Impacts of COVID-19 on Cardiac and Pulmonary Rehab Programs among Montana Outcomes Project Participants and Montana Association of Cardiovascular and Pulmonary Rehab Members: Survey 5

In March 2021, the Montana Cardiovascular Health (CVH) Program at the Montana Department of Public Health and Human Services (DPHHS) sent a survey to the 105 programs participating in the Montana Outcomes Project and the Montana Association of Cardiovascular and Pulmonary Rehabilitation (MACVPR) membership to ascertain the on-going impacts of the COVID-19 pandemic on these cardiac rehab (CR) and pulmonary rehab (PR) programs. This was the fifth and final survey in a series.

Although we have done five surveys for this topic, the first two surveys had multiple responses per recipient site; therefore, we received multiple perspectives from some sites, and validity was difficult to ascertain. For the third through fifth surveys, we specified that only one response per site was needed, and we received only one response per site. These differential responses mean the results of the third through fifth surveys are not directly comparable to the results of the first two surveys. Following are the results of the fifth survey.

Overview

The survey received 64 complete and two incomplete responses from CR and PR sites in 14 of the 15 states represented in the Montana Outcomes Project and MACVPR (Figure 1). It took an average of 8.5 minutes to complete the survey.

Report Highlights

Sixty-four respondents from CR/PR sites in 14 of 15 Montana Outcomes Project participating states and MACVPR sites completed surveys. Two other respondents partially completed the survey. Results indicate that:

- 97% are located in hospital-based systems; 48% work in systems that perform interventional procedures.
- 39% perform CR-only services, 61% both CR and PR services.
- 5% of sites have become more restrictive since December 2020, 27% less restrictive. 68% have remained about the same.

The summary reports of the first four surveys have been distributed via email. They also can be found here.

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Figure 1. Number of respondents per state to CR/PR COVID-19 Impact Survey 5.

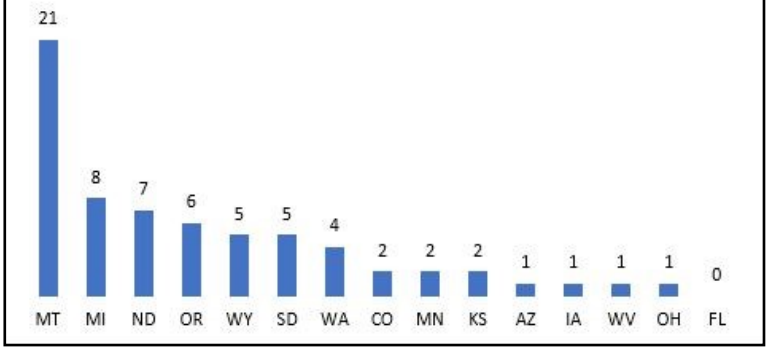
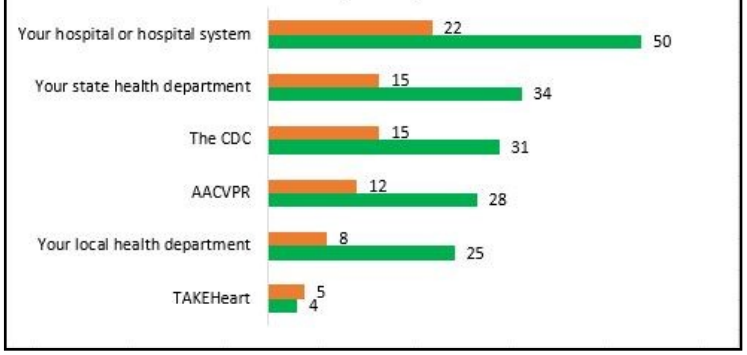


Figure 2. Guidance sources for CR/PR programs for becoming more restrictive and for opening safely during the COVID-19 public health emergency (by # of responses).



Program and Service Characteristics

Off-site programs are represented by 3% of respondents; 97% indicated they work in hospital-based programs. Forty-eight percent of respondents are affiliated with hospitals that perform cardiac interventional procedures. Thirty-nine percent of respondents work in facilities that provide CR-only services, and 61% work in facilities that provide both CR and PR services. Zero sites reported performing PR-only services.

Since December 2020, 5% of responding sites have become more restrictive, 27% have become less restrictive, and 68% have remained about the same. Some examples of more restrictive practices include seeing only one patient at a time, moving exercise equipment 12 feet apart instead of six feet, and closing between November and February. Some examples of less restrictive practices include increasing the number of patients exercising at one time, resuming maintenance programs, reopening with limited class sizes and masking, no temp checks, working toward no masking during exercise, and "hypervigilant cleaning procedures."

