

# 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 that can include economic factors, education, healthcare access, environment, and sociocultural contexts. SDOH can have a significant impact on health and quality of life.<sup>i</sup> In particular, people in rural and high-deprivation areas are more likely to experience care concerns related to SDOH, can experience problems managing chronic disease, and have higher readmission and mortality rates. Due to this, hospitals in rural and high-deprivation areas should consider applying solutions to address the SDOH in their patient populations.<sup>ii</sup>

### Topic 1: SDOH Data Collection

**Rationale:** 80 percent to 90 percent of health outcomes can be attributed to SDOH, while only 10 percent to 20 percent are attributable to medical care.<sup>iii</sup> This statistic is especially relevant in rural and high-deprivation areas where patients experience many social factors outside of their local hospitals' control, which impact their health.<sup>iv</sup> Hospitals should consider implementing methods to identify and account for patients' 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 needs in a patient population because it integrates multiple social determinants into one deprivation measure, which can be looked at on the census-block group level.	<ul style="list-style-type: none"> <li>Neighborhood Atlas. University of Wisconsin School of Medicine. ADI Mapping Tool—<a href="https://www.neighborhoodatlas.medicine.wisc.edu/">https://www.neighborhoodatlas.medicine.wisc.edu/</a></li> <li>Journal of the American Heart Association. ADI and Cardiac Readmissions: Evaluating Risk Prediction in EHR*—<a href="https://www.ahajournals.org/doi/10.1161/JAHA.120.020466">https://www.ahajournals.org/doi/10.1161/JAHA.120.020466</a></li> </ul>
2. Use a SDOH data collection tool to identify patient-level social risk factors.	SDOH contribute significantly to patient outcomes, so collecting these data allows for better understanding and addresses the individual social risk factors patients may have.	<ul style="list-style-type: none"> <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>Social Interventions Research &amp; Evaluation Network (SIREN). SDOH Data Collection Tool—<a href="https://sirennetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison">https://sirennetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison</a></li> </ul>
3. Document SDOH Z Codes in the medical record.	Documenting Z Codes improves detailing of patient social risk factors, which can improve continuity of care. In addition, improving documentation of Z Codes allows for accurate billing of these codes.	<ul style="list-style-type: none"> <li>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></li> </ul>

\* EHR = electronic medical records. 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.<sup>v</sup> Decreased primary care access can often be attributed to lack of insurance, disabilities, geographic and transportation barriers, and a low number of primary care providers in an area.<sup>vi</sup> Primary care is critical for prevention of readmissions, chronic disease management, preventive care, and access to other health services. Consequently, 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.	<p>Nurse practitioners and physician assistants have been shown to provide high-quality primary care at lower cost.</p> <p>Nurse practitioners are more likely to practice in rural communities, increasing access to primary care in these areas.</p> <p>Understand scope of practice laws in your state to know how much these practitioners can do in your area.</p>	<ul style="list-style-type: none"> <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>Journal of the American Medical Association (JAMA). 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.aha.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—<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—<a href="https://www.aapa.org/download/61319/">https://www.aapa.org/download/61319/</a></li> <li>American Medical Association (AMA). PA Scope of Practice Resource—<a href="https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/arc-public/state-law-physician-assistant-scope-practice.pdf">https://www.ama-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.	<p>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.</p>	<ul style="list-style-type: none"> <li>Agency for Healthcare Research and Quality (AHRQ). Discharge Planning Guide—<a href="https://psnet.ahrq.gov/primer/discharge-planning-and-transitions-care">https://psnet.ahrq.gov/primer/discharge-planning-and-transitions-care</a></li> <li>Baky V, et. al. Obtaining a Follow-Up Appointment Before Discharge Protects Against Readmission for Patients With Acute Coronary Syndrome and Heart Failure: A Quality Improvement Project—<a href="https://pubmed.ncbi.nlm.nih.gov/29506682/">https://pubmed.ncbi.nlm.nih.gov/29506682/</a></li> <li>Tech Target. Patient Engagement Strategies for Post-Discharge Follow-Up Care—<a href="https://www.techtarget.com/patientengagement/feature/Patient-Engagement-Strategies-for-Post-Discharge-Follow-Up-Care">https://www.techtarget.com/patientengagement/feature/Patient-Engagement-Strategies-for-Post-Discharge-Follow-Up-Care</a></li> </ul>

