

# Impacting Social Determinants of Health That Affect Your Patients A Toolkit for Hospitals in Rural and High-Deprivation Areas

Social determinants of health (SDOH) are environmental conditions, which can include economic factors, education, healthcare access, built environment, and sociocultural contexts. These SDOH can have a significant impact on health and quality of life, and can contribute to health disparities and inequities. In particular, people in rural and high-deprivation areas are more likely to experience disparities related to SDOH and can experience problems managing chronic disease and have higher readmission and mortality rates. Because of this, hospitals in rural and high-deprivation areas should consider the context of their patients and work on applying solutions to address the SDOH in their patient populations.<sup>2</sup>

## **Topic 1: SDOH Data Collection**

**Rationale:** 80–90 percent of health outcomes can be attributed to SDOH, while only 10–20 percent are attributable to medical care.<sup>3</sup> This statistic is especially applicable in rural and high-deprivation areas where patients experience a number of social factors outside of the hospitals' control which impact the patients' health.<sup>4</sup> Because of this, hospitals should consider implementing methods to identify and account for patient SDOH, and the first step of this is collecting data on patient SDOH.

| Strategies  | Discussion  | Tools and Resources  |
|---|---|--|
| 1. Use the Area Deprivation Index (ADI) to understand how SDOH might be affecting your patient population and quality measures. | ADI is a measure of neighborhood deprivation at the census block level, and research has shown patients with higher deprivation are more likely to experience readmission and mortality. Using ADI can be a simpler way to identify health disparities in a patient population, as it integrates multiple social determinants into one deprivation measure, which can be looked at on the census block group level. | <ul> <li>ADI Home and Mapping Tool—<a href="https://www.neighborhoodatlas.medicine.wisc.edu/">https://www.neighborhoodatlas.medicine.wisc.edu/</a></li> <li>Utilizing ADI for Risk Prediction—         <a href="https://www.ahajournals.org/doi/">https://www.ahajournals.org/doi/</a> <a href="https://www.ahajournals.org/doi/">https://www.ahajournals.org/doi/</a> <a href="https://www.ahajournals.org/doi/">10.1161/JAHA.120.020466</a></li> </ul> |
| <ol> <li>Use a SDOH data<br/>collection tool to<br/>identify patient-level<br/>social risk factors.</li> </ol>                  | SDOH contribute significantly to patient outcomes, so collecting these data allows for understanding and addressing the individual social risk factors patients may have.   | <ul> <li>PRAPARE* SDOH Data Collection Tool—         http://www.nachc.org/research-and-data/prapare/     </li> <li>CMS** SDOH Data Collection Tool—https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf</li> <li>SDOH Data Collection Tool Comparison Resource—https://sirenetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison</li> </ul>  |
| <ol><li>Document SDOH</li><li>Z Codes in the medical record.</li></ol>  | Documenting Z Codes allows for better documentation of patient social risk factors, which can improve continuity of care. In addition, improving documentation of Z Codes allows for increased billing of these codes.  | CMS Z Code Infographic— <a href="https://www.cms.gov/files/document/zcodes-infographic.pdf">https://www.cms.gov/files/document/zcodes-infographic.pdf</a>  |

\*PRAPARE = Protocol for Responding to and Assessing Patients' Assets, Risks, and Experience. \*\*CMS = Centers for Medicare & Medicaid Services



# **Topic 2: Primary Care and Behavioral Health Access**

**Rationale:** Approximately 82 million people in the United States live in primary care Health Professional Shortage Areas (HPSAs), indicating these patients live in an area with poor access to primary care health services. Disparities to primary care access can often be attributed to lack of insurance, disabilities, geographic and transportation barriers, and low number of primary care providers in an area. Primary care is critical for prevention of readmissions, chronic disease management, preventive care, and access to other health services, so hospitals in areas with poor access to primary care should consider alternative methods for their patients to access the primary care they need.

