Supplementary Material

Adapting to change: exploring perceptions and demands of the coronavirus (COVID-19) workforce changes – an Australian multi-institutional radiation oncology survey

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Appendix 1: Working from home and remote access

Survey Question	n (%)
How would you view the ease of using remote/virtual solutions?	
Somewhat easy	62 (30%)
Very easy	53 (25%)
Neither easy nor hard	71 (34%)
Somewhat hard	18 (9%)
Very hard	5 (2%)
How many days a week did you work from home?*	
0 days	81 (53%)
1 day	15 (10%)
2-3 days	29 (19%)
4-5 days	29 (19%)
How do you feel working remotely affected your productivity?	
Slightly improved	35 (17%)
Greatly improved	37 (18%)
No change	124 (60%)
Slightly not improved	9 (4%)
Greatly not improved	3 (1%)
Positives of remote working	
Reduced travel	185 (89%)
Improved safety from COVID-19	168 (81%)
Increased flexibility in hours worked	142 (68%)
Negatives of remote working	
Reduced contact with colleagues	159 (76%)
IT issues	111 (53%)
Communication difficulties	83 (40%)

Appendix 2: Education and Quality Assurance

Survey Question	n (%)
Do you believe that your early career junior colleagues were negatively impacted by departmental changes?	
Yes	79 (38%)
No	66 (31%)
Don't know	65 (31%)
Ways in which early career junior colleagues were negatively impacted?	
Less time in workplace	39/79 (31%)
Decreased contact with patients	36/79 (29%)
How often did you have departmental education services prior to COVID-19?	
Daily	1 (0.5%)
Fortnightly	39 (19%)
Monthly	37 (18%)
Never	17 (8%)
Weekly	116 (55%)
Have departmental education services stopped as a result of COVID-19?	
Yes	27 (13%)
No	82 (39%)
Some	101 (48%)
Has there been a remote/virtual replacement of your education services?	
Yes	173 (82%)
No	37 (18%)
Would you want these remote/virtual replacements to continue?	
Yes	115 (66%)
No	6 (3%)
Occasionally	52 (30%)
Were you supervising university students before COVID-19?	
Yes	116 (55%)
No	60 (29%)
N/A	34 (16%)
Did you continue to supervise university students without interruption during COVID-19?	
Yes	62 (53%)
No	54 (47%)
Were you able to safely supervise students during COVID-19?	
Yes	87 (86%)
No	15 (15%)
Do you think that students learning experience was negatively impacted as a result of COVID-19?	
Yes	75 (74%)
No	26 (26%)
Were your PDL/CPD activities cancelled or postponed as a result of COVID-19?	
Yes	46 (22%)
No	23 (11%)
Some activities	111 (54%)
N/A	25 (12%)
Were you able to access alternative versions of your PDL/CPD via	

remote/virtual solutions?	
Yes	77 (43%)
No	17 (9%)
For some	86 (48%)
Did your regular department QA activities continue during COVID-19?	
Yes	165 (79%)
No	18 (9%)
Don't know	27 (13%)
Were remote/virtual solutions employed to complete QA activities? (n = 165)	118 (72%)
Yes	47 (28%)
No	
Would you prefer to continue using virtual solutions to complete QA activities?	
Yes	60 (52%)
No	9 (8%)
Occasionally	47 (41%)
Are you involved in clinical trials or research activity?	
Yes	86 (41%)
No	124 (59%)
Were your trials or research activities delayed or suspended as a result of COVID-19?	
Delay only	34 (40%)
Both delay and suspension	32 (38%)
Suspension only	3 (4%)
No delay or suspension	16 (19%)
Are your trials or research activities now continuing?	
Yes	47 (68%)
No	1 (1%)
Majority have continued	15 (22%)
Majority are still delayed or suspended	6 (9%)
Can you see remote/virtual solutions being beneficial as part of your research/trial?	
Yes	58 (68%)
No	27 (32%)

Radiation Oncology COVID-19 Pandemic Response Evaluation Survey (Copy) ⤴

Thank you for participating in this survey, assessing the workflow changes in Radiation Oncology departments across Australia as a result of COVID-19. The objective of this study is to gain comprehensive feedback on the recent departmental pandemic response and examine potential refinement of the existing strategies to optimise patient care and productivity of departments. It should take approximately 7-10 minutes to complete.