Strategies	Discussion	Tools and Resources
3. Use telehealth for patients unable to set up their own timely follow-up visits.	See additional telehealth strategies in Topic 6.	<ul style="list-style-type: none"> <li>AHA. Market Insights: Telehealth Strategy—<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></li> <li>AHRQ. Improving Rural Health Through Telehealth-Guided Provider-to-Provider Communication—<a href="https://effectivehealthcare.ahrq.gov/products/rural-telehealth/protocol">https://effectivehealthcare.ahrq.gov/products/rural-telehealth/protocol</a></li> </ul>
4. Consider partnering with clinics and federally qualified health centers (FQHCs) for primary care.	<p>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.</p> <p>Referring patients without insurance to free or sliding scale clinics can improve care in this population as well.</p>	<ul style="list-style-type: none"> <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.aha.org/system/files/2018-02/ensuring-access-case-study-comp-rural.pdf</a></li> <li>FQHC Associates. 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 improves continuity of care and mitigates access to care issues patients may experience.	<ul style="list-style-type: none"> <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—<a href="https://www.ruralhealthinfo.org/toolkits/mental-health/2/access/behavioral-health-integration">https://www.ruralhealthinfo.org/toolkits/mental-health/2/access/behavioral-health-integration</a></li> <li>National Committee for Quality Assurance (NCQA). Patient-Centered Medical Home—<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	Discussion	Tools and Resources
6. Consider promoting or partnering to create a paramedicine program in your area.	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.	<ul style="list-style-type: none"> <li>• RHI Hub. Rural Community Paramedicine Toolkit—<a href="https://www.ruralhealthinfo.org/toolkits/community-paramedicine">https://www.ruralhealthinfo.org/toolkits/community-paramedicine</a></li> <li>• RHI Hub. Community Paramedicine Resources—<a href="https://www.ruralhealthinfo.org/topics/community-paramedicine">https://www.ruralhealthinfo.org/topics/community-paramedicine</a></li> <li>• National Assn. of EMTs (NAEMT). Community Paramedicine Course Series—<a href="https://www.naemt.org/education/community-paramedicine-course-series">https://www.naemt.org/education/community-paramedicine-course-series</a></li> <li>• 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></li> <li>• Buckeye Arizona. Community Paramedicine Program—<a href="https://www.buckeyeaz.gov/residents/fire-medical-rescue-department/fire-rescue-programs">https://www.buckeyeaz.gov/residents/fire-medical-rescue-department/fire-rescue-programs</a>. And YouTube—<a href="https://www.youtube.com/watch?v=2WoM34ykfjE">https://www.youtube.com/watch?v=2WoM34ykfjE</a></li> </ul>
7. Consider developing a hospital-affiliated clinic, such as a free clinic, an 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.	<ul style="list-style-type: none"> <li>• Self Regional Healthcare. Full Circle Care Clinic—<a href="https://www.selfregional.org/providers/location/full-circle-care/">https://www.selfregional.org/providers/location/full-circle-care/</a></li> <li>• HRSA. FQHC Program Look-Alikes—<a href="https://www.hrsa.gov/opa/eligibility-and-registration/health-centers/fqhc-look-alikes/index.html">https://www.hrsa.gov/opa/eligibility-and-registration/health-centers/fqhc-look-alikes/index.html</a></li> <li>• Free Clinics. Medical Health Clinics for Everyone—<a href="https://www.freeclinics.com/">https://www.freeclinics.com/</a></li> <li>• 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/files/corp/media-browser/public/ama-foundation/free-medical-clinic-handbook.pdf</a></li> <li>• 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/files/corp/media-browser/public/ama-foundation/legal-operational-guide-free-medical-clinics.pdf</a></li> </ul>