| Strategies  | Discussion   | Tools and Resources  |
|---|--|--|
| 1. Use nurse practitioners and physician assistants to provide primary care to underserved populations. | Nurse practitioners and physician assistants have been shown to provide high-quality primary care at lower cost.  Nurse practitioners are more likely to practice in rural communities, increasing access to primary care in these areas.  Understand scope of practice laws in your state to know how much these practitioners can do in your area. | <ul> <li>American Association of Nurse Practitioners (AANP) Nurse Practitioners in Primary Care—<a href="https://www.aanp.org/advocacy/advocacy-resource/position-statements/nurse-practitioners-in-primary-care">https://www.aanp.org/advocacy/advocacy-resource/position-statements/nurse-practitioners-in-primary-care</a> </li> <li>Primary Care Nurse Practitioners and Physicians in Low-Income and Rural Areas, 2010–2016—<a href="https://jamanetwork.com/journals/jama/article-abstract/2720014">https://jamanetwork.com/journals/jama/article-abstract/2720014</a> </li> <li>American Hospital Association (AHA) 5 Strategies Rural Hospitals are Using to Bolster Their Workforce—<a href="https://www.aha.org/news/insights-and-analysis/2019-03-05-5-strategies-rural-hospitals-are-using-bolster-their">https://www.aba.org/news/insights-and-analysis/2019-03-05-5-strategies-rural-hospitals-are-using-bolster-their</a> </li> <li>American Association of Medical Assistants (AAMA) State Scope of Practice Laws Resource—<a href="https://www.aama-ntl.org/employers/state-scope-of-practice-laws">https://www.aama-ntl.org/employers/state-scope-of-practice-laws</a> </li> <li>AANP State Practice Environment Resource—</li> <li><a href="https://www.aanp.org/advocacy/state/state-practice-environment">https://www.aanp.org/advocacy/state/state-practice-environment</a> </li> <li>American Academy of Physician Assistants (AAPA) Scope of Practice Resource—</li> <li><a href="https://www.aana-assn.org/download/61319/">https://www.aana-assn.org/download/61319/</a> </li> <li>American Medical Association (AMA) PA Scope of Practice Resource—</li> <li><a href="https://www.aana-assn.org/sites/ama-assn.org/files/corp/media-browser/public/arc-public/state-law-physician-assistant-scope-practice.pdf">https://www.aana-assn.org/sites/ama-assn.org/files/corp/media-browser/public/arc-public/state-law-physician-assistant-scope-practice.pdf</a></li> </ul> |
| 2. Assist patients with scheduling their follow-up visits prior to discharge.                           | Scheduling follow-up appointments with patients prior to discharge can improve the likelihood they will complete their follow-up visits, which can result in lower readmission rates.  | <ul> <li>Agency for Healthcare Research and Quality (AHRQ) Discharge Planning Guide—         https://psnet.ahrq.gov/primer/discharge-planning-and-transitions-care     </li> <li>Obtaining a Follow-Up Appointment Before Discharge Protects Against         Readmission for Patients With Acute Coronary Syndrome and Heart Failure: A             Quality Improvement Project—</li></ul>   |



| Strategies  | Discussion  | Tools and Resources  |
|---|---|--|
| 3. Use telehealth for patients unable to set up their own timely follow-up visits.  | See additional strategies below at topic #6.  | <ul> <li>AHA Market Insights: Telehealth Strategy—         <a effectivehealthcare.ahrq.gov="" href="https://www.aha.org/center/emerging-issues/market-insights/telehealth?utm_source=newsletter&amp;utm_medium=email&amp;utm_content=02262019-ms-innovation&amp;utm_campaign=aha-innovation-center&lt;/a&gt;     &lt;/li&gt;     &lt;li&gt;Improving Rural Health Through Telehealth-Guided Provider-to-Provider Communication—&lt;a href=" https:="" products="" protocol"="" rural-telehealth="">https://effectivehealthcare.ahrq.gov/products/rural-telehealth/protocol</a></li> </ul>  |
| <ol> <li>Consider partnering<br/>with clinics and<br/>federally qualified<br/>health centers (FQHCs)<br/>for primary care.</li> </ol>         | When access to primary care is difficult in an area, it can be helpful to look for alternative solutions, including partnering with local clinics and FQHCs to provide primary care services.  Referring patients without insurance to free or sliding scale clinics can reduce disparities in this population as well. | <ul> <li>AHA Ensuring Access Case Studies—<a href="https://www.aha.org/system/files/2018-02/ensuring-access-case-study-comp-rural.pdf">https://www.files/2018-02/ensuring-access-case-study-comp-rural.pdf</a></li> <li>Unusual Hospital/FQHC Partnerships Address Payment And Access Issues—<a href="https://www.fqhc.org/blog/2017/4/27/unusual-hospital-fqhc-partnerships-address-payment-and-access-issues">https://www.fqhc.org/blog/2017/4/27/unusual-hospital-fqhc-partnerships-address-payment-and-access-issues</a></li> </ul>  |
| 5. Promote an integrated primary care and behavioral health services model by discharging to an FQHC or patient-centered medical home (PCMH). | Integration of care models can allow for better continuity of care and mitigate access to care issues patients may experience.  | <ul> <li>AHA Integrating Physical and Behavioral Health—<a href="https://www.aha.org/2017-01-03-integrating-physical-and-behavioral-health">https://www.aha.org/2017-01-03-integrating-physical-and-behavioral-health</a></li> <li>Substance Abuse and Mental Health Services Admin. (SAMSA) Health Resources and Services Admin. (HRSA) Center for Integrated Health Solutions (CIHS)—<a href="https://www.samhsa.gov/integrated-health-solutions">https://www.samhsa.gov/integrated-health-solutions</a></li> <li>Rural Health Information (RHI) Hub Primary Care Behavioral Health Model—</li> <li><a href="https://www.ruralhealthinfo.org/toolkits/services-integration/2/primary-care-behavioral-health">https://www.ruralhealthinfo.org/toolkits/services-integration/2/primary-care-behavioral-health</a></li> <li>National Committee for Quality Assurance (NCQA) PCMH—</li> <li><a href="https://www.ncqa.org/programs/health-care-providers-practices/patient-centered-medical-home-pcmh/">https://www.ncqa.org/programs/health-care-providers-practices/patient-centered-medical-home-pcmh/</a></li> </ul> |



#### **Strategies**

## Consider promoting or partnering to create paramedicine program in your area.

#### Discussion

Paramedicine programs expand the role of emergency medical technicians (EMTs) and paramedics and get them into the community to provide primary and preventive care services to populations that might not otherwise be able to receive these services.