* Required

* This form will record your name, please fill your name.

[   ]

Demographics

1. What gender do you identify as? *

◯ Woman

◯ Man

◯ Non-binary

◯ Prefer not to answer

◯ Other

2. What is your age? *

◯ <25

◯ 25-35

◯ 36-45

◯ 46-55

◯ 56-65

◯ 66+

3. Which state do you work in? *

◯ Queensland

◯ New South Wales

◯ Victoria

4. If you work in Queensland, which health centre do you work in? *

◯ ROPAIR (PA Hospital)

◯ ROPART (Mater Hospital)

◯ Townsville University Hospital

5. If you work in New South Wales, which health centre do you work in? *

◯ Crown Princess Mary Cancer Centre Westmead

◯ Blacktown Cancer and Haematology Centre

◯ Nepean Cancer Care Centre

◯ Liverpool Cancer Therapy Centre

◯ Macarthur Cancer Therapy Centre

◯ Chris O'Brien Lifehouse

6. If you work in Victoria, which health centre do you work in? *

  ○ Alfred Health Radiation Oncology Unit

7. How would you classify your employment status? *

  ○ Part-time

  ○ Full-time

  ○ Casual

8. Were you employed prior to the COVID-19 pandemic (i.e. before Jan 31st 2020)? *

  ○ Yes

  ○ No

Remote working options

Questions about remote desktop access and remote working (working from home). Maximum 12 questions.

9. Did your department offer remote access before COVID-19? *

i.e. could you access your work computer and its programs/file from home, prior to Jan 31st 2020?

◯ Yes

◯ No

◯ Don't know

◯ Other

10. Did your department offer remote access during COVID-19? *

i.e. could you access your work computer and its programs/file from home?

◯ Yes

◯ No

11. How would you view the ease of using remote/virtual solutions? *

◯ Very easy

◯ Somewhat easy

◯ Neither easy nor hard

◯ Somewhat hard

◯ Very hard

12. During the COVID-19 pandemic, did your institution support working from home? *

Working from home defined as doing part-time or full-time work from the location where you live.

◯ Yes

◯ No

13. If yes, do you think the option of working from home should continue?

○ Yes

○ No

14. How many days a week did you work from home?

○ 0 days
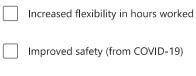
○ 1 day

○ 2-3 days

○ 4-5 days

15. If no, would you like your department to explore working from home?

○ Yes

○ No

○ Other

16. In your opinion, what would you say are the positives of remote working? *
Tick all that apply

☐ Increased flexibility in hours worked

☐ Improved safety (from COVID-19)

☐ Reduced travel

☐ Fewer interruptions/increased productivity

☐ Improved work-life balance

☐ Other

17. In your opinion, what would you say are the negatives of remote working? *
Tick all that apply

☐ Reduced contact with colleagues

☐ Reduced contact with Radiation Oncologist

☐ IT issues

☐ Work-life balance concerns

☐ Communication difficulties

☐ Other

18. How do you feel working remotely affected your productivity? *

○ Greatly improved my productivity

○ Slightly improved my productivity

○ No change

○ Slightly not improved my productivity

○ Greatly not improved my productivity

19. Which type of work did you prefer to do remotely?

☐ Admin/non-clinical work

☐ Perform telehealth clinics

☐ Other

20. Do you have any comments about particular benefits or challenges with regards to IT support, remote access or telehealth consultations?

[   ]

Work Life Balance

Questions about mental wellbeing and work-life balance during COVID-19. Maximum 5 questions.

