

Environmental Scan of South Dakota's Mobile Mammography Efforts

BACKGROUND

South Dakota (SD) encompasses over 75,000 square miles and is one of the nation's most rural and frontier geographic areas. Of SD's 66 counties, 30 (45%) are designated as rural and 34 (52%) are considered frontier (less than 6 people per sq. mile), which equates to approximately 97% of SD counties being considered either rural or frontier (United States [U.S.] Census Bureau, 2010). SD's rural geography impacts access to health care services. Approximately two-thirds of SD is designated by the federal government as a Health Professional Shortage Area due to geographic and low-income disparities. Transportation is a factor which impedes access to services as geographic isolation results in much of the population traveling great distances (over 50 miles one way) to see a primary care provider and even further to see a specialist (Towne, Smith, & Ory, 2014). The problem of geographic isolation is further complicated on American Indian reservations by the lack of a reliable transportation system.

Mobile mammography offers a way for women living in rural and frontier regions of the state to receive a recommended screening mammogram by reducing or removing the distance barrier. In SD, three organizations provide mobile mammography services through the use of six mobile mammography units. The goal of this environmental scan was to determine where and how often each unit travels to communities throughout South Dakota for screening events open to the public in order to better understand gaps in service provision.

METHODS

Organizations with mobile mammography services in SD were asked to participate in an interview, including: Avera Health, Sanford Health, and DMS Imaging. For the purpose of this environmental scan, sites were asked only to report the screening sites that are open to the public. It is important to note that Avera Health and Sanford Health both partner with external entities (worksites, nursing homes, colonies, etc.) to provide private screenings throughout the state. The only sites included in the map are those open to the public. Representatives from the SD Department of Health and Great Plains Tribal Chairmen's Health Board developed a structured interview guide. The questions were formulated to gather information describing the mobile units' coverage area, scheduled frequency, annual mammogram provision and tracking procedures. The communication and marketing of the mobile unit, challenges within the service areas, and the units' capacity to expand services to additional SD communities were also assessed. To explore these topics, the questions outlined in Appendix A were asked among the interviewed facilities.

AVERA HEALTH

Two calls took place with Avera Health, where it was learned that three units are currently operating. One unit is based in Sioux Falls, serving 70 sites in three states (NE Iowa, SE South Dakota, and NE Nebraska). The Sioux Falls mobile unit reports serving ten communities with screenings that are open to the public. This unit will drive up to two hours away from Sioux Falls and has a set schedule based on the needs of the businesses/facilities they serve. This unit commonly visits hospitals, clinics, businesses, and health fairs. In addition, Avera has units based in Yankton and Mitchell, which expand the reach of Avera's mobile mammography efforts into northern Nebraska. The unit based in Yankton reports serving one community for public screening in the region and stays within a 100 mile radius. The unit in Mitchell will travel as far as Pierre and reports serving thirteen communities with screenings that are open to the public. However, there is no cutoff line for counties that Avera is willing to serve. It is solely dependent on the capacity load of the units. Each fall, an Avera representative reaches out to all past mobile mammography sites to create a new schedule for the next year. Dates are provided to all sites the mobile unit will visit, and then a facilitator from a local clinic will coordinate with patients to create an appointment schedule. The marketing team from Avera Sioux Falls will also place advertisements for the mobile mammography unit in the communities they visit. Three days prior to arrival, Avera contacts the facility or business to update patient cases. Records for past mammograms are requested if completed by another facility or in another state to create a full breast health history. Walk-ins are acceptable; however, this delays the paperwork. The mobile units participate in the AWC! Program and have paperwork available in the mobile units to help women enroll. Clinics will also assist patients with enrollment into the AWC! Program. All women seen on the mobile unit must have a primary care provider where the test results can be sent. Women over the age of 40 do not need a referral from their provider. Barriers to screening include: 1) the unit must have at least 8 scheduled appointments before it will travel to a site, 2) the patient is required to have a health care provider in order to complete the mammography, and 3) the coverage area for each mobile unit is limited due to difficulties in overnight travel (staffing, lack of safe storage for the mobile unit, etc.).

SANFORD HEALTH

Sanford currently has two mobile mammography units, both based out of Sioux Falls. The units service Sanford facilities in South Dakota, Minnesota, and Iowa that do not have a stationary mammography unit. The mobile units travel throughout a two-hour radius from Sioux Falls, and Mitchell is currently the furthest west they go. The units report serving seventeen communities with screenings open to the public. Communities can request the mobile unit even if they do not have a Sanford clinic or hospital; however, hospitals and clinics do make up the majority of their visits. For busy sites, mobile units will go out every month, every other month, or by request. Visits to schools, businesses, and nursing homes are also done, but on a less frequent basis. Since the mobile units are frequently partnering with local clinics, each clinic is responsible for scheduling and sending reminders to women.



This protocol helps to reduce turnover and no-shows. Sanford Hospital will schedule patients and place orders for screening with the mobile units. Clinic practices vary, but some may put an ad in the newspaper or circulate flyers to notify the public once a mobile unit is scheduled. The mobile units participate in the AWC! Program and have paperwork available in the mobile units to help women enroll. Clinics will also assist patients with enrollment into the AWC! Program. Both units stay very busy and are utilized most days, but Sanford is open to expanding reach if additional communities within the two-hour radius are interesting in partnering. A challenge of the mobile units is a limited coverage area for each mobile unit as overnight travel is difficult due to secure housing requirements for the mobile unit and tracking hours for drivers.