## Topic 3: Medication Management

**Rationale:** Patients in rural and high-deprivation areas may experience multiple challenges regarding medication management, including difficulty in accessing medications and understanding medication instructions due to low health literacy. Hospitals in these areas also can 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 educating their patients prior to discharge, as well as using health information technology, telepharmacy, or mail-order pharmacy services to improve access to pharmacy services.<sup>vii, viii</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 style="list-style-type: none"> <li>Institute for Healthcare Improvement (IHI). Adverse Drug Events Trigger Tool—<a href="https://www.ihl.org/library/tools/ihl-trigger-tool-measuring-adverse-drug-events">https://www.ihl.org/library/tools/ihl-trigger-tool-measuring-adverse-drug-events</a></li> <li>IHI. Making Medications Safer for Older Adults—<a href="https://www.ihl.org/library/blog/lessons-learned-making-medications-safer-older-adults">https://www.ihl.org/library/blog/lessons-learned-making-medications-safer-older-adults</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>Up to Date. Alper E et. al. 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 Assn. (ASHP-APhA). Medication Management in Care Transitions Best Practices—<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>
2. Partner with local FQHCs to use 340B pricing for outpatient prescribing.	The 340B program allows qualifying health providers serving rural and low-income communities to purchase outpatient pharmaceuticals at discounted prices, increasing access to these drugs in rural and high-deprivation areas.	<ul style="list-style-type: none"> <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="https://www.nachc.org/wp-content/uploads/2024/01/340B_Intersect-for-Health-Equity.pdf">https://www.nachc.org/wp-content/uploads/2024/01/340B_Intersect-for-Health-Equity.pdf</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 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 style="list-style-type: none"> <li>American Journal of Managed Care (AJMC). Meds-to-Beds Programs: Continuity of Care in Discharged Patients—<a href="https://www.ajmc.com/view/meds-to-bed-programs-address-continuity-of-care-in-discharged-patients-mark-riggle-pharmd">https://www.ajmc.com/view/meds-to-bed-programs-address-continuity-of-care-in-discharged-patients-mark-riggle-pharmd</a></li> <li>University of Iowa. Meds-to-Beds Program—<a href="https://uihc.org/meds-beds-program">https://uihc.org/meds-beds-program</a></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 allow pharmacist input on prescription drug decision-making, even when there is no pharmacist available at the facility.	<ul style="list-style-type: none"> <li>AHRQ. Health Information Technology-Based Regional Medication Management 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 the area.	If patients live in rural areas, access to pharmacies may be limited locally. Consider using alternative strategies, such as telepharmacy or mail-order pharmacy services.	<ul style="list-style-type: none"> <li>The Commonwealth Fund. Practicing Medicine in Rural America—<a href="https://www.commonwealthfund.org/publications/2019/feb/practicing-medicine-rural-america-listening-primary-care-physicians">https://www.commonwealthfund.org/publications/2019/feb/practicing-medicine-rural-america-listening-primary-care-physicians</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—<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>
6. Provide patients with medication Zone tools.	Medication Zone tools are an easy-to-understand way for patients to keep track of medication side effects post-discharge.	<ul style="list-style-type: none"> <li>Health Services Advisory Group (HSAG). Medication Zone Tool—<a href="https://www.hsag.com/zone-tools">https://www.hsag.com/zone-tools</a></li> <li>HSAG. Blood Thinner Zone Tool—<a href="https://www.hsag.com/zone-tools">https://www.hsag.com/zone-tools</a></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 do not always have the resources necessary to effectively treat patients with the condition. Consider strategies, such as naloxone co-prescribing, medication-assisted treatment (MAT) referrals, and emergency department (ED) bridge programs. Telehealth solutions for these strategies also could provide opportunities for rural patients with limited access to these resources.	<ul style="list-style-type: none"> <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. 1—<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—<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.<sup>ix</sup> These patients may be less likely to follow discharge instructions due to lack of resource 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 accounts for individual patient needs can lead to lower readmission rates.<sup>x</sup>