21. As a result of my department's COVID-19 response... *

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't know
My work life balance has improved	○	○	○	○	○	○
I have felt burnt out at work	○	○	○	○	○	○
I have felt stressed at work	○	○	○	○	○	○
My workplace has communicated that they are aware of the risk of stress and burnout	○	○	○	○	○	○
I have felt supported by my workplace to prevent stress and burnout	○	○	○	○	○	○
I feel confident that I know where to ask for help or assistance if I am feeling stressed at work	○	○	○	○	○	○

22. What were the most stressful issues you experienced personally in the workforce? *

☐ Technical challenges (i.e. new software, new hardware)

☐ Workflow challenges (i.e. new schedules, new teams)

☐ Fear of COVID-19

☐ Uncertainty of COVID-19

☐ Concern around job security

☐ Managing other colleagues

☐ Managing patient/carer expectations

☐ Rapid changes

☐ Wearing PPE

☐ Increased workload

☐ Other

23. Do you have any other comments with regards to stress and burnout during COVID-19?

[   ]

24. Has your workplace introduced some interventions into place to support your mental wellbeing?
For example: social video chats, newsletters

◯ Yes

◯ No

◯ Don't know

25. If yes, can you provide an example of these interventions?

[   ]

Education

Four broad sections on junior colleagues, university students, department (in house) education and external education. Maximum 15 questions.
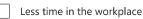
26. Do you believe that your early career junior colleagues were negatively impacted by departmental changes made during the COVID-19 pandemic? *

○ Yes

○ No

○ I don't know

27. If yes, how were they negatively impacted?

☐ Decreased contact with patients

☐ Decreased mix of patients

☐ Less time in the workplace

☐ Other

28. How often did you have departmental education services prior to COVID-19? *

○ Daily

○ Weekly

○ Fortnightly

○ Monthly

○ Never

29. Have departmental education services stopped as a result of COVID-19? *

○ Yes

○ No

○ Some education services stopped

30. Has there been a remote/virtual replacement of your education services? *

○ Yes

○ No

31. If yes, would you want these remote/virtual replacements to continue?

○ Yes

○ No

○ Occasionally

32. If no, would you want a remote/virtual replacement?

○ Yes

○ No

○ Occasionally

33. Were you supervising university students before COVID-19? *

○ Yes

○ No

○ N/A

34. Did you continue to supervise university students without interruption during COVID-19?

○ Yes

○ No

35. If no, when did university students return to clinical practice?

○ April

○ May

○ June

○ July

○ August

○ September

○ October

○ November

○ They still have not returned

36. Were you able to safely supervise them during COVID-19?

○ Yes

○ No

37. Do you think their learning experience was negatively impacted as a result of COVID-19?

○ Yes

○ No

38. Were your PDL/CPD activities cancelled or postponed as a result of COVID-19? *
PDL (Professional Development Leave), CPD (Continuing Professional Development)

○ Yes

○ No

○ Some activities cancelled or postponed

○ N/A

39. Were you able to access alternative versions of your PDL/CPD via remote/virtual solutions? *

○ Yes

○ No

○ For some

40. What PDL/CPD would you like to continue being offered remotely?

e.g. newsletters, online seminars, webinars, virtual journal club?

Communication

Questions about communication within disciplines and format of communication. Maximum 4 questions

41. In my opinion, I found that communication with these teams regarding patient care during COVID-19 is: *

	Much more difficult	Slightly more difficult	No change	Slightly less difficult	Much less difficult
Radiation Oncologists	○	○	○	○	○
Nursing staff	○	○	○	○	○
Allied Health staff	○	○	○	○	○
Administration staff	○	○	○	○	○
Physics staff	○	○	○	○	○
Radiation Therapy staff	○	○	○	○	○

42. With regards to virtual meetings... *

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I prefer virtual meetings to face to face meetings	○	○	○	○	○
After COVID, I would be open to changing a few of the face to face meetings to virtual meetings	○	○	○	○	○
After COVID, I would be open to changing all of the meetings to virtual meetings	○	○	○	○	○

43. How did you maintain communication with your team at work? *

Slack is a channel based messaging platform (slack.com), WhatsApp is a messaging platform available on both the web and via an app.

