Care Redesign Survey

Lessons Learned From and For Rural Health

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Lessons Learned From and For Rural Health

Advisor Analysis

More than 46 million Americans, accounting for 15% of the U.S. population, live in rural areas, according to the U.S. Census Bureau. NEJM Catalyst surveyed our Insights Council members to understand the similarities and disparities between health care in rural and urban/suburban settings, and to get a clearer picture of the barriers that exist in delivering excellent care to rural settings. Although care delivery models in rural and urban/suburban areas are distinct, by virtue of geographic density and resource availability, each locale affords lessons for the other.

Our survey respondents have informed opinions – half report being personally involved in the delivery of health care in a rural setting, with an average of 12 years of experience. Just over 20% of respondents say they’ve been involved in rural care for more than 20 years. A large majority (78%) currently work at organizations that provide care in urban/suburban settings. (Survey respondents self-identified as working for rural or urban/suburban providers.)

Insights Council members say quality is superior in urban/suburban settings across all types of care. For primary care, rural settings are almost on par; a significant majority of respondents, 80%, consider primary care excellent, very good, or good in rural areas. But for specialty care, post-acute care, and mental and behavioral health services, the gap in perceived quality is wide and heavily in favor of urban/suburban settings.

In other aspects of care, however, rural areas do better than urban/suburban settings, according to survey respondents: 37% say the rural patient experience is superior, and 32% say the rural cost of care is lower.

Where rural health care quality falls shortest, say Insights Council members, is in mental and behavioral health services (including substance use disorders). Half of respondents say this care is poor or very poor. This is sadly supported by a 2017 Centers for Disease Control and Prevention report showing that rural counties consistently had higher suicide rates than metropolitan counties from 2001 to 2015. And drug overdose rates in rural areas surpassed the rates in urban areas in 2006, staying consistently higher since then.

Care design in rural settings could be better aligned with patient needs (as in urban/
suburban settings as well). For instance, survey respondents don’t consider social determinants of health a significant barrier to excellent care in rural settings (listed by 23% compared to 40% in urban settings). Community Health Needs Assessments (CHNAs) – which are derived from patient and community input – say otherwise. In Alaska, the Southcentral Foundation, which provides services for the Native American population in the predominantly rural areas around Anchorage, redesigned services at the turn of the century based on findings from their CHNA, showing child abuse, child neglect, and substance abuse as the three areas most impactful to their communities’ health – all of which lead back to social determinants. In North Dakota, the top needs include resources to address diabetes and mental health/substance abuse.

Rural health providers are responding to their needs by using telehealth. The biggest barrier to excellent care, according to the survey, is distance/travel time to facilities (tied with recruitment/retention of physicians). Expanded telehealth services are considered one of top means to improve care delivery in rural areas, tied with better access to specialty care, which can be delivered through telemedicine.

We asked respondents to tell us what would cause them to switch to practicing in a rural setting from an urban/suburban location. Many point to quality of life, less bureaucracy and more autonomy in decision-making about patient care, access to specialists via telehealth, and lower cost of living. “A desire to make a difference in a population that has many needs,” one clinician says. Others comment that usually the providers who grew up in a rural setting are the ones who want to return. What health care providers would likely give up from the urban setting, according to respondents, is higher pay, more opportunity for collaboration, and a faster-paced lifestyle.

To overcome the challenge of provider recruitment in rural areas, Providence St. Joseph Health (PSJH) has developed ways to allow physicians to have the best of both worlds: a base of operations in a more metropolitan area, while they deliver care to rural communities. PSJH also uses telehealth to give rural communities access to specialists and cutting-edge care – implementing the concept of moving knowledge, not people. In addition, to ensure a skilled workforce exists in each community, PSJH has leveraged our university to build distance learning programs for health professions students. The University of Providence can now train nurses, CRNAs, and techs close to their homes, so students can stay and work in the communities they’ll serve.

