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 2

At the end of May 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 second survey in a series; the first survey and summary report were sent in April 2020. Following are the results of the second survey.

Report Highlights

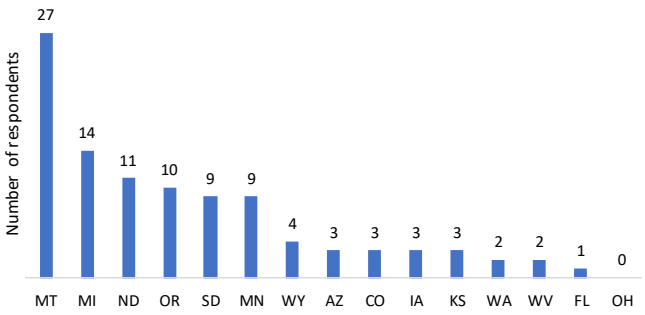
One hundred and one (101) individuals from CR/PR sites in 14 of 15 Outcomes– and MACVPR participating states responded to this survey, indicating that

- 96% are located in hospital-based systems; 40% work in systems that perform interventional procedures.
- 38% perform CR-only services, 62% both CR and PR services. There were no respondents from PR-only sites.
- 42% of respondents are now seeing patients on a regular, full-time basis (14% never stopped).
- Nearly 60% of respondents at sites not fully open indicate they are offering Phase II and smaller class sizes to maintain some patient services.
- 16% of respondents' sites are offering home-based services to current and/or new patients. One large health system is looking into a system-wide home-based program.

Overview

The survey received 101 responses from CR and PR sites in 14 of the 15 states represented in the Montana Outcomes Project and MACVPR (Figure 1). (Note: Some questions received fewer than 101 responses, limiting some comparisons.)

Figure 1. Number of respondents per state to CR/PR COVID-19 Impact Survey 2.



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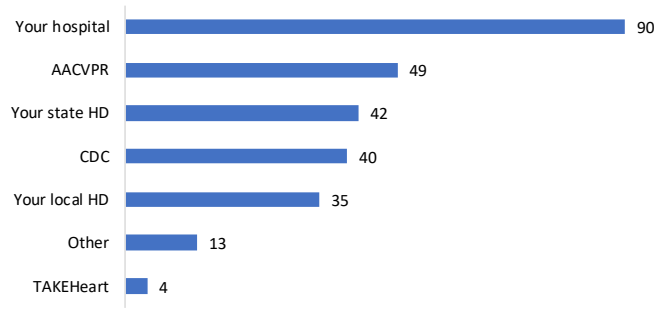
Program and Service Characteristics

Off-site programs are represented by 4% of respondents; 96% indicated they work in hospital-based programs. Forty percent of respondents are affiliated with hospitals that perform cardiac interventional procedures. Thirty-eight percent of respondents work in facilities that provide CR-only services, and 62% work in facilities that provide both CR and PR services.

Eighty-five respondents indicated variations in the evolution of their programming since the April 2020 survey, with 21% of their sites becoming more restrictive, 48% becoming less restrictive, and 31% remaining about the same. Content and extent of restrictions were not asked for or specified.

The programs that are beginning to consider or undertake steps for reopening are receiving guidance from a variety of sources, with their hospital, the American Association of Cardiovascular and Pulmonary Rehab (AACVPR), and their state health departments (HD) topping the sources (Figure 2).

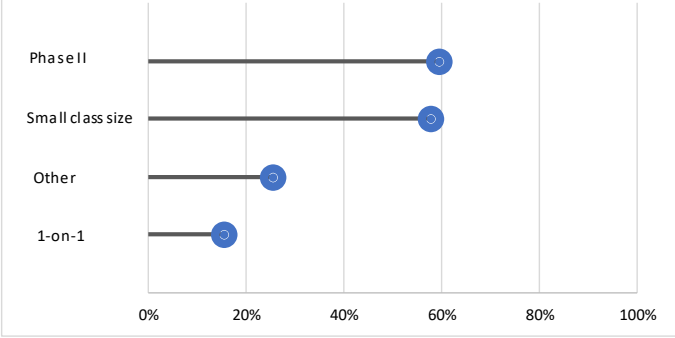
Figure 2. Sources of reopening guidance for CR and PR programs during the COVID-19 public health emergency (by number of responses).



Thirteen respondents cited "other" sources, including their AACVPR affiliate, medical director, governor, and other CR programs. Four didn't close their CR programs; one didn't close its PR program.