- [ ] Email

- [ ] Phone calls

- [ ] SMS messaging

- [ ] Microsoft Teams

- [ ] WhatsApp

- [ ] Slack

- [ ] Zoom

- [ ] Regular in person team meetings (social distancing)

- [ ] Other

44. Would you like to add any comments about communication lessions learned during the pandemic?

e.g. working from home being adopted more, virtual meetings becoming standard etc.

Quality Assurance

Three broad categories of COVID-related QA, usual QA and trial/research activity. Maximum 7 questions.

45. Did your regular department QA activities continue during COVID-19? *

○ Yes

○ No

○ Don't know

46. Were remote/virtual solutions employed to complete QA activities? *

○ Yes

○ No

47. If yes, would you prefer to continue using virtual solutions to complete QA activities?

○ Yes

○ No

○ Occasionally

48. Are you involved in clinical trials or research activity? *

○ Yes

○ No

49. Were your trials or research activities delayed or suspended as a result of COVID-19?

○ No delay or suspension

○ Delay only

○ Suspension only

○ Both delay and suspension

50. Are your trials or research activities now continuing?

○ Yes

○ No

○ Majority have continued

○ Majority are still delayed or suspended

51. Can you see remote/virtual solutions being beneficial as part of your research/trial?

○ Yes

○ No

Streaming

From this section onwards, you will be streamed into discipline specific questions. You will answer the section specific questions, then skip to section 14 or 15 after this. There are approximately 20 further multiple choice questions remaining for the survey, totalling 2-3 minutes.

52. Which professional group do you work in? *

○ Medical

○ Nursing

○ Allied Health

○ Radiation Therapy

○ Medical Physics

○ Administration

Medical

53. What stage are you in your medical career? *

○ Consultant

○ Fellow

○ Registrar/PHO

○ Resident

54. Do you consult in telehealth clinics? *

A telehealth clinic is defined as a clinic to consult patients, using a secure form of telecommunication, whether that be via the telephone or via a video conference format.
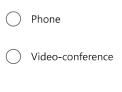
○ Yes

○ No

55. Which communication technology/technologies do you use for your telehealth consultations?

☐ Phone

☐ Video-conference

☐ Other

56. Which communication technology do you prefer to use for your telehealth consultations?

○ Phone

○ Video-conference

○ Other

57. How often do you use video-conference technology for your telehealth consultations?

○ Always (>90%)

○ Most of the time (>75%)

○ Regularly (50-75%)

○ Sometimes (30-50%)

○ Rarely (<30%)

○ Never

58. With regards to telehealth consultations... *

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Telehealth consultations are preferred by my patients	◯	◯	◯	◯	◯
I prefer doing telehealth consultations	◯	◯	◯	◯	◯
I maintain the same level of engagement with my patients with a telehealth consultation as I would with a face to face consultation	◯	◯	◯	◯	◯
My patients' clinical outcomes were not affected by telehealth consultations	◯	◯	◯	◯	◯
There were some redundant telehealth consultations as I had to see the patient in person	◯	◯	◯	◯	◯
I feel more confident using telehealth	◯	◯	◯	◯	◯
I will be using telehealth more frequently after COVID-19	◯	◯	◯	◯	◯

59. Are you able to do telehealth clinics from home? *

Does your institution provide you the capability to run a telehealth clinic remotely?

◯ Yes

◯ No

60. If yes, how often did you complete telehealth clinics from home?

○ Half a day

○ One day

○ Two days

○ Three days

○ Four days

○ All days

61. How much time per week do you estimate you spend on telehealth consultations overall? *

○ <5 hours

○ 5-10 hours

○ 10-15 hours

○ 15 hours +

62. Which patient groups have you identified as being disadvantaged by telehealth? *
Choose all that apply

☐ Elderly

☐ Patients requiring clinical examination

☐ Anxious

☐ Socially isolated

☐ Scenarios requiring breaking bad news

☐ Dysphasic patients

☐ Other

63. With regards to clinical changes as a result of COVID-19... *

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I have had to alter the majority of my patients' prescription to reduce hospital visits.	○	○	○	○	○
My clinical practice has been changed significantly as a result of COVID-19	○	○	○	○	○
I will continue prescribing radiation similarly to how I have been prescribing during COVID-19	○	○	○	○	○
Patient care suffered as a result of the decreased frequency of reviews	○	○	○	○	○

