



## Report Highlights

Eighty-three respondents from CR/PR sites in 13 of 15 Montana Outcomes Project participating states and MACVPR sites completed surveys, indicating that:

- 98% are located in hospital-based systems; 41% work in systems that perform interventional procedures.
- 48% perform CR-only services, 52% both CR and PR services.
- 24% of sites have become more restrictive since September 2020, 7% less restrictive. 69% have remained about the same.
- 36% of responding sites think it is very or somewhat likely that they will have to reduce on-site operations in the near future if there is a COVID-19 resurgence.

The summary reports of the first three surveys have been distributed via email. They also can be found [here](#).

# 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 4

In December 2020, 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 fourth survey in a series in 2020.

Although we have done four 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 and fourth surveys, we specified that only one response per site was needed, and we received only one response per site. These differential response types mean the results of the third and fourth surveys are not directly comparable to the results of the first two surveys. Following are the results of the fourth survey.

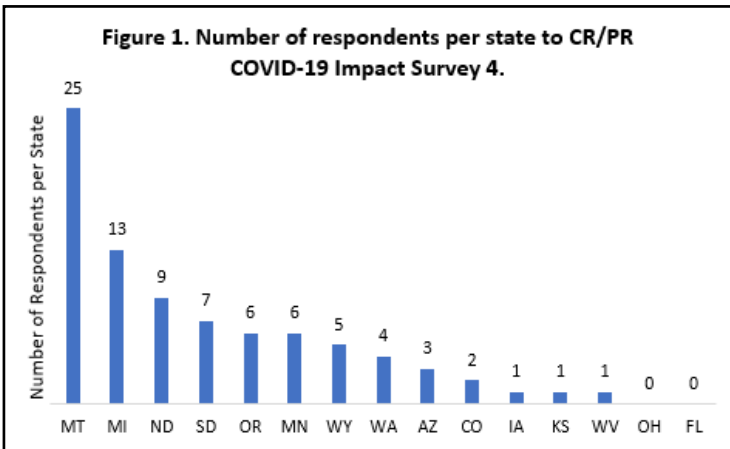
## Overview

The survey received 83 complete responses from CR and PR sites in 13 of the 15 states represented in the Montana Outcomes Project and MACVPR (Figure 1).

### Montana Cardiovascular Health Program

1400 E Broadway  
Helena, Montana 59260-2951  
(406) 444-9170

<https://dphhs.mt.gov/publichealth/cardiovascular/index>



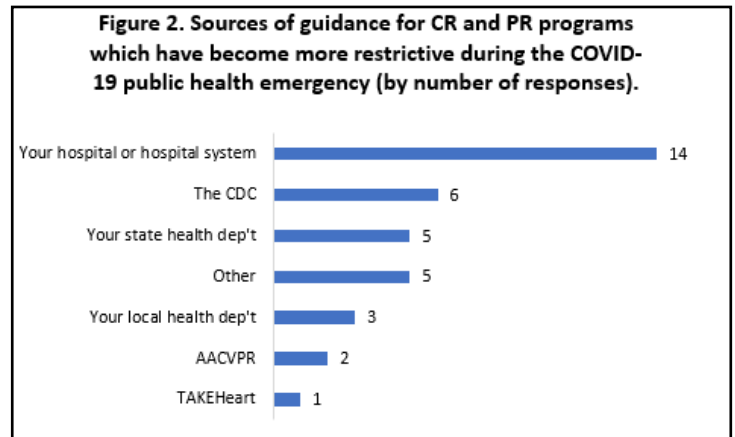
### Program and Service Characteristics

Off-site programs are represented by 2% of respondents; 98% indicated they work in hospital-based programs. Forty-one percent of respondents are affiliated with hospitals that perform cardiac interventional procedures. Forty-eight percent of respondents work in facilities that provide CR-only services, and 52% work in facilities that provide both CR and PR services. Zero sites reported performing PR-only services.

Since September 2020, 24% of responding sites have become more restrictive, 7% have become less restrictive, and 69% have remained about the same. Some examples of more restrictive practices include decreased patient volumes and social distancing in group classes, PR labs on hold, on-site or full program closures, limiting new patient intake, and mask wearing for patients during the entire visit, including during exercise. Some examples of less restrictive practices include reopening, putting better screening and infection control in place to avoid having to close, adding PR back with some limitations, and bringing Phase III patients back during scheduled times.