As rural and urban/suburban providers alike work to deliver outstanding care, they should ground health care system design in data and a deep understanding of the population’s needs. Broadening access to care, coordinating with services when socioeconomic needs trump health issues, building a skilled workforce dedicated to service in rural areas, and enhancing services that focus on mental and behavioral issues will be essential to creating thriving rural communities. To do otherwise jeopardizes the investment in care delivery and results in a system that is expensive and mismatched to the needs of the community it serves.
Lessons Learned From and For Rural Health

NEJM Catalyst

Insights Report · October 2018

Charts and Commentary

We surveyed members of the NEJM Catalyst Insights Council — who comprise health care executives, clinical leaders, and clinicians — about health care in urban/suburban and rural settings. The survey explores the type of settings in which organizations provide care, the quality of services provided, a comparison of aspects of care for rural versus urban/suburban settings, the biggest barriers to providing excellent care, and the tools, models, and policies to improve care delivery. Completed surveys from 730 respondents are included in the analysis.

More than two-thirds of respondents say their organization provides care in an urban/suburban setting, compared with just over a third in rural settings. Looking at geographic regions of the United States, the largest share of respondents in the Midwest provide care in a rural setting (46%), while the Northeast has the lowest share (26%).

Insights Council Members Provide Care in All Settings

In what settings does your organization provide care?

<table>
<thead>
<tr>
<th>Setting</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban/suburban</td>
<td>78%</td>
</tr>
<tr>
<td>Rural</td>
<td>37%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>4%</td>
</tr>
</tbody>
</table>

Base = 730 (multiple responses)

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society
The quality of services for all areas is consistently rated higher for urban/suburban settings than for rural settings. When it comes to quality of care in urban/suburban settings, specialty care, primary care, and pharmacy rank highest. A greater percentage of respondents in the Midwest (76%) rank specialty care as excellent, very good, or good compared to respondents in the South (58%) and West (55%). The quality of dentistry ranks lowest among services in the urban/suburban setting, and is low in rural sites as well.

Quality of Care Is High in Urban/Suburban Settings

What is the quality of services provided in your organization?

<table>
<thead>
<tr>
<th>Service</th>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialty care</td>
<td>43%</td>
<td>33%</td>
<td>14%</td>
<td>4%</td>
<td>6%</td>
<td>90%</td>
</tr>
<tr>
<td>Primary care</td>
<td>34%</td>
<td>37%</td>
<td>16%</td>
<td>5%</td>
<td>7%</td>
<td>87%</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>30%</td>
<td>31%</td>
<td>20%</td>
<td>5%</td>
<td>15%</td>
<td>81%</td>
</tr>
<tr>
<td>Post-acute care</td>
<td>24%</td>
<td>29%</td>
<td>27%</td>
<td>7%</td>
<td>11%</td>
<td>80%</td>
</tr>
<tr>
<td>Mental and behavioral health services (Including substance use disorders)</td>
<td>11%</td>
<td>21%</td>
<td>25%</td>
<td>23%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Dentistry</td>
<td>18%</td>
<td>18%</td>
<td>18%</td>
<td>9%</td>
<td>3%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Base = 573 (Among those providing care in urban/suburban settings)
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In the rural setting, primary care, pharmacy, and specialty care rank as the top three services in terms of quality. A higher percentage of respondents from the Northeast (37%) than the West (19%) rate the quality of rural primary care as excellent. The quality of rural primary care is rated nearly as high as urban/suburban primary care. The gap widens to 20 percentage points for mental and behavioral health services (including substance use disorders), with urban/suburban settings at 57% and rural settings at 37%. The quality gap between urban/suburban and rural settings is the widest for specialty care (26 percentage points).

### Quality of Care Is Rated Lower for Rural Settings

What is the quality of services provided in your organization?