64. How many hours per week do you spend attending virtual MDT meetings? *

○ I do not attend any virtual MDT meetings

○ 1-3 hours

○ 4-6 hours

○ 7+ hours

65. What do you think is the optimum number of virtual MDT meetings to be productive in a week? *

○ 1-3 meetings

○ 4-6 meetings

○ 7+ meetings

66. Are you a radiation oncology trainee? *

Trainee in this circumstance refers to registrars on the program, unaccredited registrars and residents.

○ Yes

○ No

67. Has COVID-19 delayed your expected date of completion of the radiation oncology training program?

○ Yes

○ No

○ Maybe

○ N/A

68. If yes, how has COVID-19 delayed your completion date?

☐ Unable to complete minimum required training time

☐ Unable to sit Phase I exam

☐ Unable to sit Phase II exam

☐ Unable to complete required assessments on time

☐ N/A

☐ Other

69. How has COVID-19 impacted the quality of your training experience with regards to:

	Greatly improved	Slightly improved	No change	Slightly worsened	Greatly worsened
MDTs	○	○	○	○	○
Lectures	○	○	○	○	○
Formal educational events/workshops/courses	○	○	○	○	○
Procedural skills	○	○	○	○	○
Planning exposure	○	○	○	○	○
Contouring exposure	○	○	○	○	○
Patient exposure	○	○	○	○	○
Informal teaching from colleagues	○	○	○	○	○
Protected time	○	○	○	○	○
Study out of work	○	○	○	○	○
Research output	○	○	○	○	○
Networking	○	○	○	○	○

70. How has COVID-19 impacted the quality of your training experience overall?

○ Greatly improved it

○ Slightly improved it

○ No change

○ Slightly worsened it

○ Greatly worsened it

○ N/A

71. Trainees, do you have comments about any other effects as a result of COVID-19?
Trainees including registrars and junior doctors

Nursing

72. What specialty of nursing do you work in? *

- ◯ Clinic/OPD Nursing

- ◯ Rad Bay/Treatment Side Nursing

- ◯ Clinical Nurse Consultant

- ◯ Nursing Management

- ◯ Ward Nursing

- ◯ Other

73. With regards to clinical changes as a result of COVID-19... *

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
My clinical practice has been changed significantly as a result of COVID-19	◯	◯	◯	◯	◯
Patient care suffered as a result of the decreased frequency of reviews	◯	◯	◯	◯	◯
Patients have suffered as a result of visitor/carer accompaniment restrictions	◯	◯	◯	◯	◯
Carers have suffered as a result of visitor restrictions	◯	◯	◯	◯	◯
Patients or carers required more telephone support during COVID-19	◯	◯	◯	◯	◯

74. Which patient groups have you identified as being disadvantaged by telehealth? *

☐ Elderly

☐ Patients requiring clinical examination

☐ Anxious

☐ Socially isolated

☐ Scenarios requiring breaking bad news

☐ Dysphasic patients

☐ Other

75. How many hours per week do you spend attending virtual MDT meetings? *

○ I do not attend any virtual MDT meetings

○ 1-3 hours

○ 4-6 hours

○ 7+ hours

76. What do you think is the optimum number of virtual MDT meetings to be productive in a week? *

○ 1-3 meetings

○ 4-6 meetings

○ 7+ meetings

77. Have you had patients miss appointments due to COVID-19 related reasons (e.g. awaiting test results, a positive diagnosis, family quarantine reasons)