For programs that have become more restrictive, they are receiving their guidance from a variety of 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).



Five respondents cited “other” sources, including CR/PR staff proactivity, medical directors, and patient caution as an impetus.

Regarding which center-based services are being offered, the 83 responding sites indicated 67 are offering Phase II only CR services, 51 are offering reduced class size with a focus on social distancing, 27 are offering Phase III/maintenance services, 14 are offering 1-on-1 services with no other patients present, and nine are offering “other” services, including combining Phase II and III patients into joined classes, virtual phone calls with Phase I and virtual audio/visual Phase II patients, and sending patients to other facilities due to site closure.

Sites are addressing patient education in a variety of ways, including in-person 1-on-1 (53 respondents), on-line education (20), in-person group (17), and “other” (21). “Other” patient education modes include Krames’ booklet, Cardiosmart, physicians on YouTube, and the Veterans Administration

Home-Based Cardiac Rehabilitation Patient Manual. One site lets patients watch Henry Ford offerings during CR sessions, if the patient doesn't have a home computer.

On-line offerings include sites developing their own (18 respondents), educational offerings from Henry Ford (12), Cardiac College (9), and "other" (5). "Other" offerings include handouts (5), videos during exercise (5), group education socially distanced (2), and iPad video education (2), among other options.

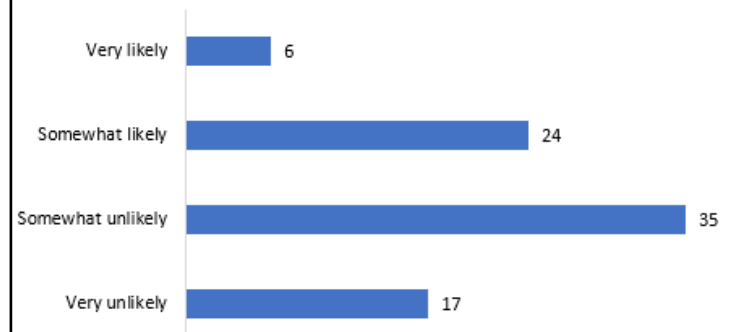
**Figure 3. Personal protective equipment requirements for patients and staff at responding CR and PR sites (by number of responses).**



### COVID-19 Specific Requirements and Implications

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

**Figure 4. Likelihood of sites needing to reduce their level of service in the near future (by number of sites).**



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 how likely sites are to reduce their level of on-site operations if there is a resurgence of COVID-19 in the near future. Of responding sites, 36% are somewhat or very likely to do so.

### Home-Based Cardiac and Pulmonary Rehab Services

Seven sites are offering HBCR; two of these sites also are offering HBPR. Of those programs offering HBCR, two are billing for those services (Medicare and private insurance). Six sites indicated that they are offering HBCR to new and current patients. HBCR sites offer the service in a variety of ways, depending on patient needs and capacity, including phone only, two-way audio-visual (AV), phone apps (Better Hearts), and a combination of phone and AV. Five sites contact their patients at home at least once a week and require regular in-person visits, usually once or twice a month.



Of the sites not offering home-based options (76), reasons include no interest (patients) or need (program capacity) (16); limitations of time, staffing, or resources (16); no HBCR program developed (8); perceptions that HBCR has poor or difficult reimbursement (8), that patients have technical limitations (4), is not effective (2), or is not effective (2); and lack of administration approval (4). Four sites are offering home exercise prescriptions but not official HBCR. Two sites are in the process of setting up HBCR protocols and programs.

### New Referrals

Survey respondents were asked how they have been accommodating new referrals. The majority (54%) have no restrictions on new referrals, just as before COVID-19. Others have a cap set on enrollment numbers, accommodating new patients as completed patients cycle out (34%) or are not accepting new patients (1%). Other accommodations (11%) include adding COVID-19 safety protocols, census caps for only certain parts of CR (Phase II or Phase III only, for example), and increased time from referral to CR evaluation due to limited gym space.

### Staff Reassignment and Impacts on Pay

Of the 83 responding sites, 10% indicated that they were reassigned to other work but are beginning to return to their previous duties; 25% continue to work in reassigned areas; 8% report not being reassigned but anticipating reassignment in the near future; and 57% have not been reassigned and do not anticipate reassignment.