7. Consider developing a hospital-affiliated clinic, such as a free clinic, FQHC look-a-like, or a follow-up clinic.

A hospital-affiliated clinic offers the opportunity to expand primary care access to underserved patients and increases their likelihood of receiving preventive care. When a clinic is affiliated with a hospital, it allows for synchronization of the electronic health record (EHR) across the two sites, promoting care coordination and potentially allowing for sharing of SDOH data collected at either the hospital or the clinic.

#### **Tools and Resources**

- Rural Community Paramedicine Toolkit https://www.ruralhealthinfo.org/toolkits/community-paramedicine
- RHI Hub Community Paramedicine Resources https://www.ruralhealthinfo.org/topics/community-paramedicine
- National Assn. of EMTs (NAEMT) Community Paramedicine Course Series https://www.naemt.org/education/community-paramedicine-course-series
- Regional Emergency Medical Services Authority (REMSA) Health Community Paramedicine Resources—<a href="https://www.remsahealth.com/community-health/community-paramedicine/">https://www.remsahealth.com/community-health/community-paramedicine/</a>
- Buckeye Arizona Community Paramedicine Program—
   <a href="https://www.buckeyeaz.gov/residents/fire-medical-rescue-department/fire-rescue-programs/community-paramedicine-program">https://www.buckeyeaz.gov/residents/fire-medical-rescue-department/fire-rescue-programs/community-paramedicine-program</a>
- Self Regional Full Circle Care Clinic https://www.selfregional.org/providers/location/full-circle-care/
- HRSA FQHC Look-Alike Information—<a href="https://www.hrsa.gov/opa/eligibility-and-registration/health-centers/fghc-look-alikes/index.html">https://www.hrsa.gov/opa/eligibility-and-registration/health-centers/fghc-look-alikes/index.html</a>
- Free Clinics—<a href="https://www.freeclinics.com/">https://www.freeclinics.com/</a>
- AMA Free Medical Clinic Handbook—<a href="https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/ama-foundation/free-medical-clinic-handbook.pdf">https://www.ama-assn.org/sites/ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/ama-foundation/free-medical-clinic-handbook.pdf</a>
- AMA Free Medical Clinic Legal Guide—<a href="https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/ama-foundation/legal-operational-guide-free-medical-clinics.pdf">https://www.ama-assn.org/sites/ama-assn.org/sites/ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/ama-foundation/legal-operational-guide-free-medical-clinics.pdf</a>



# **Topic 3: Medication Management**

**Rationale:** Patients in rural and high-deprivation areas may experience multiple challenges around medication management, including difficult accessing medications and understanding medication instructions due to low health literacy. Hospitals in these areas can also experience challenges related to pharmacist staffing, which can lead to poor patient outcomes and more adverse drug events. Hospitals can help mitigate these issues by performing medication reconciliation and education with their patients prior to discharge, as well as using health information technology and telepharmacy or mail-order pharmacy services to improve access to pharmacy services.<sup>7, 8</sup>