○ Yes

○ No

78. How much time per week do you estimate you spent on rescheduling as a result of COVID-19?

○ No time

○ 1-5 hours

○ 5-10 hours

○ 10-20 hours

○ 20+ hours

79. How much time per day do you estimate you spent on fielding patient/carer clinical concerns as a result of COVID-19?

○ No time

○ <30 minutes

○ 30-60 minutes

○ 1-2 hours

○ 2-4 hours

○ 4 hours +

80. How much time per day do you estimate you spent on prescreening patients as a result of COVID-19?
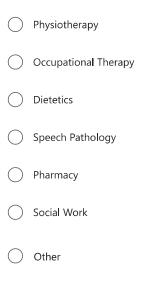
Prescreening meaning calling, messaging or emailing patients to check they haven't been at high risk of COVID-19 or tested for COVID-19.

○ No time

○ <30 minutes

○ 30-60 minutes

○ 1-2 hours

○ 2-4 hours

○ 4 hours +

81. Are there any other nursing specific workflow changes related to COVID-19 that you would like to mention?

Allied Health

82. Which field of allied health do you work in? *

○ Physiotherapy

○ Occupational Therapy

○ Dietetics

○ Speech Pathology

○ Pharmacy

○ Social Work

○ Other

83. Do you consult in telehealth clinics? *

A telehealth clinic is defined as a clinic to consult patients, using a secure form of telecommunication, whether that be via the telephone or via a video conference format.
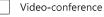
○ Yes

○ No

84. Which communication technology/technologies do you use for your telehealth consultations?

☐ Phone

☐ Video-conference

☐ Other

85. Which communication technology do you prefer to use for your telehealth consultations?

○ Phone

○ Video-conference

○ Other

86. How often do you use video-conference technology for your telehealth consultations?

○ Always (>90%)

○ Most of the time (>75%)

○ Regularly (50-75%)

○ Sometimes (30-50%)

○ Rarely (<30%)

○ Never

87. With regards to telehealth consultations... *

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Telehealth consultations are preferred by my patients	◯	◯	◯	◯	◯
I prefer doing telehealth consultations	◯	◯	◯	◯	◯
I maintain the same level of engagement with my patients with a telehealth consultation as I would with a face to face consultation	◯	◯	◯	◯	◯
My patients' clinical outcomes were not affected by telehealth consultations	◯	◯	◯	◯	◯
There were some redundant telehealth consultations as I had to see the patient in person	◯	◯	◯	◯	◯
I feel more confident using telehealth	◯	◯	◯	◯	◯
I will be using telehealth more frequently after COVID-19	◯	◯	◯	◯	◯

88. Are you able to do telehealth clinics from home?

Does your institution provide you the capability to run a telehealth clinic remotely?

◯ Yes

◯ No

89. If yes, how often did you complete telehealth clinics from home?

○ Half a day

○ One day

○ Two days

○ Three days

○ Four days

○ All days

90. How much time per week do you estimate you spend on telehealth consultations overall? *

○ <5 hours

○ 5-10 hours

○ 10-15 hours

○ 15 hours +

91. Which patient groups have you identified as being disadvantaged by telehealth? *

☐ Elderly

☐ Patients requiring clinical examination

☐ Anxious

☐ Socially isolated

☐ Scenarios requiring breaking bad news

☐ Dysphasic patients

☐ Other

92. With regards to clinical changes as a result of COVID-19... *

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
My clinical practice has been changed significantly as a result of COVID-19	○	○	○	○	○
Patient care suffered as a result of the decreased frequency of reviews	○	○	○	○	○
Patients have suffered as a result of visitor/carer accompaniment restrictions	○	○	○	○	○

93. Were any of your clinics changed or cancelled as a result of COVID-19?

e.g. speech pathology clinics because of aerosolisation risk

○ Yes

○ No

94. If yes, can you elaborate more about how your clinics were changed or cancelled?

[   ]

95. Have you had patients miss appointments due to COVID-19 related reasons (e.g. awaiting test results, a positive diagnosis, family quarantine reasons)

