work with COGME as a potential coalition partner on these two bills during this current Congress.

# 4) INPUT ON RURAL HEALTH CARE TEAMS

- Working alongside fellow specialties and healthcare providers is an expected and core competency for all surgeons – in training or in practice : Professionalism
- This includes multi-disciplinary boards and committees such as tumor boards, ethics boards, etc.
- However, surgeons would not expect other non-surgeon disciplines to render surgical care or be primarily covered by other medical specialties. Surgeons would not be amendable to require other non-surgeons to hold comparable operative skills, outcome expectations or post-op responsibilities to individuals not trained in surgery or possess the necessary liability coverage
- Therefore, as a former rural surgeon in a community of 20,000, I would best benefit from an earnest effort by the hospital, clinic or community to recruit for two or more rural surgeons or they arrange for another surgeon available for reasonable surgical call coverage

# ANY QUESTIONS?

THANK YOU!

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