| Strategies  | Discussion   | Tools and Resources   |
|---|--|---|
| 1. Perform medication reconciliation and assist patients with medication management in the hospital prior to discharge. | Contact the patients' pharmacy and primary care provider to understand what medications they are on. This discussion also offers multiple opportunities to identify any issues with obtaining certain medications.                               | <ul> <li>Institute for Healthcare Improvement (IHI) Medication Reconciliation to Prevent Adverse Drug Events Resource—<a href="http://www.ihi.org/Topics/ADEsMedicationReconciliation/Pages/default.aspx">http://www.ihi.org/Topics/ADEsMedicationReconciliation/Pages/default.aspx</a></li> <li>AHRQ Toolkit to Improve Medication Reconciliation—         <a href="https://www.ahrq.gov/patient-safety/resources/match/index.html">https://www.ahrq.gov/patient-safety/resources/match/index.html</a></li> <li>Hospital discharge and readmission—         <a href="https://www.uptodate.com/contents/hospital-discharge-and-readmission">https://www.uptodate.com/contents/hospital-discharge-and-readmission</a></li> <li>AHRQ Medication Management Strategy: Intervention—<a href="https://www.ahrq.gov/patient-safety/reports/engage/interventions/medmanage.html">https://www.ahrq.gov/patient-safety/reports/engage/interventions/medmanage.html</a></li> <li>American Society of Health System Pharmacists-American Pharmacists Assoc.         <a href="https://www.ashp.org/-/media/assets/pharmacy-practice/resource-centers/quality-improvement/learn-about-quality-improvement-medication-management-care-transitions.ashx">https://www.ashp.org/-/media/assets/pharmacy-practice/resource-centers/quality-improvement/learn-about-quality-improvement-medication-management-care-transitions.ashx</a></li> </ul> |
| <ol><li>Partner with local FQHCs<br/>to utilize 340B pricing for<br/>outpatient prescribing.</li></ol>                  | The 340B program allows qualifying health providers that serve rural and low-income communities to purchase outpatient pharmaceuticals at discounted prices, increasing access to these drugs in rural and high deprivation areas.               | <ul> <li>National Association of Community Health Centers (NACHC) 340B Program         Description—<a href="https://www.nachc.org/focus-areas/policy-matters/340b/">https://www.nachc.org/focus-areas/policy-matters/340b/</a></li> <li>NACHC 340B Fact Sheet—<a href="http://www.nachc.org/wp-content/uploads/2016/02/340B">http://www.nachc.org/wp-content/uploads/2016/02/340B</a> FS 2014.pdf</li> <li>RHI Hub 340B Drug Pricing Program—<a href="https://www.ruralhealthinfo.org/funding/369">https://www.ruralhealthinfo.org/funding/369</a></li> <li>AHA 340B Fact Sheet—<a href="https://www.aha.org/fact-sheets/2020-01-28-fact-sheet-340b-drug-pricing-program">https://www.aha.org/fact-sheets/2020-01-28-fact-sheet-340b-drug-pricing-program</a></li> </ul>  |
| 3. Use the meds-to-beds program, potentially in partnership with a local pharmacy.                                      | The meds-to-beds program improves patient engagement and medication adherence. For patients with low health literacy or difficulty accessing medications, this strategy could be effective in mitigating those issues and reducing readmissions. | <ul> <li>Pharmacy Today: Meds-to-Beds program puts patients at ease with new meds—         https://www.pharmacytoday.org/article/S1042-0991(19)31153-3/fulltext     </li> <li>University of Iowa Meds-to-beds program—https://uihc.org/meds-beds-program</li> </ul>   |



| Strategies   | Discussion   | Tools and Resources  |
|--|--|--|
| 4. For rural or critical access hospitals (CAHs), consider using health information technology solutions to access a remote pharmacist for input when a local pharmacist is not available. | Health information technology solutions can allow for pharmacist input on prescription drug decision-making, even when there is no pharmacist available at the facility.   | <ul> <li>Health Information Technology-Based Regional Medication Management<br/>Pharmacy System (Minnesota)—<a href="https://digital.ahrq.gov/ahrq-funded-projects/hit-based-regional-medication-management-pharmacy-system">https://digital.ahrq.gov/ahrq-funded-projects/hit-based-regional-medication-management-pharmacy-system</a></li> </ul>   |
| 5. Identify best practices for patient prescribing, depending on availability of resources in area.  | If patient lives in a rural area, access to pharmacies may be limited in their region. Consider using alternative strategies, such as telepharmacy or mail-order pharmacy services.  | <ul> <li>The Commonwealth Fund—<a href="https://www.commonwealthfund.org/publications/2019/feb/practicing-medicine-rural-america-listening-primary-care-physicians">https://emacy-and-prescriptions</a></li> <li>RHI Hub Rural Pharmacy and Prescription Drugs Guide—<a href="https://www.ruralhealthinfo.org/topics/pharmacy-and-prescription-drugs">https://www.ruralhealthinfo.org/topics/pharmacy-and-prescription-drugs</a></li> <li>Centers for Disease Control and Prevention (CDC) Telepharmacy and Quality of Medication Use in Rural Areas, 2013–2019—</li> <li><a href="https://www.cdc.gov/pcd/issues/2020/20_0012.htm">https://www.cdc.gov/pcd/issues/2020/20_0012.htm</a></li> </ul>   |
| <ol><li>Provide patients with medication zone tools.</li></ol>   | Medication zone tools are an easy to understand way for patients to keep track of medication side effects post-discharge.  | <ul> <li>HSAG Medication Zone Tool—         https://www.hsag.com/globalassets/hqic/zonetool_medication_hqic.pdf     </li> <li>HSAG Blood Thinner Zone Tool—         https://www.hsag.com/globalassets/hqic/zonetool_bloodthinner_hqic.pdf     </li> </ul>  |
| 7. Develop strategies to address opioid use disorder in your patient population.   | Rural areas have been shown to have higher rates of opioid use, but these areas do not always have the resources necessary to effectively treat these patients. Consider strategies such as naloxone co-prescribing, medication-assisted treatment (MAT) referrals, and emergency department (ED) bridge programs. Telehealth solutions for these strategies could also provide opportunities for patients living in areas with limited access to these resources. | <ul> <li>University of North Carolina Opioid Project ECHO (Extension for Community Healthcare Outcomes)—<a href="https://echo.unc.edu/">https://echo.unc.edu/</a></li> <li>RHI Hub What's MAT Got to Do with It? Medication-Assisted Treatment for Opioid Use Disorder in Rural America—<a href="https://www.ruralhealthinfo.org/rural-monitor/medication-assisted-treatment/">https://www.ruralhealthinfo.org/rural-monitor/medication-assisted-treatment/</a></li> <li>RHI Hub Vermont Hub-and-Spoke Model of Care for Opioid Use Disorder—<a href="https://www.ruralhealthinfo.org/project-examples/1015">https://www.ruralhealthinfo.org/project-examples/1015</a></li> <li>AHRQ Implementing Medication-Assisted Treatment for Opioid Use Disorder in Rural Primary Care: Environmental Scan Vol—</li> <li><a href="https://integrationacademy.ahrq.gov/sites/default/files/2020-06/mat for oud environmental scan volume 1 1.pdf">https://integrationacademy.ahrq.gov/sites/default/files/2020-06/mat for oud environmental scan volume 1 1.pdf</a></li> <li>California Bridge Blueprint for Hospital Opioid Use Disorder Treatment—</li> <li><a href="https://cabridge.org/resource/blueprint-for-hospital-opioid-use-disorder-treatment/">https://cabridge.org/resource/blueprint-for-hospital-opioid-use-disorder-treatment/</a></li> </ul> |