○ Yes

○ No

96. How much time per week do you estimate you spent on rescheduling as a result of COVID-19?

   ○ No time

   ○ 30 mins

   ○ 1-2 hours

   ○ 3-5 hours

   ○ >5 hours

   ○ Other

97. Are there any other allied health specific workflow changes related to COVID-19 that you would like to mention?

Radiation Therapists

98. Have you had patients miss appointments due to COVID-19 related reasons (e.g. awaiting test results, a positive diagnosis, family quarantine reasons)

○ Yes

○ No

99. How much time per week do you estimate you spent on rescheduling as a result of COVID-19?

○ No time

○ 30 mins

○ 1-2 hours

○ 3-5 hours

○ >5 hours

○ Other

100. Did aspects of your normal Patient Education workflow change?
Choose all that apply

☐ Change to physical spaces where patient education takes place

☐ Increased use of virtual approaches

☐ Reduced face to face patient education

☐ Other

101. Did aspects of your normal CT/imaging workflow change?
Choose all that apply

☐ CT staff separated into teams

☐ CT area quarantined

☐ Other RT staff not permitted in CT

☐ Reduced radiation oncology attendance at CT

☐ Changes to work hours

☐ Changes to shift patterns

☐ Other

102. Did aspects of your normal planning workflow change?
Choose all that apply

☐ All planning staff working from home

☐ Some planning staff working from home

☐ Physical space changes

☐ Planning staff not participating in CT/imaging or treatment

☐ Changes to work hours

☐ Changes to shift patterns

☐ Other

103. Did aspects of your normal QA workflow change?

Choose all that apply

☐ All QA staff working from home

☐ Some QA staff working from home

☐ Physical space changes

☐ QA staff split into sub-teams

☐ QA staff not participating in CT/imaging or treatment

☐ Changes to work hours

☐ Changes to shift patterns

☐ Other

104. Did aspects of your normal Treatment workflow change?

Choose all that apply

☐ Isolating treatment teams from other staff

☐ Patient appointment changes/duration

☐ Changes to work hours

☐ Changes to shift patterns

☐ Cleaning time

☐ Other

105. Would you like to see changes your service has made in the following categories, to be permanently adopted or adjusted?

	Yes	No	Maybe
Rostering	○	○	○
Meetings	○	○	○
Patient education	○	○	○
CT	○	○	○
Planning	○	○	○
Treatment	○	○	○
QA	○	○	○
Staff education	○	○	○

106. Are there any other radiation therapist specific workflow changes related to COVID-19 that you would like to mention?

Medical Physics

107. Did you still perform in-vivo dosimetry measurements during COVID-19 restrictions?

○ Yes

○ No

108. Did aspects of your normal plan checking workflow change?
Choose all that apply

☐ Isolating plan checking team members from other staff

☐ All plan check staff working from home

☐ Some plan check staff working from home

☐ Staff split into sub-teams

☐ Changes to work hours

☐ Other

109. Did aspects of your LINAC QA workflow change?
Choose all that apply

☐ Isolating LINAC team members from other staff

☐ Staff split into sub-teams

☐ Changes to work hours

☐ Other

110. Are you enrolled in TEAP?

○ Yes

○ No

○ I was a trainee at the start of the pandemic and have since gained certification

111. Has COVID-19 delayed your expected date of completion for TEAP?

◯ Yes

◯ No

◯ Other

112. How has COVID-19 impacted the quality of your training experience with regards to:

	Greatly improved	Slightly improved	No change	Slightly worsened	Greatly worsened
TEAP Tutorials with preceptor	◯	◯	◯	◯	◯
Regular meetings with supervisor	◯	◯	◯	◯	◯
Protected time	◯	◯	◯	◯	◯
Informal teaching from colleagues	◯	◯	◯	◯	◯
Procedural skills	◯	◯	◯	◯	◯

113. How has COVID-19 impacted the quality of your training experience overall?

◯ Greatly improved it

◯ Slightly improved it

◯ No change

◯ Slightly worsened it

◯ Greatly worsened it

114. If your department ordinarily offers projects for Masters' students, were these projects changes/discontinued due to the pandemic?