DMS IMAGING

DMS Imaging provides technical services to hospitals so that hospitals can serve their communities and patients. While their corporate office is located in Fargo, a mobile mammography unit is housed in Aberdeen and the company has contracts in place with several clinics and hospitals in the northeastern part of SD to visit frequently and offer mammography services. DMS Imaging reports serving nine communities in the northeastern region of SD. The schedule is set well in advance and a contract needs to be in place prior to the unit visiting a new community.

SUMMARY

Both Avera and Sanford mentioned that overnight trips are very difficult, since the unit needs to be stored in a safe place and staff time is limited. Therefore, coverage for the west side of the state remains a huge barrier for mobile mammography in SD. Both organizations are aware that IHS no longer has mobile units operating and are open to discussions about ways they can be of assistance to meeting the needs of this population. The results of this environmental scan clearly demonstrate that a disparity exists in SD in terms of access to mobile mammography services, especially for the northwestern region. All locations have been mapped online to paint a picture of mobile mammography in our state. In addition, the map features a complete list of all stationary mammography facilities throughout the state. The goal of this map is to demonstrate access for both mobile mammography and stationary mammography services, as well as identify areas of the state do not have access to mammography services.

See below for the map that has been developed. To view an interactive map of cities being served by the mobile units as well as stationary mammography locations, visit <https://sdbit.maps.arcgis.com/apps/SimpleViewer/index.html?appid=e7ebb97dc03b4b42895a33c47c5ec39f>. It's important to note that Avera Health and Sanford Health both partner with worksites, nursing homes, colonies, and other organizations to provide private mobile mammography services throughout the state. The only sites included in the map are those open to the public. Contact information is provided in the charts below for anyone interested in bringing a mobile unit to a local business, clinic, or community site.

Appendix A- Interview Questions

1. What specific areas of SD are covered by your mobile unit?
2. How often is your mobile unit going out?
 - a. Is there a set schedule or do the units only go out as requested?
3. On average, how many women are being seen by each unit every year?
 - a. How do you track this number?
4. Are there any barriers you are facing in regard to your mobile unit? (Are women not showing up for appointments? Has it become more difficult to use mobile units now with digital mammograms? Are travel costs a barrier?)
5. What kind of communication is done prior to the mobile unit visiting a community?
 - a. Do you partner with local businesses, clinics, etc. to spread the word about the mobile unit?
6. Does your organization have the capacity to go out more frequently to communities?
 - a. Do you feel like there is a need to do more frequent visits to communities within your service area?
 - b. Would you ever consider expanding your service area to reach additional counties in SD that don't currently have access to a mobile unit?
 - c. If yes to either of the above questions, what would be needed in order to make this happen (commitment from women ahead of time, grant funds to pay for travel costs, etc.)?
 - d. Are you aware that the Indian Health Services mobile unit that used to travel to South Dakota's reservations is no longer operating?
 - i. IHS clinics have funding available to pay Avera or Sanford units to visit. Would you be interested in having more conversations about this?
7. Can any woman aged 40 or older receive a mammogram on the mobile unit?
 - a. Does she need a referral from her provider?
 - b. How does the billing process work?
 - c. Can women be enrolled in AWC! to pay for the cost of the mammogram?
 - d. How is follow-up handled? Is the woman's primary care provider notified of the results, and if so, how? Also, how is the woman notified of her results?
 - e. Is the protocol different for IHS facilities?
8. Can we share information about your mobile unit, including where it's stationed and where it can travel to, on an interactive map online for the public to view?
 - a. If yes, collect:
 - i. Name of mobile unit
 - ii. Contact information
 - iii. Website
 - iv. Counties/communities covered by the unit
 - v. Street address where the unit is stationed



Mobile Unit Name	Stationed Address	Contact Information	Website	South Dakota Communities Served
Avera Queen of Peace Mobile Mammography	625 N Foster St, Mitchell, SD	Laurie Moody Mammography Coordinator laurie.moody@avera.org (605) 995-2280	https://www.avera.org/services/womens/mammo/	Woonsocket Plankinton Burke Lower Brule Chamberlain DeSmet Ft. Thompson Presho Murdo Lake Andes Gettysburg Highmore Wagner
Avera Sacred Heart Mobile Mammography	501 Summit Street Yankton, SD 57078	Robin Berke robin.berke@avera.org 605-668-8157	https://www.avera.org/locations/sacred-heart/patients-visitors/	Wagner
Avera Breast Center 3D Mobile Mammography	1000 E 23rd Street, Sioux Falls, SD 57105	Jill Schultz jill.schultz@avera.org 322-PINK	https://www.avera.org/services/womens/mammo/mammography-locations/#South-Dakota	Alcester Brandon Elk Point Flandreau Garretson Harrisburg Salem Scotland Sioux Falls Tea

Mobile Unit Name	Stationed Address	Contact Information	Website	South Dakota Communities Served
*DMS Imaging	109 S. Petro Ave., Sioux Falls, SD 57107	Darrell Hinger darrell.hinger@dmshealth.com 701-297-3433	https://www.dmshealth.com/	Selby Waubay Bowdle Redfield Eureka Faulkton Miller Sisseton (IHS) Britton
Edith Sanford Breast Center Mobile Mammogram (2 mobile units)	1309 West 17th Street, Sioux Falls, SD 57104	Lori Moelter Mammography Manager 605-328-2869	Sanfordhealth.org	Sioux Falls Armour Beresford Canton Brookings Clear Lake Estelline Lennox Hartford Viborg Howard Canistota Corsica Brandon Mitchell Clark Lake Norden

* Please note that DMS Health provides technical services to hospitals so that hospitals can serve their communities and patients. For this reason, their website is geared toward the hospital as a potential customer and does not have a lot of information that an individual patient would find useful. DMS maintains the FDA certification of the service. The listed address is only used for FDA certification of the unit.