<table>
<thead>
<tr>
<th>Service</th>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care</td>
<td>23%</td>
<td>37%</td>
<td>21%</td>
<td>11%</td>
<td>7%</td>
<td>80%</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>18%</td>
<td>25%</td>
<td>28%</td>
<td>9%</td>
<td>3%</td>
<td>16%</td>
</tr>
<tr>
<td>Specialty care</td>
<td>9%</td>
<td>29%</td>
<td>27%</td>
<td>18%</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>Post-acute care</td>
<td>10%</td>
<td>20%</td>
<td>29%</td>
<td>22%</td>
<td>4%</td>
<td>15%</td>
</tr>
<tr>
<td>Dentistry</td>
<td>8%</td>
<td>14%</td>
<td>22%</td>
<td>14%</td>
<td>10%</td>
<td>31%</td>
</tr>
<tr>
<td>Mental and behavioral health services (including substance use disorders)</td>
<td>7%</td>
<td>12%</td>
<td>18%</td>
<td>25%</td>
<td>24%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Base = 270 (Among those providing care in rural settings)
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Patient experience ranks as the best aspect of rural care in comparison to urban care, whereas quality of care ranks the worst. A higher percentage of respondents rate patient experience and cost of care as better in a rural setting than an urban setting. A higher percentage of respondents also rate quality of care and clinician experience as worse in a rural setting. A clinician respondent says a benefit of switching from urban/suburban to rural settings is “a change in focus from RVUs to quality of care.”

**Rural Care Is Rated Comparable or Worse Across "Quadruple Aim" Aspects**

How do you regard rural versus urban health care in the following aspects:

- **Patient experience**
  - Much better: 8%
  - Better: 29%
  - The same: 28%
  - Worse: 23%
  - Much worse: 3%
  - Don’t know: 9%

- **Cost of care**
  - Much better: 3%
  - Better: 28%
  - The same: 32%
  - Worse: 20%
  - Much worse: 3%
  - Don’t know: 13%

- **Clinician experience**
  - Much better: 5%
  - Better: 22%
  - The same: 28%
  - Worse: 32%
  - Much worse: 3%
  - Don’t know: 9%

- **Quality of care**
  - Much better: 4%
  - Better: 11%
  - The same: 28%
  - Worse: 46%
  - Much worse: 5%
  - Don’t know: 7%

Base = 730

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The biggest barriers to excellent care vary greatly between urban/suburban and rural settings. In the urban setting, adverse social determinants of health rank highest, whereas distance/time to travel and recruitment/retention of physicians tie for top rank in the rural setting. Respondents agree that primary care physician availability is a big barrier in both settings. Many more respondents from the South (31%) and the West (28%) than the Northeast (17%) indicate a lack of or inadequate health insurance as one of the biggest barriers.

The Barriers to Excellent Care Vary Widely Across Geographic Settings

What are the top two biggest barriers to providing excellent care in urban/suburban settings?

Rural

- Distance/travel time to facilities: 49%
- Recruitment/retention of physicians: 49%
- Primary care physician availability: 25%
- Adverse social determinants of health: 23%
- Lack of or inadequate health insurance: 12%
- Suboptimal use of telehealth: 9%
- Recruitment/retention of nurses: 7%
- Difficulty of patient engagement: 6%
- Higher incidence of chronic diseases (e.g., type 2 diabetes): 5%
- High cost of capital: 2%
- Don’t know: 3%

Urban/suburban

- Adverse social determinants of health: 48%
- Primary care physician availability: 27%
- Lack of or inadequate health insurance: 25%
- High cost of capital: 20%
- Difficulty of patient engagement: 18%
- Recruitment/retention of physicians: 15%
- Higher incidence of chronic diseases (e.g., type 2 diabetes): 13%
- Distance/travel time to facilities: 10%
- Recruitment/retention of nurses: 8%
- Suboptimal use of telehealth: 4%
- Don’t know: 3%

Base = 730 (multiple responses)

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The best approaches to improve care delivery vary widely by setting. In urban areas, nearly half of respondents say community-based services to address social determinants of health are the top tool, model, or policy to improve care delivery. In the rural setting, better access to primary care is considered the best approach. A higher incidence of clinical leaders (54%) than clinicians (42%) indicate community-based services to address social determinants of health as one of the top tools, models, and policies in urban/suburban settings.

### Improved Access, Technology, and Community Services Are the Top Means of Improving Care

What are the top two tools, models, and policies that would most improve care delivery in urban/suburban vs. rural settings?