○ Yes

○ No

○ N/A

115. Are there any other medical physics specific workflow changes related to COVID-19 that you would like to mention?

[   ]

Administration Staff

116. Have you had patients miss appointments due to COVID-19 related reasons (e.g. awaiting test results, a positive diagnosis, family quarantine reasons)

○ Yes

○ No

117. How much time per week do you estimate you spent on rescheduling as a result of COVID-19?

○ No time

○ 30 mins

○ 1-2 hours

○ 3-5 hours

○ >5 hours

○ Other

118. How much time per week do you estimate you spent on increased typing services as a result of COVID-19?

○ No time

○ 1-5 hours

○ 5-10 hours

○ 10-20 hours

○ 20+ hours

119. How many calls per day did you receive from patients troubleshooting appointments due to changes from COVID-19?

○ No calls

○ 1-5 calls

○ 5-10 calls

○ 10-20 calls

○ 20+ calls

120. How much time do you estimate you spent on troubleshooting IT assets?

○ No time

○ 1-5 hours

○ 5-10 hours

○ 10-20 hours

○ 20+ hours

121. Are there any other administration officer specific workflow changes related to COVID-19 that you would like to mention?

[   ]

COVID Specific Education and Interventions

Questions about education required specifically with issues that arose as a result of COVID-19. Maximum 4 questions.

122. Did you have to upskill in any areas due to COVID-19? (e.g. infection control practices, telehealth practices, donning/doffing PPE)

   ◯ Yes

   ◯ No

123. What areas did you upskill in?

   ☐ Appropriate donning and doffing of PPE

   ☐ Infection control practices

   ☐ Telehealth practices

   ☐ COVID screening protocols

   ☐ New software packages and programs

   ☐ Virtual meeting options

   ☐ New protocols and procedures

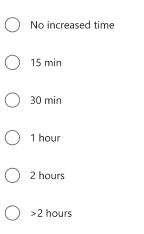124. How much time was required for these up-skilling activities?

   ◯ <15 min/day

   ◯ 15-30 min/day

   ◯ 30-60 min/day

   ◯ >60 min/day

125. How much time did you spent on cleaning, sanitation and PPE demands in a day?

○ No increased time

○ 15 min

○ 30 min

○ 1 hour

○ 2 hours

○ >2 hours

Global Perception

Overall perception of procedures, communication and changes to workflow as a result of the COVID-19 pandemic. Maximum 8 questions.

126. Have COVID-related procedures changed as a result of feedback? *

○ Yes

○ No

○ Don't know

127. If yes, how often are these changes occurring? *

○ Daily

○ Weekly

○ Monthly

○ Three monthly

○ Never

○ I don't know

128. How was feedback sought about COVID-related changes? *
Choose all that apply

☐ Team meetings

☐ In person feedback

☐ Survey

☐ Structured individual feedback

☐ Email

☐ Phone

☐ Feedback not sought

☐ Other

129. How were COVID-related changes communicated to you? *
Choose all that apply

- [ ] Team meetings

- [ ] In person feedback

- [ ] Survey

- [ ] Structured individual feedback

- [ ] Email

- [ ] Phone

- [ ] No communication

- [ ] Other

130. Was this communication effective? *

- ( ) Yes

- ( ) No

- ( ) I don't know

131. Which of the following changed the most as a result of the COVID-19 workflow interventions? *
Choose all that apply

- [ ] Telehealth consultations

- [ ] Decreased interprofessional communication

- [ ] Alternative methods of interprofessional communication

- [ ] Increased sanitation measures

- [ ] Decreased business-as-usual activities (e.g. education, QA activities, PDL)

- [ ] Changed format of business-as-usual activities (e.g. virtual meetings)

- [ ] Working from home

- [ ] Other

132. What changes would you support to continue in your department? *
Choose all that apply

☐ Telehealth consultations

☐ Alternative methods of interprofessional communication

☐ Increased sanitation measures

☐ Changed format of business-as-usual activities (e.g. virtual meetings)

☐ Working from home

☐ Other

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133. Any other comments?