## **Topic 4: Discharge Planning**

Rationale: Discharge planning is a critical process to prevent readmissions and adverse outcomes in patients leaving the hospital, and this process can be even more challenging for hospitals with patients in rural and high-deprivation areas. These patients may be less likely to follow discharge instructions due to lack of access in their community, and may have difficulty understanding and following discharge instructions due to low health literacy. However, studies show that individualized discharge planning that takes into account individual patient needs can lead to lower readmission rates. 10

| Strategies  | Discussion  | Tools and Resources  |
|---|---|--|
| 1. Understand the scope of your hospital's service area and use a community health needs assessment to identify resources available to your patients. Keep an up-to-date list of community resources related to food, physical activity, transportation, and housing. | Hospitals in rural and high-deprivation areas may not be aware of all of the services and resources available to their patients at discharge, so keeping track of these community assets. Understanding the patient population can assist you in setting up individualized discharge plans that meet the needs of each patient. | <ul> <li>University of Montana—Providing patient-centered enhanced discharge planning and rural transition support: Building a rural transitions network between regional referral and critical access hospitals—         <a href="https://scholarworks.umt.edu/cgi/viewcontent.cgi?">https://scholarworks.umt.edu/cgi/viewcontent.cgi?</a></li></ul>  |
| <ol> <li>Ensure that initial follow-up<br/>visits with discharged<br/>patients occurs within 72<br/>hours of discharge.</li> </ol>  | Scheduling an initial follow-up visit within 72 hours allows for resource planning, medication reconciliation, and other necessary follow-up. It also can decrease readmissions and unnecessary ED utilization.   | <ul> <li>American College of Physicians: Care Transitions Management Codes—         https://www.acponline.org/practice-resources/business-resources/coding/what-practices-need-to-know-about-transition-care-management-codes     </li> <li>Western Journal of Emergency Medicine: Rapid Primary Care Follow-up from the ED to Reduce Avoidable Hospital Admissions—         https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5576623/     </li> </ul> |