<table>
<thead>
<tr>
<th>Rural</th>
<th>Urban/suburban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better access to primary care</td>
<td>36%</td>
</tr>
<tr>
<td>Expanded telehealth services</td>
<td>35%</td>
</tr>
<tr>
<td>Better access to specialty care</td>
<td>35%</td>
</tr>
<tr>
<td>Better access to mental and behavioral health services (including substance use disorders)</td>
<td>32%</td>
</tr>
<tr>
<td>Community-based services to address social determinants of health</td>
<td>28%</td>
</tr>
<tr>
<td>Extended hours for outpatient services and non-emergent care</td>
<td>9%</td>
</tr>
<tr>
<td>Expanded home care offerings</td>
<td>7%</td>
</tr>
<tr>
<td>Expanded post-acute care</td>
<td>3%</td>
</tr>
<tr>
<td>Expanded retail health offerings</td>
<td>1%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>4%</td>
</tr>
</tbody>
</table>

Base = 730 (multiple responses)

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society
Almost half of respondents say they are personally involved in the delivery of health care in a rural setting. More Baby Boomers (52%) than members of the Greatest Generation (34%), Generation Xers (49%), and Millennials (48%) are personally involved in rural health care. One executive respondent says, “Our rural community is a large retirement community, so some older physicians will come to our area to scale back their practices as they prepare to retire.” The average number of years of involvement in rural health care delivery is 12, with a median of 8. A higher incidence of clinical leaders (28%) than executives (17%) or clinicians (17%) have spent 11 to 20 years in a rural setting. One clinician respondent says, “It seems we train doctors who want to live in big cities and have access to all the amenities.”

**Insights Council Members Have Substantial Experience Delivering Rural Health Care**

<table>
<thead>
<tr>
<th>Have you personally been involved in the delivery of health care in a rural setting?</th>
<th>For how many years?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 49%</td>
<td><strong>22%</strong> Over 20 years</td>
</tr>
<tr>
<td>No 51%</td>
<td><strong>19%</strong> 11-20 years</td>
</tr>
<tr>
<td></td>
<td><strong>26%</strong> 6-10 years</td>
</tr>
<tr>
<td></td>
<td><strong>33%</strong> Less than 5 years</td>
</tr>
</tbody>
</table>

Approximately one-half of respondents have been personally involved in the delivery of health care in a rural setting. Respondents from the Midwest (16) have significantly higher average years of involvement than the Northeast (12), South (11), and West (11).
Verbatim Comments from Survey Respondents

What would attract a clinician to change from an urban to rural setting?

“Avoidable coverage. Good environment for raising family (schools, access to social activities for family, etc.).”
— Clinician at a small for-profit community hospital in the Northeast

“Escaping the rat race.”
— Chief Medical Officer at a large for-profit organization in the South

“(1) Sadly, $$$ (2) Awareness of the life style—even after learning of the advantages of rural practice, many physicians will prefer the urban but SOME would change to rural practice.”
— Executive at a small nonprofit teaching hospital in the Northeast

“Beauty of surroundings, different pace of work, stronger relationships to patients, ability to pursue livelihood in the mountains.”
— Director of a large for-profit physician organization in the West

“Almost nothing.”
— Chief of service line at a midsized nonprofit teaching hospital in the South

“Better pay, student loan forgiveness. There needs to be a financial incentive.”
— Clinician at a large nonprofit teaching hospital in the Northeast

“Ultimately it will need to be a calling. It will have to provide professional satisfaction while supporting a quality of life that assures sustainability.”
— Executive at a midsized nonprofit hospital in the South

— Clinician at a small for-profit physician organization in the Midwest
Verbatim Comments

What would attract a clinician to change from a rural to urban setting?

“Almost anything.”
— Clinician at a large nonprofit health system in the Midwest

“A lot more money and less aggravation. After coming from an urban to a rural setting, I would never go back to urban/suburban area. Treated well with respect from hospital administration. Urban areas are generally parts of big systems where patients are treated like widgets and there is little to no respect for physician input.”
— Department chair at a small nonprofit hospital in the Northeast

“Access to services and referral sources, larger, more sophisticated healthcare systems with peer and specialist, as well as ancillary service support readily available. Spouse and significant other career opportunities, cultural features in community.”
— Director of a small nonprofit clinic in the West