Of 101 respondents, 28% are seeing patients on a full-time, regular basis; 14% never stopped seeing patients on a full-time, regular basis; 58% are not seeing patients on a full-time, regular basis. Of those not seeing patients on a full-time, regular basis, many are still offering some services, including Phase II services (59%), small class sizes (58%), 1-on-1 services (15%), and "other" modifications (25%). These include not being open, phone check-ins, spacing out a small number of patients over a period of time, or only seeing patients at risk of a health decline (Figure 3).

Figure 3. Modified services still being offered by CR and PR sites not offering regular, full-time CR or PR.



COVID-19 Specific Requirements

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 4). Masks are the primary PPE required for both staff and patients; staff are required to take a greater variety of precautions than patients. At many sites, masks are being required for patients only during entry and exit from the building, not during exercise. One site is requiring full PPE for transplant patients. Several sites discussed implementing spacing requirements, hand sanitizing, and symptom checking for staff.

Figure 4. Personal protective equipment requirements for patients and staff at responding CR and PR sites (by number of responses).

Home-Based Cardiac and Pulmonary Rehab Services

Fewer respondents indicated they are offering home-based (HB) rehabilitation options to their current and/or new patients compared with the first survey.

Whereas 34% of respondents in the first survey said they were offering a home-based option to current/new patients, only 16% indicated they are offering this option in the second survey (8% are offering HB options to current patients; 8% are offering them to current and new patients). HB options are primarily being offered by phone (62%), followed by phone plus phone-based app (19%). The remainder (19%) are using phone-plus-audio/visual connections or a phone app alone. Apps in use include Better Hearts by Chanl Health and VA Video Connect. Most respondents' sites (81%) are contacting their HBCR and HBPR patients once a week; most respondents' sites (81%) are not requiring HB patients to have periodic check-ins.

At least one large health system within the Outcomes Project is working to create a home-based model for all of its hospitals. We will report further developments if they become available.

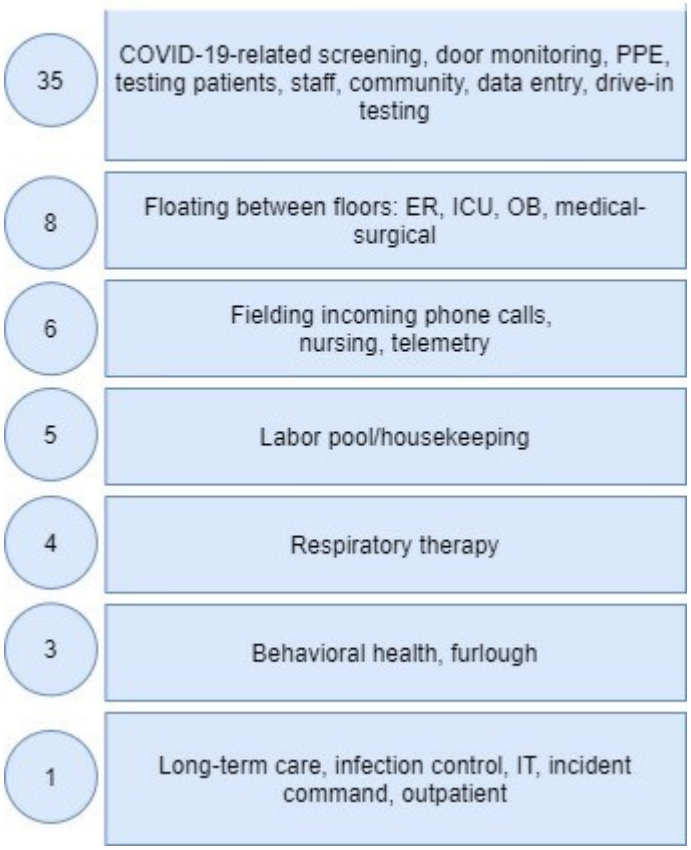
New Referrals

Ninety-eight respondents' discussion of handling new referrals fit into five broad categories: those on hold for now but communicating updates to new referrals (15); those restarting slowly (35), including taking fewer patients, allowing patients to choose whether to come in based on comfort level, and using risk stratification to prioritize new patients; those with some changes implemented (29), including adding screening questions and patient education about COVID-19-related risks to intake processes, starting with CR but not PR patients, and sending patients to an affiliated facility; those with no changes (17); and those who do not know because they are furloughed (2).

Staff Reassignment and Impacts on Pay

Of the 101 respondents, 46% indicated that they were reassigned to other work but are beginning to return to their previous duties; 20% continue to work in reassigned areas; and 34% were not reassigned (Figure 5). Twenty respondents have been reassigned to more than one area. One indicated they are doing COVID-19 testing in the community, including in meat-packing plants.