| Strategies   | Discussion  | Tools and Resources   |
|--|---|---|
| 3. Ensure patients have resources in their area to help them follow their discharge plans and refer them to recommended community resources. | Refer patients to community resources identified in community health needs assessments.   | <ul> <li>HSAG Community Interventions: Hospital—<a href="https://www.hsag.com/globalassets/hqic/hqic cmtyinterventid hospital.pdf">https://www.hsag.com/globalassets/hqic/hqic cmtyinterventid hospital.pdf</a></li> <li>Referring Patients and Family Caregivers to Community-Based Services: A Provider's Guide—<a href="https://www.nextstepincare.org/uploads/File/Guides/Provider/Community_Based_Services.pdf">https://www.nextstepincare.org/uploads/File/Guides/Provider/Community_Based_Services.pdf</a></li> <li>Implementing Community Resource Referral Technology: Facilitators And Barriers Described By Early Adopters—</li> <li><a href="https://www.healthaffairs.org/doi/10.1377/hlthaff.2019.01588">https://www.healthaffairs.org/doi/10.1377/hlthaff.2019.01588</a></li> <li>NCOA How to Build Referral Systems for Community-Integrated Health Networks—<a href="https://www.ncoa.org/article/how-to-build-referral-systems-for-community-integrated-health-networks">https://www.ncoa.org/article/how-to-build-referral-systems-for-community-integrated-health-networks</a></li> </ul> |
| <ol> <li>Provide patients with<br/>condition-specific zone<br/>tools.</li> </ol>   | Zone tools assist patients in self-<br>management of chronic diseases after<br>discharge and are appropriate and<br>understandable for patients with different<br>levels of education.  | HSAG Patient Zone Tools— <a href="https://www.hsag.com/hqic/tools-resources/zone-tools/">https://www.hsag.com/hqic/tools-resources/zone-tools/</a>  |
| 5. Use the teach-back method to ensure patient comprehension of discharge instructions.  | Patients in rural/resource-deprived areas may have lower education levels and lower health literacy, so ensuring they feel confident in their understanding of discharge instructions is important.   | <ul> <li>HSAG Teach-Back Resources—<a href="https://www.hsag.com/en/medicare-providers/care-coordination/teach-back/">https://care-coordination/teach-back/</a></li> <li>HSAG Webinar Slides: Reducing Readmissions with Patient and Family Engagement Using Teach-Back—</li> <li><a href="https://www.hsag.com/globalassets/hqic/hsaghqicteachbacksession.pdf">https://www.hsag.com/globalassets/hqic/hsaghqictbstartersentences.pdf</a></li> <li>HSAG Teach Back Starter Sentences Resource—</li> <li><a href="https://www.hsag.com/globalassets/hqic/hsaghqictbstartersentences.pdf">https://www.hsag.com/globalassets/hqic/hsaghqictbstartersentences.pdf</a></li> </ul>  |
| 6. Consider strategies to address deprivation when referring patients to resources for chronic disease management.                           | Patients in rural and high-deprivation areas may be limited in their access to resources—including healthy foods, exercise opportunities, and support groups—so consider alternative solutions to expand patient access to necessary resources to manage their disease. | <ul> <li>Telemedicine for Tobacco Cessation and Prevention to Combat COVID-19         Morbidity and Mortality in Rural Areas—         https://www.ruralhealthinfo.org/resources/16155     </li> <li>AHA Hospitals in Pursuit of Excellence (HPOE) SDOH Series: Food Insecurity and the Role of Hospitals—<a href="http://www.hpoe.org/Reports-HPOE/2017/determinants-health-food-insecurity-role-of-hospitals.pdf">http://www.hpoe.org/Reports-HPOE/2017/determinants-health-food-insecurity-role-of-hospitals.pdf</a> </li> <li>RHI Hub Rural Obesity Toolkit—         <a href="https://www.ruralhealthinfo.org/toolkits/obesity/5/health-care-providers/how-can-rural-health-care-providers-address-obesity">https://www.ruralhealthinfo.org/toolkits/obesity/5/health-care-providers-address-obesity</a></li> </ul>  |



| Strategies  | Discussion  | Tools and Resources   |
|---|---|---|
| 7. Engage patients and families in the discharge planning process.  | Patient and family engagement invites patients and their families to be active partners in their care and can assist with successful discharge and transitions of care.   | <ul> <li>HSAG PFE Checklist—<a href="https://www.hsag.com/globalassets/hqic/pfemeasureschecklist_v1_508.pdf">https://www.https://pfemeasureschecklist_v1_508.pdf</a></li> <li>AHRQ Patient and Family Discharge Planning Checklist—<a 11376-discharge-planning-checklist.pdf"="" href="https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/strategy4/Strat4_Tool_1_IDEAL_chklst_508.pdf&lt;/a&gt;&lt;/li&gt;     &lt;li&gt;CMS Discharge Planning Checklist—          &lt;a href=" https:="" pdf="" pubs="" www.medicare.gov="">https://www.medicare.gov/Pubs/pdf/11376-discharge-planning-checklist.pdf</a></li> <li>AHRQ PFE Communication Strategies—<a href="https://www.ahrq.gov/patient-safety/patients-families/engagingfamilies/strategy2/index.html">https://www.ahrq.gov/patient-safety/patients-families/engagingfamilies/strategy2/index.html</a></li> </ul> |
| <ol> <li>Utilize a social needs<br/>screening tool to identify<br/>SDOH impacting patients<br/>prior to discharge.</li> </ol> | SDOH contribute significantly to patient outcomes, so collecting these data allows for understanding and addressing the individual social risk factors patients may have. | <ul> <li>PRAPARE SDOH Data Collection Tool—<a href="http://www.nachc.org/research-and-data/prapare/">http://www.nachc.org/research-and-data/prapare/</a></li> <li>CMS SDOH Data Collection Tool—         <a href="https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf">https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf</a></li> <li>SDOH Data Collection Tool Comparison Resource—<a href="https://sirenetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison">https://sirenetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison</a></li> </ul>  |