Programs are receiving guidance for both becoming more restrictive and opening safely from the same sources, including their hospital or hospital system, the Centers for Disease Control and Prevention, and their state health departments topping the sources of guidance (Figure 2).

Four respondents cited "other" sources for becoming more restrictive, including medical directors, their hospital's infectious disease staff, and the Michigan Society for Cardiovascular and Pulmonary Rehabilitation (MSCVPR) forum. These same sources were cited by four respondents for opening safely.

Of the center-based services being offered, 60 sites are offering classes that consist of Phase II patients only, and 25 are offering classes that consist of Phase III/maintenance patients only. Forty-three sites are offering reduced class sizes with social distancing, and seven are offering one-on-one services.

Sites are addressing patient education in a variety of ways, including in-person 1-on-1 (44 respondents), in-person group classes (20), on-line education (18), and "other" (15). "Other" patient education modes include handouts, iPads, and DVDs; TV presentations and discussions during group exercise; medication consultations with pharmacists; conference calls with families during patient education; and a group lunch-and-learn with the pharmacist and then (the next month) with the dietitian. This trial project is being done in a large meeting room that allows social distancing and has a speaker system to make it easier for patients to hear what's being said. Boxed lunches are being provided.

On-line offerings include sites developing their own (15 respondents), educational offerings from Cardiac College (13) and Henry Ford (9), and "other" (6). "Other" sources of educational offerings include the American Heart Association, the Chronic Obstructive Pulmonary Disease Foundation, Krames on Demand, the Preventive Cardiovascular Nurses Association, and YouTube, specifically videos by Dr. Evans, which are watched by patients while they are exercising.

COVID-19-Specific Requirements and Vaccinations

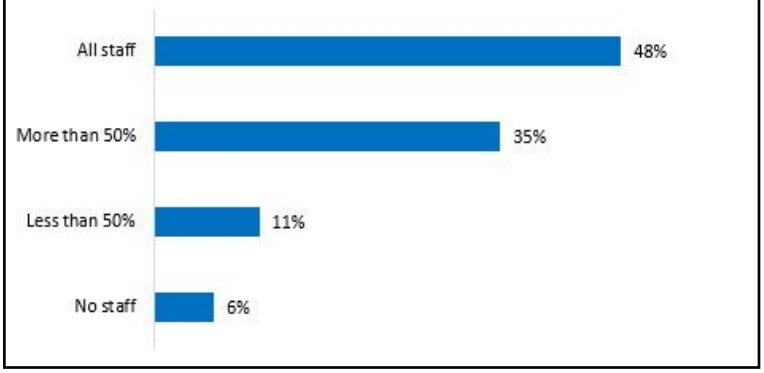
The public health emergency has necessitated other precautionary measures within many CR/PR facilities, including use of personal protective equipment (PPE), although requirements vary between patients and staff (Figure 3).

Figure 3. Personal protective equipment requirements for patients and staff at responding CR and PR sites (by # of responses).

Masks are the primary PPE required for both staff and patients; staff are required to take a greater variety of precautions than patients.

Figure 4 shows the COVID-19 vaccination status of CR/PR staff, with most sites reporting all staff or more than 50% of staff having been partially or fully vaccinated.

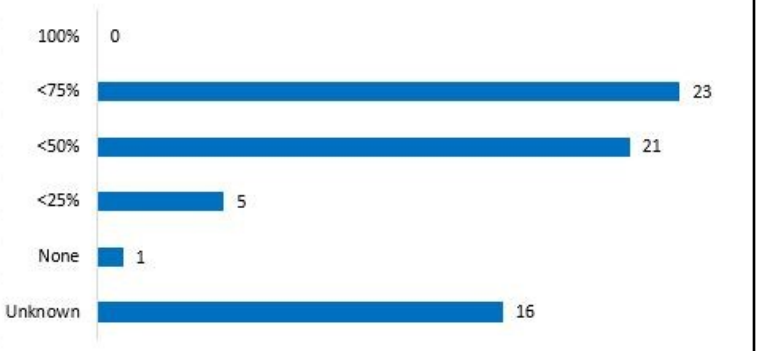
Figure 4.CR/PR Staff Vaccination Status (partially or fully vaccinated)



No responding site is requiring patients to be vaccinated before they come in for rehabilitation.

Figure 5 shows the percentage of patients who have been vaccinated by responding site, with most sites reporting less than 75% of patients being vaccinated and 16 sites saying patient vaccination status is unknown.

Figure 5. Percentage of patients per site who have been vaccinated (by # of respondents).