“Being overwhelmed with call, and being truly the primary care physician (no one else is immediately available). [Spouse] wants to move. You want to earn more money.”
— Clinician at a small nonprofit physician organization in the Midwest

“Better quality of care with better specialty backup for patients, better school options, better social life options/entertainment.”
— Department chair at a midsized nonprofit hospital in the South

“Diversity in the types of diseases and patients that present themselves. Working in a larger group practice that is often the case in urban settings has the potential to provide more dedicated time away from the practice — shared call. Urban settings also offer non-healthcare related activities that are still available to rural clinicians but would require additional travel/time to participate.”
— Director of a large nonprofit hospital in the South

— Clinician at a large nonprofit health plan in the West

“For those that like a rural setting hard to say. They probably do not want the hustle and bustle. Their significant other may feel the same way. They may not want to give up the autonomy they have in a rural setting and have to become part of the group. They would also experience a feeling of not being as important, as they still have a relatively high social/professional status in the rural environment which is less in an urban setting.”

— Department chair at a large nonprofit health system in the West

“The same things that attract physicians any time. Autonomy, mastery, purpose. Adding physicians may not always be the answer. Start with a clean white board and design what is really needed and then look at incentives and motivators.”

— VP at a large for-profit community hospital in the South
Methodology

• The Lessons Learned From and For Rural Health survey was conducted by NEJM Catalyst, powered by the NEJM Catalyst Insights Council.

• The NEJM Catalyst Insights Council is a qualified group of U.S. executives, clinical leaders, and clinicians at organizations directly involved in health care delivery, who bring an expert perspective and set of experiences to the conversation about health care transformation. They are change agents who are both influential and knowledgeable.

• In June 2018, an online survey was sent to the NEJM Catalyst Insights Council.

• A total of 730 completed surveys are included in the analysis. The margin of error for a base of 730 is +/- 3.6% at the 95% confidence interval.

NEJM Catalyst Insights Council

We’d like to acknowledge the NEJM Catalyst Insights Council. Insights Council members participate in monthly surveys with specific topics on health care delivery. These results are published as NEJM Catalyst Insights Reports, such as this one, including summary findings, key takeaways from NEJM Catalyst leaders, expert analysis, and commentary.

It is through the Insights Council’s participation and commitment to the transformation of health care delivery that we are able to provide actionable data that can help move the industry forward. To join your peers in the conversation, visit join.catalyst.nejm.org/insights-council.

NEJM Catalyst wishes to thank Allison Suttle, MD, Chief Medical Officer of Sanford Health, and Philip Polakoff, MD, MPH, MEnvSci, Consulting Professor, Stanford University School of Medicine, for their contributions to this survey.
Respondent Profile

### Audience Segment
- Executive: 29%
- Clinician: 47%
- Clinical Leader: 24%

### Organization Setting
- Physician organization: 16%
- Hospital: 42%
- Other: 8%
- Health system: 42%

### Type of Organization
- For profit: 28%
- Nonprofit: 72%

### Number of Beds (Among hospitals)
- 1 - 50: 8%
- 51 - 199: 18%
- 200 - 499: 33%
- 500 - 999: 26%
- 1000+: 15%

### Number of Sites (Among health systems)
- 1 - 5: 13%
- 6 - 20: 28%
- 21 - 49: 12%
- 50+: 47%

### Number of Physicians (Among physician organizations)
- 1 - 9: 26%
- 10 - 49: 17%
- 50 - 99: 7%
- 100+: 47%

### Net Patient Revenue
- > $5 billion: 10%
- $1 - $4.9 billion: 25%
- $500 - $999.9 million: 8%
- $100 - $499.9 million: 17%
- $10 - $99.9 million: 20%
- < $9.9 million: 20%

### Region
- Northeast: 23%
- Midwest: 23%
- Southeast: 24%
- West: 29%

Base = 730

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About Us

NEJM Catalyst brings health care executives, clinical leaders, and clinicians together to share innovative ideas and practical applications for enhancing the value of health care delivery. From a network of top thought leaders, experts, and advisors, our digital publication, quarterly events, and qualified Insights Council provide real-life examples and actionable solutions to help organizations address urgent challenges affecting health care.