# **Topic 5: Transportation**

Rationale: Transportation is one of the biggest barriers to access to care in rural and high-deprivation areas, as patients may experience difficulties related to poor and unreliable public transportation options, a low number of vehicles per household, and long driving distances to access resources. This lack of access can make it difficult for patients to get to follow-up appointments or access resources necessary for proper recovery, making it more likely that patients will be readmitted. Because of this, hospitals should consider the impacts of transportation on their patients and assist patients with mitigating these factors as part of the discharge planning process. <sup>11</sup>

| Strategies  | Discussion   | Tools and Resources  |
|---|--|--|
| 1. Understand impacts of transportation systems on health in your area.   | Depending on your area, transportation could be impacting your patients in a variety of ways, so it is important to understand those challenges and how you can help mitigate their impact on patient outcomes.    | <ul> <li>US Dept. of Transportation: Transportation and Health Tool—         https://www.transportation.gov/transportation-health-tool     </li> <li>CDC Transportation Health Impact Assessment Toolkit—         https://www.cdc.gov/healthyplaces/transportation/hia_toolkit.htm     </li> <li>HPOE SDOH Series: Transportation and the Role of Hospitals—http://www.hpoe.org/Reports-HPOE/2017/sdoh-transportation-role-of-hospitals.pdf</li> <li>University of South Florida Center for Urban Transportation Research: Improving         Transportation Access to Health Care Services—https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1009&amp;context=cutr_nctr     </li> <li>RHI Hub Rural Transportation Toolkit—https://www.ruralhealthinfo.org/toolkits/transportation</li> </ul> |
| 2. Provide a local transit consultation prior to discharge, such as vouchers for public transportation.                                   | Based on your assessment of transportation impacts, assist patients in identifying how these impacts could affect them.  | <ul> <li>HPOE SDOH Series: Transportation and the Role of Hospitals—<a href="http://www.hpoe.org/Reports-HPOE/2017/sdoh-transportation-role-of-hospitals.pdf">http://www.hpoe.org/Reports-HPOE/2017/sdoh-transportation-role-of-hospitals.pdf</a></li> <li>RHI Hub Rural Transportation Toolkit—<a href="https://www.ruralhealthinfo.org/toolkits/transportation">https://www.ruralhealthinfo.org/toolkits/transportation</a></li> <li>Metrohealth and Greater Cleveland Regional Transit Authority (RTA) transit partnership—</li> <li><a href="https://news.metrohealth.org/get-ready-to-climb-aboard-the-metrohealth-line/">https://news.metrohealth.org/get-ready-to-climb-aboard-the-metrohealth-line/</a></li> </ul>   |
| 3. Facilitate ride-share services for patients.   | Ride-share services can assist patients who are unable to drive or have limited public transit in their area to make it to their follow-up appointments.   | <ul> <li>Nonemergency Medical Transportation: Delivering Care in the Era of Lyft and Uber—         <a href="https://jamanetwork.com/journals/jama/article-abstract/2547765">https://jamanetwork.com/journals/jama/article-abstract/2547765</a></li> <li>CareMore Health System's Collaboration With Lyft Improves Access to Care, Reduces Transportation Cost and Wait Times—<a href="https://www.businesswire.com/news/home/20160906006087/">https://www.businesswire.com/news/home/20160906006087/</a></li> </ul>  |
| <ol> <li>Assist patients in<br/>exploring medical<br/>transportation<br/>services available<br/>to them through<br/>insurance.</li> </ol> | There are multiple non-<br>emergent medical transport<br>services available through<br>different insurances, which<br>could provide patients with the<br>necessary transportation to care<br>and follow-up visits. | <ul> <li>Medicaid Benefits: Non-Emergency Medical Transportation Services—<a href="https://www.kff.org/medicaid/state-indicator/non-emergency-medical-transportation-services/">https://www.cms.gov/medicator/non-emergency-medical-transportation-services/</a></li> <li>CMS, Medicaid Non-Emergency Medical Transportation Booklet for Providers—         <a href="https://www.cms.gov/medicare-medicaid-coordination/fraud-prevention/medicaid-integrity-education/downloads/nemt-booklet.pdf">https://www.ridehealth.com/medicaid-integrity-education/downloads/nemt-booklet.pdf</a></li> <li>Ride Health Patient Transportation System—<a href="https://www.ridehealth.com/">https://www.ridehealth.com/</a></li> </ul>   |



# **Topic 6: Telehealth**

**Rationale:** Telehealth solutions can improve access to care in rural and high-deprivation areas by allowing patients access to providers who do not necessarily live in their geographic area. This can impact a number of determinants by mitigating issues with distance and transportation, as well as shortages of providers in the area. However, rural and high-deprivation areas can bring with them their own challenges related to telehealth, such as poor access to Internet and low health literacy, so these factors should be considered when developing telehealth solutions for these regions.<sup>12</sup>