Figure 5. Places where CR and PR staff have been reassigned during the COVID-19 public health emergency, in order of number of mentions.



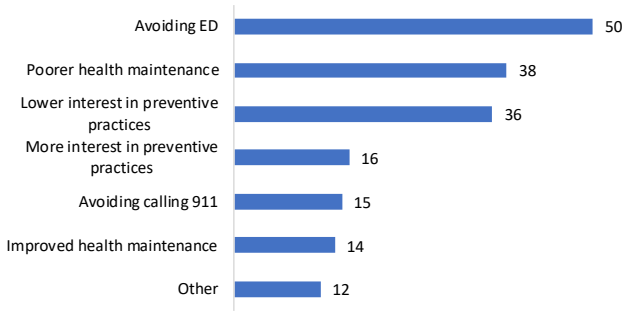
Mechanisms for staff to receive their regular pay vary, with 46 respondents receiving full regular pay, 32 receiving a combination regular pay and paid time off, three receiving paid time off, and one not being paid at all. Nineteen respondents discussed other pay options, including working reduced hours, supplementing regular hours with redeployment, and furloughs. Some sites have some staff being paid while others go unpaid. One site said their hospital has extended sick leave and child care hours to help offset hardships.

Only six respondents reported being able to work from home (WFH). Of those WFH sites, the majority are spending 0 to 10 hours in WFH activities, mainly focusing on CR work and doing phone check-ins with patients. One respondent is using WFH time to reconfigure their site's rehab programs to accommodate social distancing requirements.

COVID-19 Impacts on Patients

Many respondents shared observational and anecdotal information about the impacts COVID-19 seems to be having on the health behaviors of their patients. Most of these behaviors revolve around negative health maintenance, such as avoiding health services, reduced health maintenance and reduced engagement with preventive practices (Figure 6).

Figure 6. Observed and anecdotal impacts of COVID-19 on patient health behaviors.



Specific negative health behaviors and outcomes cited include weight gain, loss of muscle mass, having heart attacks, the desire to be discharged and not return to rehab, depression, anxiety, and increased death as a culmination of these factors.

These observations reinforce the need to educate patients about the importance of health maintenance and proactive prevention, especially in the face of a virus that disproportionately impacts people with chronic health conditions. It will be interesting to note over time via national surveillance data whether there are disparities in health outcomes traceable to COVID-19-associated patient behaviors.

Other Comments

While there were fewer miscellaneous comments in this second survey, those given were indicative of the challenges both staff and patients have faced in navigating the unknowns of health and well-being in the context of COVID-19.

One respondent indicated that they and their staff have had trouble accessing unemployment, and it "has been a tough time" for them.

Several respondents discussed patient attitudes toward their health related to COVID-19. Two said patients either do not believe that their health is at greater risk from COVID-19, believe the health threat is overblown, or do not understand the threat the virus poses to them personally. On the other hand, two said patients are very concerned about the health risk and have been cancelling appointments based on that concern. Four said patients were eager to "get back to normal" and back to center-based CR.

Another common topic was risks posed to patients due to closures and lack of patient follow-through at home. Eight respondents cited concerns about risks to the patient rehab process, including patients not leaving the house during the stay-at-home orders, an increase in depressive symptoms, and an increase in financial stress. Several said that even with weekly phone calls from staff and support via apps, videos, TV, and walking, their patients did not exercise much or make use of those resources. "Most of our patients returning to the program after being closed for 7 weeks did not exercise at home [or] struggled with exercise." One felt that COVID-19-related restrictions would delay patient recovery and treatment, and another said, "[W]e fear many will not return…due to lack of access for such a prolonged period."

Indeed, one respondent gave a lively recounting of the first week after re-opening, with one patient in paroxysmal atrial fibrillation and needing to be seen by their provider; four patients with resting BPs greater than 170 systolic, all of whom were sent to their providers and given medication changes; and one patient whose heart rate dropped to below 40 with exercise, nearly fainted, and went to the ED for evaluation and a possible pacemaker.

Only one respondent felt that COVID-19 had no bearing on the behaviors of patients, suggesting that during the public health emergency, some were proactive and vigorous about their at-home treatment and others needed more support and struggled with self-care and motivation, just as they would have in the absence of COVID-19 constraints.

Comparisons and Next Steps

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

Some interesting changes and observations have occurred among CR and PR programs and their patients as COVID-19-related uncertainties have continued to press upon regular healthcare practices. The evolution of home-based options and other avenues for helping patients access the preventive interventions they need to reach better health will be of continued interest.

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

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