Home-Based Cardiac and Pulmonary Rehab Services

Nine sites are offering home-based cardiac rehab (HBCR); three of these sites also are offering home-based pulmonary rehab (HBPR). One site is billing HBCR to Medicare/Medicaid, and one is billing HBPR to Medicare/Medicaid and private insurance. Eight sites are offering HBCR to new and current patients, one site to current patients only. HB sites offer the service in a variety of ways, depending on patient needs and capacity, including phone only, two-way audio-visual (AV; Zoom and Mend), phone apps (Better Hearts), and a combination of phone and AV. All nine sites contact their patients at home at least once a week and require regular in-person visits.

Of the sites not offering home-based options (56), the most commonly stated reasons include most patients are coming into center-based programs and prefer that option (13); there are limited resources, including time and staffing, available (9); the option was not looked into and with current patient load, there is no need for it (7), and difficulty and uncertainty about reimbursement (5). These were followed by a variety of other, less commonly cited, reasons, including lack of existing protocols, administrative resistance, patient discomfort and lack of technical skills, rural regions having poor connectivity, concerns about cost effectiveness, and personal preference ("I'm not passionate about the option").

New Referrals

Respondents were asked how they are accommodating new referrals. The majority (56%) have no restrictions on new referrals. Others (36%) have a cap on enrollment numbers, accommodating new patients as completed patients cycle out. All respondents are accepting new referrals, a change from the survey in December, when some programs were still wait-listing. Other accommodations (8%) include putting Phase III sessions on hold until Phase II sessions are done, accepting fewer new patients per week than would have been accepted before COVID-19, and doing one-on-one rather than group orientations.

Staff Reassignment and Impacts on Pay

Twenty percent of respondents indicated that they had been reassigned since December to other work but are beginning to return to their previous duties. Twelve percent continue to work in reassigned areas. Sixty-eight percent of sites have not been reassigned since December and do not anticipate reassignment.

For those who have experienced reassignment, six sites have been reassigned to in-patient care, nine to screening staff/patients for COVID-19 symptoms, five to COVID-19 testing, 10 to the general hospital labor pool, and seven to "other" assignments, including COVID-19 vaccine clinics, clinical cardiology, heart clinics, cardiac diagnostics, telemetry, administration for employee health and risk management, and incident command.

Mechanisms for staff and rehab coordinators to receive their regular pay are shown in Figure 6 (paid time off = PTO).

Figure 6. How staff and rehab coordinator are receiving full pay during the COVID-19 public health emergency (by number of responses).

Three rehab coordinators and two rehab site staff working from home up to 10 hours per week. At-home work includes CR and PR services, administrative duties and phone consults for pre-attendance.

COVID-19 Impacts on Patients

Many respondents shared observational and anecdotal information about the impacts of COVID-19 on patient health behaviors. Although many of these behaviors revolve around negative health behaviors, such as avoiding health services and reduced health maintenance, "greater interest in preventive practices" was the third most-cited behavior in this survey, an improvement from the last one (Figure 7).

Figure 7. Observed and anecdotal impacts of COVID-19 on patient health behaviors (by # of responses).

Other specific negative health behaviors or outcomes that CR/PR programs have noted include increased PHQ-9 scores, patients not eating as well with little motivation to improve, general hospital avoidance, and concerns among pulmonary patients about exercising in-center with a mask. One site said that they lost many patients after they had to close the second time. Some sites, however, have more positive behaviors to report, including that patients are keen to get vaccinated and intend to return to rehab once they have received full vaccination, that some patients see returning to rehab as a way to get out of the house and do something, and that cardiac rehab patients are more willing to return to in-center exercise, citing feelings of safety with the program due to staff following PPE and rigorous cleaning guidelines.

Other Comments

Some sites offered other comments on the impacts of COVID-19. One site reported that they have seen a "combination of greater interest in preventive practices for those who are physically able, but a noticeable poorer health maintenance for those who are not able to exercise outside." Others report that patients aren't as likely to complete 12 CR visits; are more likely to have gained weight, become more depressed, and become non-compliant with home exercise; have had to miss CR due to positive COVID-19 diagnoses; have greater anxiety; and discuss COVID-19 a lot. One site said that they have noticed maintenance patients being deconditioned and needing referrals to their primary care provider to deal with health issues that have developed. Another respondent cited adding more virtual visits for patients.

Next Steps

This survey received a moderate response from MACVPR and Montana Outcomes Project participants. This is the last survey the Montana CVH Program has planned for this subject. We plan to publish reports and other informational products from these survey efforts and intend to make those products available to all respondents as they are finalized. Thank you for taking part in this year-long information-gathering process. We appreciate your time and information.