| Strategies   | Discussion   | Tools and Resources   |
|--|--|---|
| 1. Consider implementing telehealth solutions for primary care follow-up appointments, when appropriate.   | For patients who have poor access to transportation or who live in an area with low access to primary care but have access to Internet and/or cell phone service, telehealth follow-ups can expand access to primary care. | AHA Telehealth Strategy Page— <a href="https://www.aha.org/center/emerging-issues/market-insights/telehealth?utm_source=newsletter&amp;utm_medium=email&amp;utm_content=02262019-ms-innovation&amp;utm_campaign=aha-innovation-center">https://www.aha.org/center/emerging-issues/market-insights/telehealth?utm_source=newsletter&amp;utm_medium=email&amp;utm_content=02262019-ms-innovation&amp;utm_campaign=aha-innovation-center</a> |
| <ol> <li>Develop solutions, such as<br/>provider-to-provider<br/>telehealth, to improve<br/>quality of care and access to<br/>specialty care.</li> </ol>       | Telehealth can allow for improved quality of care and access to care by providing opportunities for provider-to-provider consultation and specialty referrals which would otherwise not be possible.                       | <ul> <li>AHRQ Rural Telehealth-Guided Provider-to-Provider Communication—<br/>https://effectivehealthcare.ahrq.gov/products/rural-telehealth/protocol</li> <li>RHI Hub Telehealth Models for Increasing Access to Specialty Care—<br/>https://www.ruralhealthinfo.org/toolkits/telehealth/2/care-<br/>delivery/specialty-care</li> </ul>  |
| 3. Assess patient access to Internet services when considering telehealth interventions.   | Some rural areas have poor broadband coverage, and some patients are uncomfortable using technology. These patients may not be ideal candidates for telehealth.  | <ul> <li>AHRQ Poverty and Access to Internet, by County—         https://www.ahrq.gov/sdoh/data-analytics/sdoh-tech-poverty.html     </li> <li>Technology Literacy as a Barrier to Telehealth During COVID-19—         https://www.liebertpub.com/doi/full/10.1089/tmj.2020.0155     </li> </ul>  |
| <ol> <li>Use a regional telehealth<br/>resource center to learn<br/>more about how to best<br/>implement telehealth<br/>solutions at your facility.</li> </ol> | Telehealth resource centers are available to provide support, education, and resources to providers interested in offering telehealth care.  | <ul> <li>HRSA Telehealth Resource Centers—         https://www.hrsa.gov/library/telehealth-resource-centers     </li> <li>Telehealth Resource Centers—https://telehealthresourcecenter.org/</li> </ul>  |



### **References**

- 1 Healthy People 2030. Social Determinants of Health. https://health.gov/healthypeople/objectives-and-data/social-determinants-health
- Jonnalagadda P, Swoboda CM, Fareed N. Using area-level measures of social determinants of health to deliver improved and effective health care. Journal of Hospital Management and Health Policy. Vol 4, Dec 2020. <a href="https://jhmhp.amegroups.com/article/view/6527/html">https://jhmhp.amegroups.com/article/view/6527/html</a>
- Magnan S. Social Determinants of Health 101 for Health Care: Five Plus Five. National Academy of Medicine. Oct. 9, 2017. <a href="https://nam.edu/social-determinants-of-health-101-for-health-care-five-plus-
- 4 Hood CM, Gennuso KP, Swain GR, Catlin BB. County Health Rankings: Relationships Between Determinant Factors and Health Outcomes. American Journal of Preventive Medicine. Oct. 30, 2015. https://doi.org/10.1016/j.amepre.2015.08.024
- 5 Health Resources & Services Administration. Health Professional Shortage Areas. https://data.hrsa.gov/topics/health-workforce/shortage-areas
- 6 Healthy People 2030. Access to Primary Care. <a href="https://health.gov/healthypeople/objectives-and-data/social-determinants-health/literature-summaries/access-primary-care">https://health.gov/healthypeople/objectives-and-data/social-determinants-health/literature-summaries/access-primary-care</a>
- 7 Rural Health Information (RHI) Hub. Rural Pharmacy and Prescription Drugs. Oct. 27, 2020. https://www.ruralhealthinfo.org/topics/pharmacy-and-prescription-drugs
- Agency for Healthcare Research and Quality (AHRQ). Digital Healthcare Research. HIT-based regional Medication Management Pharmacy System, Minnesota. https://digital.ahrq.gov/ahrq-funded-projects/hit-based-regional-medication-management-pharmacy-system
- 9 Seekins T. Providing patient-centered enhanced discharge planning and rural transition support: Building a rural transitions network between regional referral and critical access hospitals. Health and Wellness, Rural Institute for Inclusive Communities. University of Montana.

  https://scholarworks.umt.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1044&context=ruralinst\_health\_wellness
- 10 Patient-Centered Outcomes and Research Institute. Helping Patients Living in Rural Areas Transition from Hospital to Home—the ROADMAP Study. <a href="https://www.pcori.org/research-results/2013/helping-patients-living-rural-areas-transition-hospital-home-roadmap-study">https://www.pcori.org/research-results/2013/helping-patients-living-rural-areas-transition-hospital-home-roadmap-study</a>
- 11 U.S. Department of Transportation. Transportation and Health Tool. <a href="https://www.transportation.gov/transportation-health-tool">https://www.transportation.gov/transportation-health-tool</a>
- 12 RHI Hub. Telehealth Use in Rural Areas. May 21, 2019. https://www.ruralhealthinfo.org/toolkits/telehealth/1/use-in-rural

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