For those who have experienced reassignment, 17 sites have been reassigned to in-patient care, 13 to screening staff/patients for COVID-19 symptoms, nine each to COVID-19 testing and the general hospital labor pool, and five to “other” assignments, including intensive care, telemetry, materials management, and working where needed.

Mechanisms for staff and rehab coordinators to receive their regular pay are shown in Figure 5 (paid time off = PTO).

Figure 5. How **staff** and **rehab coordinator** are receiving full pay during the COVID-19 public health emergency (by number of responses).



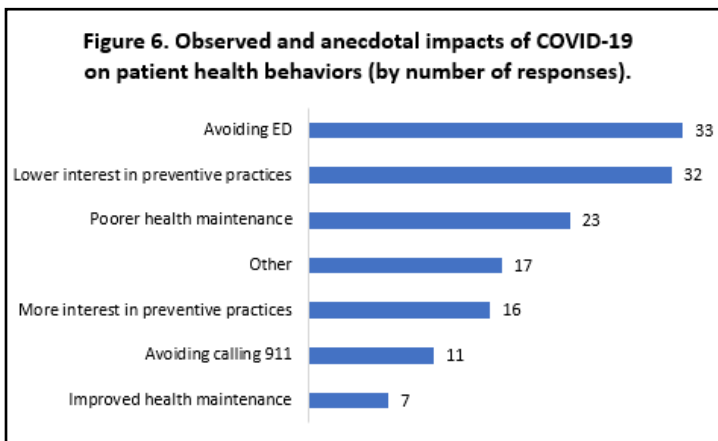
Most rehab staff and coordinators are receiving their regular pay, but there are some exceptions, including taking unpaid low census and supplementing with PTO, keeping vacant positions unfilled, and working in reassigned positions.

Seven rehab coordinators and three rehab site staff are able to work from home up to 10 hours per week. At-home work includes CR and PR services, staff self-education, and management and administrative functions.



## COVID-19 Impacts on Patients

Many respondents shared observational and anecdotal information about the impacts of COVID-19 on patient health behaviors. Many of these behaviors revolve around negative health maintenance, such as avoiding health services, reduced health maintenance, reduced engagement with preventive practices and 911 avoidance, although some sites noted an increased interest in preventive practices (Figure 6).



The third survey yielded similar responses, with avoiding the ED the most commonly observed negative impact and more interest in preventive practices the most commonly observed positive impact.

Specific negative health behaviors and outcomes cited include increased depression, mental health deterioration, and loneliness/isolation among patients; decreased compliance with exercise due to lack of safe options; and general CR avoidance due to COVID-19 anxieties. On the positive side, one site mentioned that patients are showing more interest in setting up home gyms.

## Other Comments

Some sites offered other comments on the impacts of COVID-19, including that they are observing an increase, in some areas, in patients being afraid of leaving home, having increased social anxiety, and simultaneously experiencing the effects of being isolated and alone, including elevated PHQ-9 scores and more frequent calls to the ER. One site commented that it's an "emotionally difficult time for all senior Americans. Even going to church lately is scary to them. Going into winter in the grey and cold months is concerning. Checking in with all of them is critical. I believe rallying area community leaders, pastors, etc., to phone call and check in with these homebound folks is essential." Other sites report strong local and patient resistance to incorporating the CDC's COVID-19 recommendations into their daily lives.

One site reported an increase in physician telehealth visits due to the pandemic, and another said that it is interested in exploring options for digital and web-based education sites and tools for rehab.

## Next Steps

This survey—as with the last three—received a strong response from MACVPR and Montana Outcomes Project participants.

The Montana CVH Program is planning one more survey sometime in early 2021 to track reopening progress of CR and PR sites. Thank you for taking part in this information-gathering process, and we appreciate any feedback you might want to provide.

DPHHS complies with applicable federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex.

ATENCIÓN: si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al 1-406-444-1386 (TTY: 1-800-833-8503).

ACHTUNG: Wenn Sie Deutsch sprechen, stehen Ihnen kostenlos sprachliche Hilfsdienstleistungen zur Verfügung. Rufnummer: 1-406-444-1386 (TTY: 1-800-833-8503).

This publication was supported by the Cooperative Agreement Number CDC-RFA-DP18-1815PHF18 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.