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 the services and resources available to their patients at discharge. Thus, it is necessary to identify and keep track of these community assets. Understanding the patient population can assist your facility in setting up individualized discharge plans that meet the needs of each patient.	<ul style="list-style-type: none"> <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?referer=&amp;httpsredir=1&amp;article=1044&amp;context=ruralinst_health_wellness">https://scholarworks.umt.edu/cgi/viewcontent.cgi?referer=&amp;httpsredir=1&amp;article=1044&amp;context=ruralinst_health_wellness</a></li> <li>Providence Digital Commons. Helping Patients Living in Rural Areas Transition from Hospital to Home: The Roadmap Study—<a href="https://digitalcommons.psjhealth.org/publications/3613/">https://digitalcommons.psjhealth.org/publications/3613/</a></li> <li>National Rural Health Resource Center. Comprehensive Discharge Instructions—<a href="https://www.ruralcenter.org/sites/default/files/Comprehensive%20Discharge%20Instructions.pdf">https://www.ruralcenter.org/sites/default/files/Comprehensive%20Discharge%20Instructions.pdf</a></li> <li>American Hospital Association—<a href="https://ifdhe.aha.org/system/files/media/file/2021/08/ifdhe_community_partnership_toolkit.pdf">https://ifdhe.aha.org/system/files/media/file/2021/08/ifdhe_community_partnership_toolkit.pdf</a></li> <li>AHA Community Health Improvement (ACHI). Community Health Needs Assessment Toolkit—<a href="https://www.healthycommunities.org/resources/community-health-assessment-toolkit">https://www.healthycommunities.org/resources/community-health-assessment-toolkit</a></li> </ul>
2. Ensure that initial follow-up visits with discharged patients occur within 72 hours of discharge.	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 style="list-style-type: none"> <li>CMS. Medicare Learning Network (MLN). Transitional Care Management Services Resource—<a href="https://www.cms.gov/files/document/mln908628-transitional-care-management-services.pdf">https://www.cms.gov/files/document/mln908628-transitional-care-management-services.pdf</a></li> <li>Western Journal of Emergency Medicine. Rapid Primary Care Follow-up from the ED to Reduce Avoidable Hospital Admissions—<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5576623/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5576623/</a></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 style="list-style-type: none"> <li>CMS. Care Coordination Toolkit—<a href="https://www.cms.gov/priorities/innovation/files/x/aco-carecoordination-toolkit.pdf">https://www.cms.gov/priorities/innovation/files/x/aco-carecoordination-toolkit.pdf</a></li> <li>Health Affairs. Implementing Community Resource Referral Technology: Facilitators and Barriers Described by Early Adopters—<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>National Council on Aging (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>
4. Provide patients with condition-specific Zone tools.	Zone tools assist patients in self-management of chronic diseases after discharge and are appropriate and understood by patients with different levels of education.	<ul style="list-style-type: none"> <li>HSAG. Patient Zone Tools—<a href="https://www.hsag.com/zone-tools/">https://www.hsag.com/zone-tools/</a></li> </ul>
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 style="list-style-type: none"> <li>AHRQ. Teach-Back Intervention—<a href="https://www.ahrq.gov/patient-safety/reports/engage/interventions/teachback.html">https://www.ahrq.gov/patient-safety/reports/engage/interventions/teachback.html</a></li> <li>AHRQ. Teach-Back Tool—<a href="https://www.ahrq.gov/teamstepps-program/curriculum/communication/tools/teachback.html">https://www.ahrq.gov/teamstepps-program/curriculum/communication/tools/teachback.html</a></li> <li>AHRQ. Interactive Teach-Back Training—<a href="https://www.ahrq.gov/downloads/teachback/story_html5.html">https://www.ahrq.gov/downloads/teachback/story_html5.html</a></li> <li>HSAG. Teach-Back Starter Sentences Resource—<a href="https://www.hsag.com/globalassets/qio/hospital/teach-backstartersentences-508.pdf">https://www.hsag.com/globalassets/qio/hospital/teach-backstartersentences-508.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. Consider alternative solutions to expand patient access to necessary resources to manage their disease.	<ul style="list-style-type: none"> <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 and Weight Control—<a href="https://www.ruralhealthinfo.org/topics/obesity-and-weight-control">https://www.ruralhealthinfo.org/topics/obesity-and-weight-control</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 style="list-style-type: none"> <li>AHRQ. Strategy 1: Working With Patients and Families as Advisors—<a href="https://www.ahrq.gov/patient-safety/patients-families/engagingfamilies/strategy1/index.html">https://www.ahrq.gov/patient-safety/patients-families/engagingfamilies/strategy1/index.html</a></li> <li>AHRQ. Engaging Patients and Families in Their Health Care: For Hospital Staff—<a href="https://www.ahrq.gov/patient-safety/patients-families/index.html#hospital-staff">https://www.ahrq.gov/patient-safety/patients-families/index.html#hospital-staff</a></li> <li>AHRQ. Patient and Family Discharge Planning Checklist—<a href="https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/strategy4/Strat4_Tool_1_IDEAL_chklst_508.pdf">https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/strategy4/Strat4_Tool_1_IDEAL_chklst_508.pdf</a></li> <li>CMS. Discharge Planning Checklist—<a href="https://www.medicare.gov/publications/11376-your-discharge-planning-checklist.pdf">https://www.medicare.gov/publications/11376-your-discharge-planning-checklist.pdf</a></li> <li>AHRQ. Strategy 2: Communicating to Improve Quality. <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>
8. Use a social needs screening tool to identify SDOH impacting patients prior to discharge.	SDOH contribute significantly to patient outcomes, so collecting these data improves understanding and addresses the individual social risk factors patients may have.	<ul style="list-style-type: none"> <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. Social Needs Screening Tool—<a href="https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf">https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf</a></li> <li>SIREN. Social Needs Screening Tool Comparison Table—<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 because 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. Due to this, hospitals should consider the impacts of transportation on their patients and assist patients to mitigate these barriers as part of the discharge planning process.<sup>xi</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 style="list-style-type: none"> <li>US Dept. of Transportation. Transportation and Health Tool—<a href="https://rosap.ntl.bts.gov/view/dot/66998/dot_66998_DS1.pdf">https://rosap.ntl.bts.gov/view/dot/66998/dot_66998_DS1.pdf</a></li> <li>CDC. Transportation Health Impact Assessment—<a href="https://www.cdc.gov/environmental-health-tracking/media/pdfs/HIA_Transportation_Diagram.pdf">https://www.cdc.gov/environmental-health-tracking/media/pdfs/HIA_Transportation_Diagram.pdf</a></li> <li>AHA. 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>University of South Florida Center for Urban Transportation Research. Improving Transportation Access to Health Care Services—<a href="https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1009&amp;context=cutr_nctr">https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1009&amp;context=cutr_nctr</a></li> <li>RHI Hub. Rural Transportation Toolkit—<a href="https://www.ruralhealthinfo.org/toolkits/transportation">https://www.ruralhealthinfo.org/toolkits/transportation</a></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 style="list-style-type: none"> <li>AHA. 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. Greater Cleveland Regional Transit Authority transit partnership—<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 rideshare services for patients.	Rideshare 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 style="list-style-type: none"> <li>JAMA. 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>La Opinión. CareMore Health System's Collaboration With Lyft Improves Access to Care, Reduces Transportation Cost and Wait Times—<a href="https://laopinion.com/latinowire/caremore-health-systems-collaboration-with-lyft-improves-access-to-care-reduces-transportation-cost-and-wait-times/">https://laopinion.com/latinowire/caremore-health-systems-collaboration-with-lyft-improves-access-to-care-reduces-transportation-cost-and-wait-times/</a></li> </ul>
4. Assist patients in exploring medical transportation services available to them through insurance.	There are multiple non-emergency medical transport services available through different insurances, which could provide patients with the necessary transportation to care and follow-up visits.	<ul style="list-style-type: none"> <li>Kaiser Family Foundation. Medicaid Benefits: Non-Emergency Medical Transportation Services—<a href="https://www.kff.org/medicaid/state-indicator/non-emergency-medical-transportation-services/">https://www.kff.org/medicaid/state-indicator/non-emergency-medical-transportation-services/</a></li> <li>CMS. Medicaid Non-Emergency Medical Transportation Booklet for Providers—<a href="https://www.cms.gov/medicare-medicare-coordination/fraud-prevention/medicaid-integrity-education/downloads/nemt-booklet.pdf">https://www.cms.gov/medicare-medicare-coordination/fraud-prevention/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 many SDOH 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 the Internet and low health literacy, so these factors should be considered when developing telehealth solutions.<sup>xii</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 limited primary care access but have access to the Internet and/or cell phone service, telehealth follow-ups can expand access to primary care.	<ul style="list-style-type: none"> <li>AHA. Market Insights: Telehealth Strategy—  <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> </li> </ul>
2. Develop solutions, such as provider-to-provider telehealth, to improve quality of care and access to specialty care.	Telehealth supports 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 style="list-style-type: none"> <li>AHRQ. Improving Rural Health Through Telehealth-Guided Provider-to-Provider Communication—  <a href="https://effectivehealthcare.ahrq.gov/products/rural-telehealth/protocol">https://effectivehealthcare.ahrq.gov/products/rural-telehealth/protocol</a> </li> <li>RHI Hub. Telehealth Models for Increasing Access to Specialty Care—  <a href="https://www.ruralhealthinfo.org/toolkits/telehealth/2/care-delivery/specialty-care">https://www.ruralhealthinfo.org/toolkits/telehealth/2/care-delivery/specialty-care</a> </li> </ul>
3. Assess patient access to Internet services when considering telehealth interventions.	Some rural areas have poor broadband coverage, while some patients are uncomfortable using technology. These patients may not be ideal candidates for telehealth.	<ul style="list-style-type: none"> <li>AHRQ. Poverty and Access to Internet, by County—  <a href="https://www.ahrq.gov/sdoh/data-analytics/sdoh-tech-poverty.html">https://www.ahrq.gov/sdoh/data-analytics/sdoh-tech-poverty.html</a> </li> </ul>
4. Use a regional telehealth resource center to learn more about how to best implement telehealth solutions at your facility.	Telehealth resource centers are available to provide support, education, and resources to providers interested in offering telehealth care.	<ul style="list-style-type: none"> <li>HRSA. Telehealth Resource Center Program—  <a href="https://www.hrsa.gov/telehealth/telehealth-resource-centers">https://www.hrsa.gov/telehealth/telehealth-resource-centers</a> </li> <li>National Consortium of Telehealth Resources Centers. Telehealth Resource Centers—  <a href="https://telehealthresourcecenter.org/">https://telehealthresourcecenter.org/</a> </li> </ul>

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